

Science STAAR Preps

5th Grade

CONTENTS:

Pedagogical Approach

45 STAAR Preparatory Spring Daily Practice Sheets

SOLUTIONS to Practice Sheets – Quick Answer Key of all sheets and Annotated Key of each Practice Sheet

5th Grade Science STAAR Preparatory Program

Teacher Recommended Guidelines

(Allows the students to practice and master 5th grade science concepts)

- The 45 practice sheets are designed to be run daily beginning 9 weeks prior to the 5th grade science STAAR examination. It is highly recommended the teacher check the student's work on each practice sheet by walking around the classroom as students are completing the questions and placing a check by each correct response. Of course, the practice sheets are much more effective if the students are held accountable for the information on each page. Finally, it is also recommended that students use privacy folders if they sit at group tables to prevent the students from viewing each other's work. Early finishers may read quietly or engage in a task not to distract other students.
- The first two practice sheets (sheets 1 and 2/sheets 3 and 4) are intended to be repetitive duplicates. The students should realize they are required to remember and retain the material throughout the program. The teacher may stress the importance of 'knowing' the material. As the teacher is reviewing and checking student work each day throughout the 45 practice sheets, she/he should note any questions that students answer incorrectly and those concepts should be quickly reviewed on subsequent days until mastered. It is recommended students turn their practice sheet over (for example) to the blank side and the teacher may quickly quiz students on those specific areas where students struggled. The teacher should monitor student answers during daily checking to identify incorrect responses and especially focus on specific students that are struggling. Hence, during the mini reteach sessions each day, these students are held accountable for understanding and all science concepts are mastered.
- Each practice sheet should take approximately 15 to 20 minutes to complete, and approximately 5 to 7 minutes each day for a review of previously covered material, as needed.
- Finally, there is a quick answer key as well as an annotated solution key to assist the teacher in efficient use of these practice sheets.

5th Grade Science Spring Review
Answer Key

<p><u>Science Prep #1/2</u></p> <ol style="list-style-type: none"> oil (petroleum), coal, natural gas organisms that lived long ago millions of years B they pollute (contaminate) the air C true inexhaustible resources renewable resources non-renewable resources 	<p><u>Science Prep #3/4</u></p> <ol style="list-style-type: none"> wind, water, ice, tree/plant roots erosion we would have nothing to eat B these energy sources don't pollute the environment—they are "clean" energy C the rock is weathered by waves and wind, then erosion takes the sand away 100° Celsius 0° Celsius 100° Celsius 	<p><u>Science Prep #5</u></p> <ol style="list-style-type: none"> water, wind, ice, plant/tree roots oil (petroleum), coal, natural gas they are non-renewable, they pollute the air and water B these energy sources don't pollute the environment—they are "clean" energy C the rock is weathered by waves and wind, then erosion takes the sand away 100°C 0°C D 												
<p><u>Science Prep #6</u></p> <ol style="list-style-type: none"> C Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune Mercury Neptune B an organism dies in the sand, more sediment covers the organism, and the sediment compacts over millions of years fire needs oxygen to burn <table border="1"> <tr> <td>1. B</td> <td>2. C</td> <td>3. A</td> </tr> <tr> <td>4. E</td> <td>5. D</td> <td></td> </tr> </table>	1. B	2. C	3. A	4. E	5. D		<p><u>Science Prep #7</u></p> <ol style="list-style-type: none"> B Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune Mercury Neptune C an organism dies in the sand, more sediment covers the organism, and the sediment compacts over millions of years B fire needs oxygen to burn <table border="1"> <tr> <td>1. E</td> <td>2. A</td> <td>3. C</td> </tr> <tr> <td>4. B</td> <td>5. D</td> <td></td> </tr> </table>	1. E	2. A	3. C	4. B	5. D		<p><u>Science Prep #8</u></p> <ol style="list-style-type: none"> B C True 100°C, 95°C, 82°C, 45°C, 23°C, 14°C, 3°C D B C A C A) 1 day, or 24 hours B) 4 weeks C) 1 year D) 12 revolutions
1. B	2. C	3. A												
4. E	5. D													
1. E	2. A	3. C												
4. B	5. D													
<p><u>Science Prep #9</u></p> <ol style="list-style-type: none"> A A wind and sun B B D A A A) 1 day, or 24 hours B) 4 weeks C) 1 year D) 12 revolutions A 	<p><u>Science Prep #10</u></p> <ol style="list-style-type: none"> D C non-renewable resources C B D C B A) 1 month, or 4 weeks B) 1 day, or 24 hours C) 1 year, or 365 ¼ days D) 12 revolutions suspension 	<p><u>Science Prep #11</u></p> <ol style="list-style-type: none"> C C life-water ; earth-heat A B C A C A B 												

5th Grade Science Spring Review
Answer Key

<p><u>Science Prep #12</u></p> <p>1. A 2. A 3. water-electricity ; study of Earth 4. A 5. B 6. C 7. A 8. B 9. C 10. C</p>	<p><u>Science Prep #13</u></p> <p>1. A 2. B 3. C 4. B 5. C 6. B 7. B (E) (M) (S) 8. B (M) (E) (S) 9. B 10. D</p>	<p><u>Science Prep #14</u></p> <p>1. A 2. C 3. C 4. B 5. C 6. B 7. B (E) (M) (S) 8. B (M) (E) (S) 9. C 10. D</p>
<p><u>Science Prep #15</u></p> <p>1. C 2. A 3. B 4. C 5. D 6. C 7. B 8. B 9. rivers/lakes and groundwater</p>	<p><u>Science Prep #16</u></p> <p>1. A 2. A 3. B 4. A 5. A 6. B 7. B 8. D 9. rivers/lakes, groundwater</p>	<p><u>Science Prep #17</u></p> <p>1. D 2. C 3. D 4. A 5. A 6. B 7. D 8. D</p>
<p><u>Science Prep #18</u></p> <p>1. B 2. D 3. A 4. D 5. C 6. C 7. C 8. D 9. core, mantle, crust</p>	<p><u>Science Prep #19</u></p> <p>1. C 2. A 3. C 4. D 5. C 6. D 7. C 8. B 9. mantle ; crust</p>	<p><u>Science Prep #20</u></p> <p>1. C 2. D 3. C 4. D 5. B 6. D 7. B 8. B 9. crust ; core 10. B</p>
<p><u>Science Prep #21</u></p> <p>1. C 2. A 3. C 4. B 5. B 6. D 7. C 8. C 9. A</p>	<p><u>Science Prep #22</u></p> <p>1. C 2. water and nutrients (minerals) 3. B 4. B 5. D 6. B 7. C 8. B 9. C 10. the moon</p>	<p><u>Science Prep #23</u></p> <p>1. C 2. water and nutrients (minerals) 3. B 4. D 5. D 6. B 7. A 8. D 9. C 10. B</p>

5th Grade Science Spring Review
Answer Key

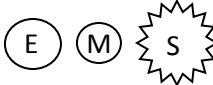
Science Prep #24

1. C
2. water and nutrients (minerals)
3. B
4. B
5. D
6. B
7. C
8. B
9. C
10. the moon

Science Prep #25

1. C
2. change of light on the moon's surface
3. B
4. B
5. D
6. A
7. B
8. B
9. D
10. D

Science Prep #26

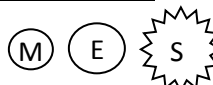
1. D 
2. change of light on the moon's surface
3. A
4. B
5. D
6. A
7. B
8. B
9. A
10. C

Science Prep #27

1. B
2.

A. sunlight/ radiation	B. evaporation
C. condensation	D. precipitation
E. runoff	
3. C
4. C
5. physical change
6. physical change
7. A
8. B
9. D
10. A
11. wind, solar, biofuel, hydroelectric energy

Science Prep #28

1. A 
2. change of light on the moon's surface
3. A
4. D
5. B
6. A
7. A
8. B
9. B
10. A

Science Prep #29

1. A
2.

A. sunlight/ radiation	B. evaporation
C. condensation	D. precipitation
E. runoff	
3. C
4. C
5. physical change
6. physical change
7. C
8. B
9. C
10. D
11. hydroelectric, nuclear, wind, or solar energy, biofuel

Science Prep #30

1. D
2.

A. precipitation	B. weathering
C. erosion	D. compaction
E. wind	
3.

1. igneous rock	2. metamorphic rock
3. sedimentary rock	
4. B
5. A
6. metamorphic rock
7. sedimentary rock
8. B
9. heat and electricity
10. metals, water, air, humans
11. rubber, plastic, wood, porcelain, glass, wood, cloth

Science Prep #31

1. C
2.

A. wind	B. compaction
C. erosion	D. weathering
E. precipitation	
3.

1. sedimentary rock	2. igneous rock
3. metamorphic rock	
4. C
5. D
6. metamorphic rock
7. sedimentary rock
8. True
9. 1- the rest are left constant
10. heat and electricity
11. metals, water, air, humans
12. glass, rubber, plastic, wood, cloth

Science Prep #32

1.

1. sharp teeth	2. sharp claws
3. built for speed	4. eyes on front of head
2. only change 1 thing
3. C
4. C
5. D
6. A
7. C
8. B
9. D
10. fruit drops on the ground and the seeds end up in the soil; birds eat the whole fruit, and drop the seeds

5th Grade Science Spring Review
Answer Key

<p><u>Science Prep #33</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">1. 1. sharp teeth</td> <td style="width: 50%; padding: 2px;">2. sharp claws</td> </tr> <tr> <td style="padding: 2px;">3. built for speed</td> <td style="padding: 2px;">4. eyes on front of head</td> </tr> </table> <p>2. one thing is changed</p> <p>3. B</p> <p>4. D</p> <p>5. D</p> <p>6. B</p> <p>7. C</p> <p>8. I</p> <p>9. C</p> <p>10. fruit drops on the ground and the seeds end up in the soil; birds eat the whole fruit, and drop the seeds</p> <p>11. thermal and radiant energy</p>	1. 1. sharp teeth	2. sharp claws	3. built for speed	4. eyes on front of head	<p><u>Science Prep #34</u></p> <p>1. D</p> <p>2. I</p> <p>3. A</p> <p>4. C</p> <p>5. K</p> <p>6. D</p> <p>7. J</p>	<p><u>Science Prep #35</u></p> <p>1. A</p> <p>2. H</p> <p>3. C</p> <p>4. D</p> <p>5. K</p> <p>6. D</p> <p>7. K</p>
1. 1. sharp teeth	2. sharp claws					
3. built for speed	4. eyes on front of head					
<p><u>Science Prep #36</u></p> <p>1. B</p> <p>2. J</p> <p>3. C</p> <p>4. C</p> <p>5. K</p> <p>6. A</p> <p>7. A</p> <p>8. J</p> <p>9. east; west</p>	<p><u>Science Prep #37</u></p> <p>1. D</p> <p>2. H</p> <p>3. C</p> <p>4. C</p> <p>5. K</p> <p>6. A</p> <p>7. K</p> <p>8. D</p>	<p><u>Science Prep #38</u></p> <p>1. C</p> <p>2. J</p> <p>3. A</p> <p>4. D</p> <p>5. I</p> <p>6. H</p> <p>7. B</p> <p>8. black fur and brown eyes</p>				
<p><u>Science Prep #39</u></p> <p>1. B</p> <p>2. I</p> <p>3. B</p> <p>4. B</p> <p>5. I</p> <p>6. B</p> <p>7. D</p> <p>8. nocturnal eyesight</p>	<p><u>Science Prep #40</u></p> <p>1. A</p> <p>2. K</p> <p>3. B</p> <p>4. K</p> <p>5. B</p> <p>6. B</p> <p>7. False</p> <p>8. True</p>	<p><u>Science Prep #41</u></p> <p>1. C</p> <p>2. the electrons will not flow</p> <p>3. I</p> <p>4. A</p> <p>5. K</p> <p>6. B</p> <p>7. detach the wires, no current</p> <p>8. B</p> <p>9. True</p> <p>10. True</p>				
<p><u>Science Prep #42</u></p> <p>1. C</p> <p>2. C</p> <p>3. H</p> <p>4. D</p> <p>5. I</p> <p>6. B</p>	<p><u>Science Prep #43</u></p> <p>1. D</p> <p>2. C</p> <p>3. H</p> <p>4. C</p> <p>5. I</p> <p>6. B</p>	<p><u>Science Prep #44</u></p> <p>1. A</p> <p>2. J</p> <p>3. C</p> <p>4. J</p> <p>5. C</p> <p>6. I</p> <p>7. B</p>				

5th Grade Science Spring Review
Answer Key

<u><i>Science Prep #45</i></u> 1. B 2. K 3. C 4. K 5. B	<u><i>Science Prep #</i></u> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	<u><i>Science Prep #</i></u> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.
<u><i>Science Prep #</i></u> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	<u><i>Science Prep #</i></u> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	<u><i>Science Prep #</i></u> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

5th Grade Science Spring Review Warm-Up Number 1

(8 to 12 minutes, maximum)

Name: _____

- 1.) Name the three types of fossil fuels: _____

- 2.) Where do fossil fuels come from (what were they made of)? _____

- 3.) How long (time) did it take fossil fuels to form? _____

- 4.) Fossil Fuels are which type of resource?
 - a.) renewable resource
 - b.) nonrenewable resource
 - c.) inexhaustible resource
 - d.) none of the above

- 5.) We use fossil fuels for energy to run our cars and produce electricity for our homes and schools. What is the problem when we use fossil fuels like coal, oil and natural gas?

- 6.) Fossils are most likely found in what type of rock?
 - a.) igneous rock
 - b.) metamorphic rock
 - c.) sedimentary rock
 - d.) a nice, big rock

- 7.) A sedimentary rock can change over time into a metamorphic or an igneous rock. As a matter of fact, the rock cycle means that any type of rock can change in to any other type of rock. Are these statements true or false? _____

On Questions 8-10 - USE: inexhaustible resource, nonrenewable resource, renewable resource

- 8.) The sun and wind are what type of resources? _____

- 9.) Soil, grass, animals and trees are what type of resources? _____

- 10.) Gold, fossil fuels, aluminum and silver are what type of resources? _____

5th Grade Science Spring Review Warm-Up Number 2

(8 to 12 minutes, maximum)

Name: _____

- 1.) Name the three types of fossil fuels: _____

- 2.) Where do fossil fuels come from (what were they made of)? _____

- 3.) How long (time) did it take fossil fuels to form? _____

- 4.) Fossil Fuels are which type of resource?
 - a.) renewable resource
 - b.) nonrenewable resource
 - c.) inexhaustible resource
 - d.) none of the above

- 5.) We use fossil fuels for energy to run our cars and produce electricity for our homes and schools. What is the problem when we use fossil fuels like coal, oil and natural gas?

- 6.) Fossils are most likely found in what type of rock?
 - a.) igneous rock
 - b.) metamorphic rock
 - c.) sedimentary rock
 - d.) a nice, big rock

- 7.) A sedimentary rock can change over time into a metamorphic or an igneous rock. As a matter of fact, the rock cycle means that any type of rock can change in to any other type of rock. Are these statements true or false? _____

On Questions 8-10 - USE: inexhaustible resource, nonrenewable resource, renewable resource

- 8.) The sun and wind are what type of resources? _____

- 9.) Soil, grass, animals and trees are what type of resources? _____

- 10.) Gold, fossil fuels, aluminum and silver are what type of resources? _____

5th Grade Science Spring Review Warm-Up Number 3

(8 to 12 minutes, maximum)

Name: _____

- 1.) There are 4 ways to weather rocks (Name them): _____

- 2.) What scientific word describes the movement of rocks and pebbles? _____
- 3.) Why is it important that soil is a renewable resource? _____
- 4.) Why don't erosion, weathering and fire happen on the moon?
 - a.) the moon is too far away
 - b.) the moon has no atmosphere
 - c.) the moon is not as big as earth
 - d.) none of the above
- 5.) Why are we trying to use solar energy, wind energy and hydroelectric power instead of fossil fuels as our major energy source to power our homes and cars in the United States?

- 6.) How do sand and small pebbles get deposited on the beach OR at the delta of a river?
 - a.) the wind
 - b.) the sun heated the water
 - c.) the waves or river water carried the sand
 - d.) electricity can electrocute through a conductor
- 7.) There was a large rock on the beach in 2000, but it was much, much smaller in 2014. What happened to the rock over the last 14 years? _____
- 8.) All amounts of water boil at what temperature in Celsius? _____
- 9.) All amounts of water freeze at what temperature in Celsius? _____
- 10.) Did you understand questions 8 and 9? Let's check. Ms. Smith takes her daughter swimming in Lake Travis (a very large lake). However, there is a small puddle of water on the sidewalk outside after a recent rain. If each amount of water is heated, at what temperature will the water boil for both Lake Travis and the puddle of water? _____

5th Grade Science Spring Review Warm-Up Number 4

(8 to 12 minutes, maximum)

Name: _____

- 1.) There are 4 ways to weather rocks (Name them): _____

- 2.) What scientific word describes the movement of rocks and pebbles? _____
- 3.) Why is it important that soil is a renewable resource? _____
- 4.) Why don't erosion, weathering and fire happen on the moon?
 - a.) the moon is too far away
 - b.) the moon has no atmosphere
 - c.) the moon is not as big as earth
 - d.) none of the above
- 5.) Why are we trying to use solar energy, wind energy and hydroelectric power instead of fossil fuels as our major energy source to power our homes and cars in the United States?

- 6.) How do sand and small pebbles get deposited on the beach OR at the delta of a river?
 - a.) the wind
 - b.) the sun heated the water
 - c.) the waves or river water carried the sand
 - d.) electricity can electrocute through a conductor
- 7.) There was a large rock on the beach in 2000, but it was much, much smaller in 2014. What happened to the rock over the last 14 years? _____
- 8.) All amounts of water boil at what temperature in Celsius? _____
- 9.) All amounts of water freeze at what temperature in Celsius? _____
- 10.) Did you understand questions 8 and 9? Let's check. Ms. Smith takes her daughter swimming in Lake Travis (a very large lake). However, there is a small puddle of water on the sidewalk outside after a recent rain. If each amount of water is heated, at what temperature will the water boil for both Lake Travis and the puddle of water? _____

5th Grade Science Spring Review Warm-Up Number 5

(8 to 12 minutes, maximum)

Name: _____

- 1.) There are 4 ways to weather rocks (Name them): _____

- 2.) Name the 3 types of fossil fuels? _____
- 3.) What major problem is created when we use fossil fuels? _____
- 4.) Why do erosion, weathering and fire not happen on the moon but they all occur on earth?
 - a.) the moon is too far away
 - b.) the moon has no atmosphere
 - c.) the moon is not as big as earth
 - d.) none of the above
- 5.) Why are we trying to use solar energy, wind energy and hydroelectric power instead of fossil fuels as our major energy source to power our homes and cars in the United States?

- 6.) How do sand and small pebbles get deposited on the beach OR at the delta of a river?
 - a.) the wind
 - b.) the sun heated the water
 - c.) the waves or river water carried the sand
 - d.) electricity can electrocute through a conductor
- 7.) There was a large rock on the beach in 1962, but it was much, much smaller in 2010. What happened to the rock over the last 48 years? _____
- 8.) All amounts of water boil at what temperature in Celsius? _____
- 9.) All amounts of water freeze at what temperature in Celsius? _____
- 10.) Jorge looked at the following chart below. What is the boiling temperature of the 25 ml water if the 50 ml glass of water boiled at 100 degrees Celsius?

Amount of Water	Temperature	Amount of Water	Temperature
50 ML	25 degrees Celsius	25 ML	10 degrees Celsius

- a.) 50 degrees Celsius
- b.) 75 degrees Celsius
- c.) 12.5 degrees Celsius
- d.) 100 degrees Celsius

5th Grade Science Spring Review Warm-Up Number 6

(8 to 12 minutes, maximum)

Name: _____

1.) A white polar bear (predator) covers his black nose with his white paw so it is not seen by a seal (prey). In science, what is this called when the polar bear is covering his black nose?

- a.) being smart
- b.) holding his breath

- c.) using camouflage
- d.) using migration

2.) Name the eight (8) planets in order from the Sun outward?

3.) Which planet makes the quickest orbit around the sun? _____

4.) Which planet makes the longest orbit around the sun? _____

5.) What type of rock is most likely to form in the delta of a river over a long period of time?

a.) igneous rock

c.) metamorphic rock

b.) sedimentary rock

d.) none of the above

6.) Why do fossils and fossil fuels usually form in a sedimentary rock?

7.) What object is found at the center of our solar system and is a big ball of gas?

a.) the moon

c.) Jupiter

e.) Saturn

b.) the sun

d.) Earth

f.) the Principal

8.) Your science teacher lights a candle. Then, she places a glass over the candle. The candle's light or flame slowly goes out. Why did the candle's flame/light go out?

9.) Jonathan listed types of energy on the left. Please match the right definition with the energy.

1.) _____ radiant energy

a.) stored energy

2.) _____ thermal energy

b.) light bulb, fire, or sun light

3.) _____ potential energy

c.) heat

4.) _____ kinetic energy

d.) flow of electrons in a conductor

5.) _____ electrical energy

e.) speeding train or moving energy

5th Grade Science Spring Review Warm-Up Number 7

(8 to 12 minutes, maximum)

Name: _____

1.) A soldier wears all green to go into the jungle on a training mission. Green allows him to blend into the surroundings with all the leaves and plants. What science word is he using?

- a.) being smart
- b.) using camouflage

- c.) holding his breath
- d.) using migration

2.) Name the eight (8) planets in order from the Sun outward?

3.) Which planet makes the quickest orbit around the sun? _____

4.) Which planet makes the longest orbit around the sun? _____

5.) What type of rock is most likely to form in the delta of a river over a long period of time?

a.) igneous rock

c.) sedimentary rock

b.) metamorphic rock

d.) none of the above

6.) Why do fossils and fossil fuels usually form in a sedimentary rock?

7.) What object is found at the center of our solar system and is a big ball of gas?

a.) the moon

c.) Jupiter

e.) Saturn

b.) the sun

d.) Earth

f.) the Principal

8.) Your science teacher lights a candle. Then, she places a glass over the candle. The candle's light or flame slowly goes out. Why did the candle's flame/light go out?

9.) Jonathan listed types of energy on the left. Please match the right definition with the energy.

1.) _____ radiant energy

a.) heat

2.) _____ thermal energy

b.) speeding train or moving energy

3.) _____ potential energy

c.) stored energy

4.) _____ kinetic energy

d.) flow of electrons in a conductor

5.) _____ electrical energy

e.) light bulb, fire, or sun light

5th Grade Science Spring Review Warm-Up Number 8

(8 to 12 minutes, maximum)

Name: _____

- 1.) An animal dies in the woods. The animal's body is broken down by what organisms?
 - a.) scavenger
 - b.) decomposers
 - c.) camouflage
 - d.) migration

- 2.) A red crayon is thrown in a frying pan. It melts but it does NOT burn. What type of change is taking place?
 - a.) chemical change
 - b.) property change
 - c.) physical change
 - d.) color change

- 3.) All water evaporates at temperatures above 0 degrees Celsius? True/False_____

- 4.) In question 3.) above, **ORDER** from greatest to least, the temperatures that water evaporates the fastest. Given the following temperatures: 95 C , 82 C, 3 C, 14 C, 45 C, 100 C, 23 C.

- 5.) From question 3 and 4.), what type of energy increases with increased temperature or heat?
 - a.) potential energy
 - b.) radiant energy
 - c.) electrical energy
 - d.) kinetic energy

- 6.) Jessica digs a hole in the ground. The deeper she digs into the earth, the soil is...
 - a.) younger than the soil above it.
 - b.) older than the soil above it
 - c.) all soil is the same age
 - d.) impossible to tell the age of soil

- 7.) Which is the largest planet in the solar system?
 - a.) Venus
 - b.) Mars
 - c.) Jupiter
 - d.) Earth

- 8.) As the earth rotates on its axis one time, we get.....
 - a.) day and night
 - b.) a solar eclipse
 - c.) a lunar eclipse
 - d.) deposition

- 9.) Your mother cuts a large hunk cheese in two separate pieces. This is what type of a change?
 - a.) chemical change
 - b.) property change
 - c.) physical change
 - d.) color change

- 10.) How long does it take...
 - A.) The Earth to rotate one time on its axis: _____
 - B.) The Moon to make one revolution around the Earth: _____
 - C.) The Earth to make one revolution around the Sun: _____
 - D.) And, how many revolutions does the moon make around the Earth in ONE year: _____

5th Grade Science Spring Review Warm-Up Number 9

(8 to 12 minutes, maximum)

Name: _____

- 1.) A vulture eats dead animals that it did not kill. The vulture is called a _____.
 - a.) scavenger
 - b.) decomposers
 - c.) camouflage
 - d.) migration

- 2.) A red crayon is thrown in a frying pan until it is burned. What is this change called?
 - a.) chemical change
 - b.) property change
 - c.) physical change
 - d.) color change

- 3.) Name two inexhaustible resources: _____

- 4.) In science, a bowl of different kinds of fruit is an example of a _____.
 - a.) suspension
 - b.) mixture
 - c.) solution
 - d.) something good to eat

- 5.) A fish fossil is found 10 feet below the surface and a shell fossil 20 feet below the surface. Which fossil is older?
 - a.) fish fossil
 - b.) shell fossil
 - c.) both are the same age
 - d.) none of the above

- 6.) Which of the following objects rotate?
 - a.) Earth
 - b.) Sun
 - c.) Moon
 - d.) the Earth, Sun and Moon all rotate

- 7.) As the earth rotates on its axis one time, we get.....
 - a.) day and night
 - b.) a solar eclipse
 - c.) a lunar eclipse
 - d.) deposition

- 8.) The metal on my car is rusting and slowing causing holes. This is what type of a change?
 - a.) chemical change
 - b.) property change
 - c.) physical change
 - d.) color change

- 9.) How long does it take...
 - A.) The Earth to rotate one time on its axis: _____
 - B.) The Moon to make one revolution around the Earth: _____
 - C.) The Earth to make one revolution around the Sun: _____
 - D.) And, how many revolutions does the moon make around the Earth in ONE year: _____

- 10.) An oil tanker hit a rocky reef and oil leaked out in to the ocean. The oil is on top of the water causing two layers of fluids, one with oil and one with water below it. In science, this situation best describes a _____.
 - a.) suspension
 - b.) mixture
 - c.) solution
 - d.) a lot of dead fish

5th Grade Science Spring Review Warm-Up Number 10

(8 to 12 minutes, maximum)

Name: _____

- 1.) Birds fly south for the winter for warmer weather. This animal movement is called _____.
 - a.) scavenger
 - b.) decomposers
 - c.) camouflage
 - d.) migration

- 2.) A glass of water is left outside on a hot day and it evaporates after 12 hours. This is an example of what type of change?
 - a.) chemical change
 - b.) property change
 - c.) physical change
 - d.) color change

- 3.) Minerals and fossil fuels are examples of what type resource? _____

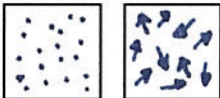
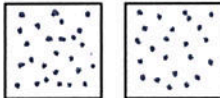
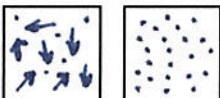
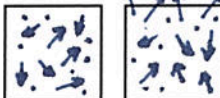
- 4.) In science, a can of Mt. Dew is an example of a _____.
 - a.) suspension
 - b.) mixture
 - c.) solution
 - d.) a drink with far too much sugar

- 5.) Jesus found a fossil of a small dinosaur. Inside what type of rock is the most likely that Jesus found the fossil?
 - a.) metamorphic rock
 - b.) sedimentary rock
 - c.) igneous rock
 - d.) none of the above

- 6.) Which of the following objects rotate?
 - a.) Earth
 - b.) Sun
 - c.) Moon
 - d.) the Earth, Sun and Moon all rotate

- 7.) The earth revolves around the sun one complete revolution, we get.....
 - a.) solar eclipse
 - b.) a month of time
 - c.) one year of time
 - d.) day and night

- 8.) Which of these best describes freezing from the first box to the second box?

a.)		c.)	
b.)		d.)	

- 9.) How long does it take...
 - A.) The Moon to make one revolution around the Earth _____
 - B.) The Earth to rotate one time on its axis: _____
 - C.) The Earth to make one revolution around the Sun: _____
 - D.) And, how many revolutions does the moon make around the Earth in ONE year: _____

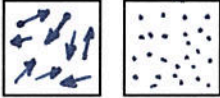
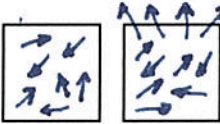
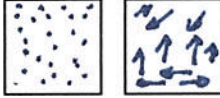
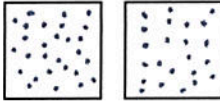
- 10.) A beaker is filled with three separate layers of fluid. Oil is the top layer, vinegar is the next layer, and water is the bottom layer. We call this situation a _____.

Fill in the blank with one of the following: mixture, suspension or a solution.

5th Grade Science Spring Review Warm-Up Number 11

(8 to 12 minutes, maximum)

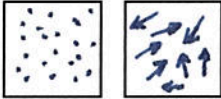
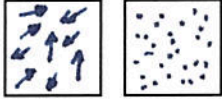
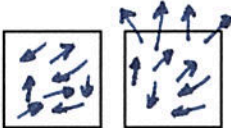
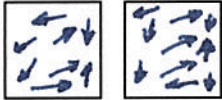
Name: _____

- 1.) What is one advantage of using wind and solar energy and not fossil fuels?
 - a.) more expensive
 - b.) do not have dig coal from the ground
 - c.) no pollution of the air
 - d.) no pollination of the air
- 2.) A block of ice melts into liquid water. This is an example of what type of change?
 - a.) chemical change
 - b.) property change
 - c.) physical change
 - d.) color change
- 3.) What does 'biohydro' mean? _____ What does 'geothermal' mean? _____
- 4.) In science, a bottle of shampoo and salt water are examples of _____.
 - a.) solutions
 - b.) mixtures
 - c.) suspensions
 - d.) none of the above
- 5.) Why are there more meteor craters on the moon than on the earth's surface?
 - a.) the moon is struck with more meteors than earth
 - b.) the moon has no atmosphere or erosion so craters are not filled up with dirt as they are on earth from wind and water erosion after many years.
 - c.) the earth is bigger than the moon and meteors miss the moon
 - d.) the earth and moon's atmospheres burn-up meteors from friction
- 6.) How long does it take the moon to revolve one time completely around earth?
 - a.) 1 year = 365 $\frac{1}{4}$ days
 - b.) 1 day = 24 hours
 - c.) 1 month = 4 weeks
 - d.) five years 7 months and 2 days
- 7.) The earth revolves around the sun one complete revolution, we get.....
 - a.) one year of time
 - b.) a month of time
 - c.) one day
 - d.) day and night
- 8.) Which best describes ice melting to liquid water from the first box to the second box?
 - a.) 
 - b.) 
 - c.) 
 - d.) 
- 9.) At the start of each month when the moon is between the earth and the sun, what is the name of the moon?
 - a.) a new moon
 - b.) a quarter moon
 - c.) a full moon
 - d.) a half moon
- 10.) What type of energy do we call light from a fire, sunlight or classroom lighting?
 - a.) kinetic energy
 - b.) radiant energy
 - c.) sound energy
 - d.) potential energy

5th Grade Science Spring Review Warm-Up Number 12

(12 to 15 minutes, maximum)

Name: _____

- 1.) A river brings sediment and deposits it in the delta of the river. How did the sediment get into the river?
- a.) from the erosion of mountains and plains c.) from sand dunes in the deserts
b.) from meteors that hit the earth d.) from an ice storm upstream
- 2.) Water evaporates into a gas or vapor. This is an example of what type of change?
- a.) physical change c.) chemical change
b.) property change d.) condensation change
- 3.) What does 'hydroelectric' mean? _____ What does 'geology' mean? _____
- 4.) In science, an energy drink and Dr. Pepper are examples of _____.
- a.) solutions c.) suspensions
b.) mixtures d.) none of the above
- 5.) Why do many meteors NOT reach the earth's surface when the meteor enters the Earth's atmosphere?
- a.) the meteors do not have enough speed to reach the earth's surface
b.) the meteors are burned up in the earth's atmosphere due to friction with air
c.) the meteors are pulled to Venus at light speed and completely miss the surface of the earth
d.) no meteors reach the earth's surface
- 6.) How long does it take the moon to revolve one time completely around earth?
- a.) 2 years = 730 ½ days c.) 1 month = 4 weeks
b.) 1 day = 24 hours d.) 1 year = 365 ¼ days
- 7.) The earth revolves around the sun one complete revolution, we get.....
- a.) one year of time c.) one day
b.) a month of time d.) day and night
- 8.) Which best describes liquid water to a gas (vapor) from the first box to the second box?
- a.)  c.) 
- b.)  d.) 
- 9.) Half-way through every month, when earth is between the moon and the sun, what is the moon's name?
- a.) a new moon c.) a full moon
b.) a quarter moon d.) a half moon
- 10.) If there is a full moon, about how many days until another full moon appears in the sky?
- a.) 10 days c.) 30 days
b.) 20 days d.) 60 days

5th Grade Science Spring Review Warm-Up Number 13

(12 to 15 minutes, maximum)

Name: _____

- 1.) A river brings sediment and deposits it in the delta of the river. How did the sediment get into the river?
 - a.) from the erosion of mountains and plains
 - b.) from meteors that hit the earth
 - c.) from sand dunes in the deserts
 - d.) from an ice storm upstream

- 2.) A bat flies at very high speeds and turns quickly by identifying objects in their flight path by _____.
 - a.) great eyesight
 - b.) echolocation using sound waves
 - c.) following very closely to the lead bat
 - d.) none of the above

- 3.) Whales communicate with other whales in the ocean by using _____.
 - a.) their dorsal fins
 - b.) flags found on the bottom of the ocean
 - c.) their sound waves traveling through the water
 - d.) none of the above

- 4.) What causes meteors to burn up in the earth's atmosphere?
 - a.) the sun burns up their mass
 - b.) the friction between the earth's atmosphere and the surface of the meteor causes heat
 - c.) the moon's gravitational pull on the meteor burns up the meteor the closer it gets to earth
 - d.) no meteors ever reach the earth's surface

- 5.) What causes raindrops, meteors, and baseballs thrown in air to fall or move toward earth?
 - a.) friction
 - b.) thrust
 - c.) gravity
 - d.) sound

- 6.) On what type of floor surface would friction be high so a person would not slide very far?
 - a.) a tile floor
 - b.) a rough carpet floor
 - c.) a tile floor covered with water
 - d.) a smooth wooden floor

- 7.) A solar eclipse occurs when which of the following occur? (Draw a picture)
 - a.) the sun leaves the solar system
 - b.) the moon is between the earth and sun
 - c.) the sun is between the earth and moon
 - d.) the earth is between the moon and sun

- 8.) A lunar eclipse occurs when which of the following occur? (Draw a picture)
 - a.) the sun leaves the solar system
 - b.) the moon is between the earth and sun
 - c.) the sun is between the earth and moon
 - d.) the earth is between the moon and sun

- 9.) If there is a new moon, about how many days until a full moon appears in the sky?
 - a.) 10 days
 - b.) 15 days
 - c.) 30 days
 - d.) 60 days

- 10.) Soil is renewable. Which of the following help make soil a renewable resource and give the soil back nutrients so grass, plants and crops can grow the following year?
 - a.) manure (cow poop)
 - b.) decayed/dead plants and organisms
 - c.) fertilizer
 - d.) All of the above make soil renewable

5th Grade Science Spring Review Warm-Up Number 14

(12 to 15 minutes, maximum)

Name: _____

- 1.) An animal only comes out at night and sleeps during the day. What is this behavior called?
 - a.) diurnal
 - b.) a night owl
 - c.) migration
 - d.) nocturnal

- 2.) All food chains and food webs all begin with what object? (Think)
 - a.) producer
 - b.) consumer
 - c.) the Sun and its energy
 - d.) photosynthesis

- 3.) Metamorphosis occurs with what type of animals or insects?
 - a.) caterpillar to butterfly
 - b.) tadpole to frog
 - c.) both answers a.) and b.)
 - d.) none of these answers

- 4.) What is the name of an animal that eats both plants and animals?
 - a.) herbivore
 - b.) omnivore
 - c.) carnivore
 - d.) nottoochoosey

- 5.) A spaceship lifts off from earth in Florida. What force tries to pull the ship back to earth?
 - a.) friction
 - b.) thrust
 - c.) gravity
 - d.) sound

- 6.) When two objects rub together creating friction, what type of energy is present between the objects?
 - a.) sound energy
 - b.) thermal energy
 - c.) potential energy
 - d.) kinetic energy

- 7.) A solar eclipse occurs when which of the following occur? (Draw a picture of earth, moon and sun)
 - a.) the sun leaves the solar system
 - b.) the sun is between the moon and earth
 - c.) the moon is between the earth and sun
 - d.) the earth is between the moon and sun

- 8.) A lunar eclipse occurs when which of the following occur? (Draw a picture of earth, moon and sun)
 - a.) the sun leaves the solar system
 - b.) the moon is between the earth and sun
 - c.) the sun is between the earth and moon
 - d.) the earth is between the moon and sun

- 9.) If there is a new moon, about how many days until another new moon appears in the sky?
 - a.) 10 days
 - b.) 15 days
 - c.) 30 days
 - d.) 60 days

- 10.) Soil is renewable. Which of the following help make soil a renewable resource and give the soil back rich nutrients so grass, plants and crops can grow the following year?
 - a.) manure (cow poop)
 - b.) decayed/dead plants and organisms
 - c.) fertilizer
 - d.) All of the above make soil renewable

5th Grade Science Spring Review Warm-Up Number 15

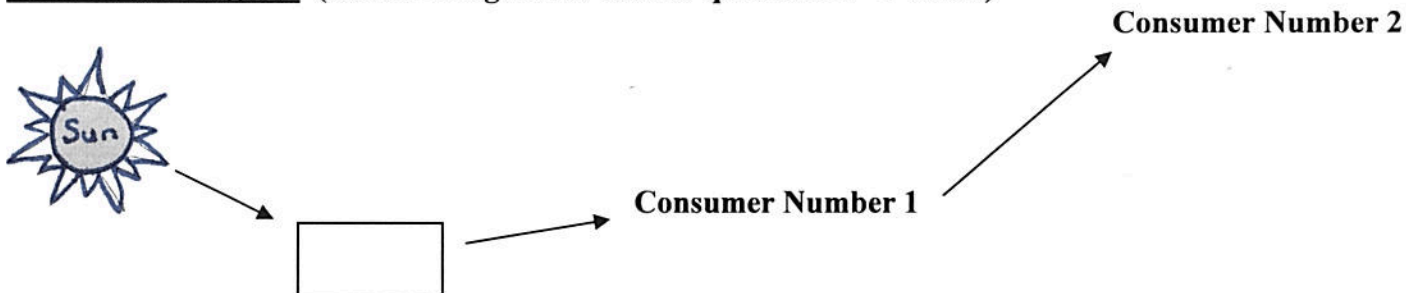
(12 to 15 minutes, maximum)

Name: _____

1.) Abbey is studying nocturnal predators. What is a characteristic of a successful nocturnal predator?

- a.) bright feathers
- b.) long legs
- c.) big eyes
- d.) flat teeth

Food Chain Diagram (Use the Diagram to answer questions 2 - 5 below)



2.) Which of the following choices should go in the box in the Food Chain Diagram above.

- a.) producer
- b.) consumer
- c.) carnivore
- d.) herbivore

3.) What do the 'arrows' mean in the Food Chain Diagram?

- a.) who is eating who
- b.) a transfer of energy
- c.) the metamorphosis of a consumer
- d.) all plants need the sun

4.) Consumer Number 1 in the Food Chain Diagram is an _____?

- a.) omnivore
- b.) suniovore
- c.) herbivore
- d.) carnivore

5.) Consumer Number 2 in the Food Chain Diagram is a _____?

- a.) omnivore
- b.) suniovore
- c.) herbivore
- d.) carnivore

6.) The first stage of the metamorphosis of a butterfly is _____?

- a.) a larva or caterpillar
- b.) an adult or butterfly
- c.) an egg
- d.) a cocoon or pupa or chrysalis

7.) What is the name of an animal that eats both plants and animals?

- a.) herbivore
- b.) omnivore
- c.) carnivore
- d.) nottoochoosey

8.) If there is a full moon, about how many days until a new moon appears in the sky?

- a.) 10 days
- b.) 15 days
- c.) 30 days
- d.) 60 days

9.) People get drinkable water from two places. Name them. _____

5th Grade Science Spring Review Warm-Up Number 16

(12 to 15 minutes, maximum)

Name: _____

1.) An owl is a nocturnal predator. What is a characteristic of owls that make them successful nighttime hunters?

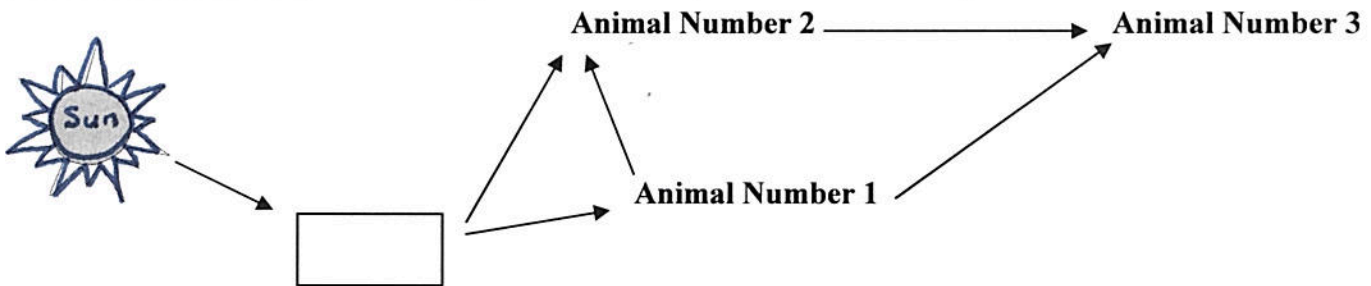
a.) big eyes that lets light in

b.) fast runners

c.) small feathers

d.) sharp teeth

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) Which of the following choices should go in the box in the Food Web Diagram above.

a.) Plant Number 1

b.) Animal Number 4

c.) omnivore

d.) herbivore

3.) What do the 'arrows' mean in the Food Web Diagram?

a.) who is eating who

b.) a transfer of energy

c.) the metamorphosis of a consumer

d.) all plants need the sun

4.) Animal Number 2 in the Food Web Diagram is an _____?

a.) omnivore

b.) suniovore

c.) herbivore

d.) carnivore

5.) Animal Number 3 in the Food Web Diagram is _____?

a.) a predator

b.) an herbivore

c.) prey

d.) hungry

6.) Animal Number 1 in the Food Web Diagram is _____?

a.) the predator

b.) an herbivore

c.) a producer

d.) hungry

7.) The last stage of the metamorphosis of a butterfly is called _____?

a.) a larva or caterpillar

b.) an adult or butterfly

c.) an egg

d.) a cocoon or pupa or chrysalis

8.) If there is a new moon, about how many days until a second full moon appears in the sky? (Think!)

a.) 10 days

b.) 15 days

c.) 30 days

d.) 45 days

9.) People get drinkable water from two places. Name them. _____

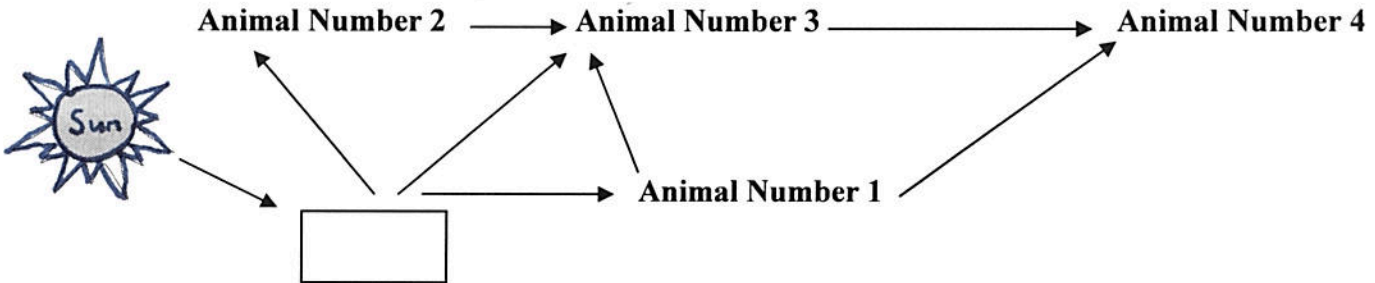
5th Grade Science Spring Review Warm-Up Number 17

(12 to 15 minutes, maximum)

Name: _____

- 1.) A raccoon sneaks into a house and finds stored cans of food in the kitchen pantry. He figures out how to use his paws to pry open a can of food so he can eat it. After eating 3 cans of food, the raccoon leaves and returns the next day to the kitchen for food. What type of behavior is the raccoon demonstrating?
- a.) a canivore
b.) inherited behavior
c.) being really smart or clever
d.) learned behavior

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



- 2.) Which of the following choices should go in the box in the Food Web Diagram above.
- a.) a consumer
b.) Animal Number 5
c.) a producer
d.) an herbivore
- 3.) What do the 'arrows' mean in the Food Web Diagram?
- a.) who is eating who
b.) which animal likes another animal
c.) the metamorphosis of a consumer
d.) a transfer of energy
- 4.) Animal Number 3 in the Food Web Diagram is an _____?
- a.) omnivore
b.) suniovore
c.) herbivore
d.) carnivore
- 5.) Animal Number 4 in the Food Web Diagram is _____?
- a.) a consumer
b.) an herbivore
c.) prey
d.) hungry
- 6.) Animal Number 2 in the Food Web Diagram is _____?
- a.) hungry
b.) a producer
c.) an herbivore
d.) predator
-
- 7.) The stage of the metamorphosis of a butterfly when it makes a cocoon is also called _____?
- a.) a larva or caterpillar
b.) an adult or butterfly
c.) an egg
d.) a pupa or chrysalis
- 8.) Esteban changes the oil on his car. He dumps the used oil on the ground instead of disposing of the oil in a recycle container. What problem does the oil on the ground may cause the environment?
- a.) kill the grass and plants in the area
b.) harm animals in the area
c.) pollute the groundwater beneath the ground
d.) all above answers are possible problems from the dumping of oil on the ground

5th Grade Science Spring Review Warm-Up Number 18

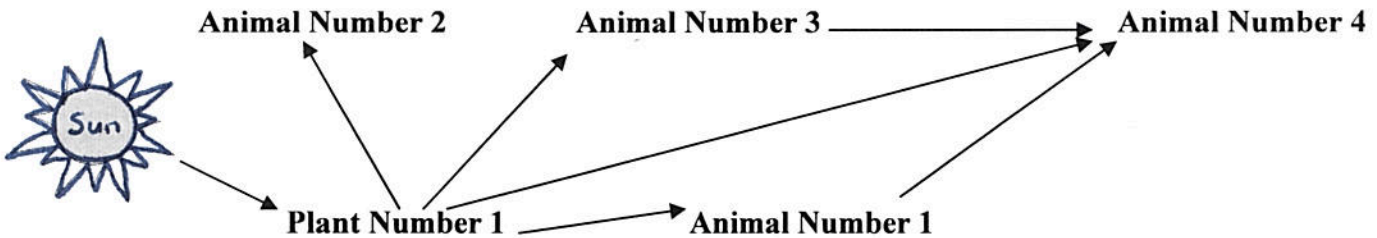
(12 to 15 minutes, maximum)

Name: _____

1.) A mother cat had a litter of kittens. All of the kittens had brown eyes like their mother. The brown eyes are an example of _____.

- a.) a decomposer
- b.) an inherited trait
- c.) a learned behavior
- d.) none of the above

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) How is Plant Number 1 using the sunlight in the Food Web Diagram above?

- a.) making their own food
- b.) giving off or emitting oxygen
- c.) absorbing or taking in carbon dioxide
- d.) all of the above

3.) Animal Number 1 and Animal Number 2 are both called _____.

- a.) an omnivore
- b.) a decomposer
- c.) an herbivore
- d.) a carnivore

4.) Animal Number 4 in the Food Web Diagram is _____.

- a.) an omnivore
- b.) a predator
- c.) a consumer
- d.) all of the above

5.) All life of all animals and plants always begins in the Food Web Diagram with _____?

- a.) Animal Number 1
- b.) Plant Number 1
- c.) the sun
- d.) producers

6.) Animal Number 3 in the Food Web Diagram is _____?

- a.) a predator
- b.) a producer
- c.) both a prey and a consumer
- d.) an omnivore

7.) The sun is made of _____, and the moon is made out of _____?

- a.) impossible for anyone to know
- b.) both the sun and moon are made of gases
- c.) sun is made of gases and moon of dirt & rocks
- d.) sun is made of rocks and moon of gases

8.) Humans get most of their drinkable water from rivers/lakes and ground water. Why do we not get our drinkable water from the ocean waters?

- a.) the water is too deep
- b.) sharks and whales keep humans away
- c.) the waters flow away from our shores
- d.) the high salt content in the ocean water causes dehydration in human beings

9.) Name the three (3) layers of the earth. _____.

5th Grade Science Spring Review Warm-Up Number 19

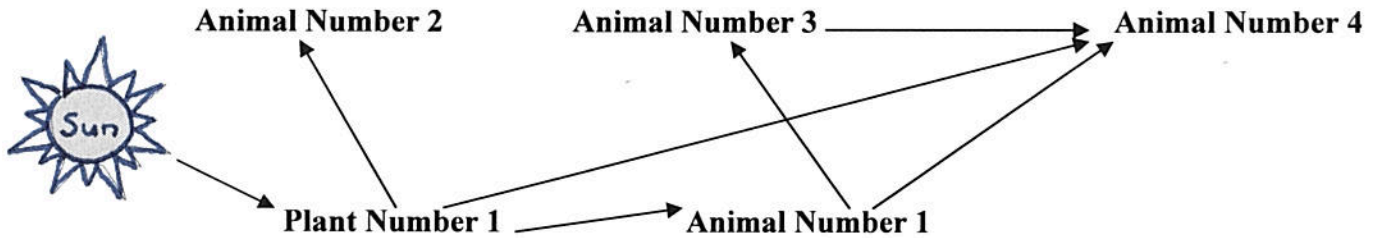
(12 to 15 minutes, maximum)

Name: _____

1.) A seal balances a ball on its nose. What is this behavior called?

- a.) a conductor
- b.) an inherited trait
- c.) a learned behavior
- d.) an insulator

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) How is Plant Number 1 using the sunlight in the Food Web Diagram above?

- a.) making their own food
- b.) uses the sunlight to drink water
- c.) taking Carbon Dioxide from nearby rocks
- d.) absorbs Oxygen to the plant

3.) Animal Number 1 and Animal Number 2 are both called _____.

- a.) omnivores
- b.) decomposers
- c.) herbivores
- d.) carnivores

4.) Animal Number 4 in the Food Web Diagram is _____.

- a.) an omnivore
- b.) a predator
- c.) a consumer
- d.) all of the above

5.) All life of all animals and plants always begins in the Food Web Diagram with _____?

- a.) Animal Number 1
- b.) Plant Number 1
- c.) the sun
- d.) producers

6.) Animal Number 3 in the Food Web Diagram is _____?

- a.) a carnivore
- b.) a consumer
- c.) both prey and predator
- d.) all of the above

7.) The sun is made of _____, and the moon is made out of _____?

- a.) impossible for anyone to know
- b.) both the sun and moon are made of gases
- c.) sun is made of gases and moon of dirt & rocks
- d.) sun is made of rocks and moon of gases

8.) On a field trip to a landfill or garbage dump, a fifth grader asks why they put a thick sheet of plastic under the garbage so there is a plastic sheet or liner between the garbage and the soil beneath the landfill. There is a reservoir of ground water directly underneath the garbage dump or landfill. Why do we use the plastic liner under the landfill?

- a.) to hurt the soil and earthworms
- b.) to protect the groundwater from pollution
- c.) so animals will not dig through the plastic
- d.) to protect the garbage from thieves

9.) Which layer of the earth is the thickest? _____ On which layer of the earth does erosion occur? _____

5th Grade Science Spring Review Warm-Up Number 20

(12 to 15 minutes, maximum)

Name: _____

1.) It was foggy on Saturday morning. This is an example of water changing from a gas to water. What is this change called in science?

- a.) evaporation
- b.) melting

- c.) condensation
- d.) freezing

Food Chain Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) Which organism (living thing) is necessary for all animals to be able to survive in the food chain diagram?

- a.) hawks
- b.) small birds

- c.) caterpillars
- d.) plants

3.) Which organisms in the food chain diagram may be classified as predators?

- a.) caterpillars and small birds
- b.) plants and hawks

- c.) small birds and hawks
- d.) plants only

4.) Based on the food chain diagram, if the population of small birds increases, what will happen to the caterpillar population?

- a.) stay the same
- b.) decreases

- c.) increases
- d.) all of the above

5.) If the number of plants decreases due to pesticides, what will happen to the caterpillar population?

- a.) stay the same
- b.) decreases

- c.) increases
- d.) none of the above

6.) Hawks in the food chain diagram are classified as _____.

- a.) carnivores
- b.) consumers

- c.) predators
- d.) all of the above

7.) A heavy marble sinks to the bottom of glass of water while a small cork floats on top of the water. What statement is true when comparing the density of the water, cork and marble?

- a.) the cork is the most dense object
- b.) the marble is the most dense object

- c.) water is less dense than the cork
- d.) the marble is the least dense object

8.) Salt and sugar are dissolved in a pan of water. After 3 days, only the sugar and salt remain after the water evaporated. Why did the salt and sugar NOT evaporate like the water?

- a.) salt and sugar are too heavy
- b.) water is a liquid where salt and sugar are minerals

- c.) salt and sugar dissolved and are invisible
- d.) all ingredients evaporated in the pan of water

9.) Which layer of the earth is the thinnest? _____ Which layer of the earth is the hottest? _____

10.) My cat sees itself in the bathroom mirror. In science, this is an example of _____.

- a.) refraction of light

- b.) reflection of light

- c.) the cat's good eyesight

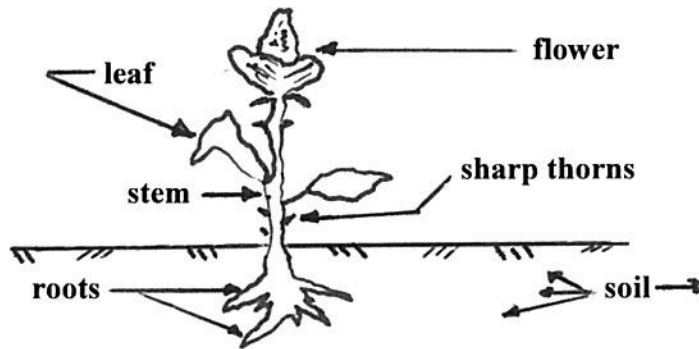
5th Grade Science Spring Review Warm-Up Number 22

(12 to 15 minutes, maximum)

Name: _____

- 1.) A blue crayon is placed in a frying pan on a hot stove. The blue crayon melts but does not burn. All of the following answer choices DID NOT change when the blue crayon melted EXCEPT _____.
- a.) the crayon's color
b.) the crayon's mass
c.) the crayon's shape
d.) the number of atoms in the crayon

PLANT DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



- 2.) The plant roots allow two important things to enter the plant. Name them. _____
- 3.) What is inside the plant's stem that allow water and nutrients (minerals) to reach the leaves?
- a.) cardboard paper
b.) small vertical tubes to transport water/minerals
c.) precipitation
d.) all of the above
- 4.) What is the purpose or function of the flowers or fruits on a plant or tree?
- a.) to look pretty
b.) to reproduce and make more plants and trees
c.) to attract sunlight
d.) to defend the plant from herbivores
- 5.) During photosynthesis, what is the plant making?
- a.) it is reproducing
b.) it is in the process of pollination
c.) fertilizing the ground with minerals
d.) making a sugar or its food
- 6.) What gas is absorbed into the leaf during photosynthesis?
- a.) nitrogen
b.) carbon dioxide
c.) oxygen
d.) phosphorous
- 7.) What gas is emitted or given off during the process of photosynthesis?
- a.) nitrogen
b.) carbon dioxide
c.) oxygen
d.) phosphorous
- 8.) What is also absorbed into the leaf during photosynthesis for the plant to make sugar or its food?
- a.) helium
b.) sunlight
c.) moon rays
d.) phosphorous
-
- 9.) What is the main reason for the four seasons (winter, summer, fall, spring) we have on Earth?
- a.) the distance of earth from the sun
b.) the moon's orbit around the earth
c.) the tilt (declination) of the earth
d.) the rotation of the earth on its axis
- 10.) The ocean tides occur twice every day. What object is the main reason for the ocean tides? _____

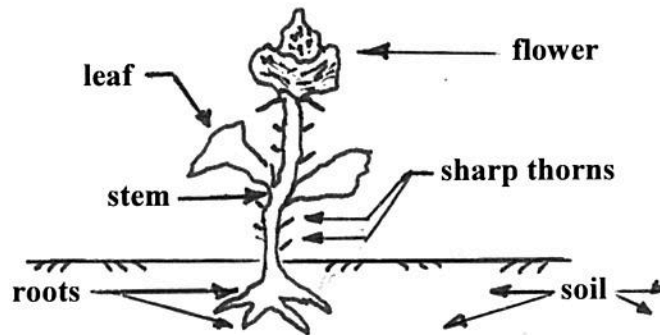
5th Grade Science Spring Review Warm-Up Number 23

(12 to 15 minutes, maximum)

Name: _____

- 1.) Your shadow is directly underneath your body as you walk to the playground. What time of day is it?
- a.) 8 AM (morning)
 - b.) 5 PM (school's out for the day)
 - c.) 12 PM (noon – lunch time)
 - d.) Party time

PLANT DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



- 2.) The plant roots allow what two important things to enter the plant. Name them. _____
- 3.) What is inside the plant's stem that allow water and nutrients (minerals) to reach the leaves?
- a.) cardboard paper
 - b.) small vertical tubes to transport water/minerals
 - c.) rubber
 - d.) none of the above
- 4.) What is the purpose or function of the flowers or fruits on a plant or tree?
- a.) to look pretty
 - b.) to reproduce and make more plants and trees
 - c.) to attract sunlight
 - d.) to defend the plant from herbivores
- 5.) During photosynthesis, what is the plant making?
- a.) it is reproducing
 - b.) it is in the process of pollination
 - c.) fertilizing the ground with minerals
 - d.) making a sugar or its food
- 6.) Why is a plant called a producer, and it is not called a consumer?
- a.) a plant is unable to make its own food
 - b.) a plant makes its own food and a consumer cannot
 - c.) a plant is a performer not a producer
 - d.) a plant is a consumer
- 7.) A plant or tree sometimes has sharp thorns. What purpose or function do the thorns serve?
- a.) to defend the plant or tree against predators
 - b.) to hurt and kill the plant
 - c.) to attract sunlight
 - d.) all of the above
- 8.) How does a flowering plant reproduce for its species to live on the next year?
- a.) insects pollinate when they get nectar
 - b.) plant pollen is transported by the wind
 - c.) plant pollen sticks to animal fur
 - d.) all of the above

-
- 9.) What is the main reason for the four seasons (winter, summer, fall, spring) we have on Earth?
- a.) the distance of earth from the sun
 - b.) the moon's orbit around the earth
 - c.) the tilt (declination) of the earth
 - d.) the rotation of the earth on its axis

- 10.) During the rock cycle, what type of rock is formed underground due to heat and pressure?
- a.) sedimentary rock
 - b.) metamorphic rock
 - c.) igneous rock

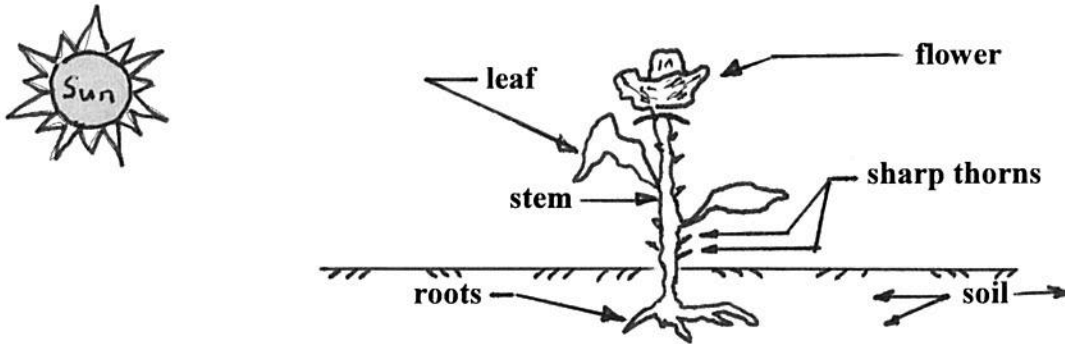
5th Grade Science Spring Review Warm-Up Number 24

(12 to 15 minutes, maximum)

Name: _____

- 1.) A blue crayon is placed in a frying pan on a hot stove. The blue crayon melts but does not burn. All of the following answer choices DID NOT change when the blue crayon melted EXCEPT _____.
- a.) the crayon's color
b.) the crayon's mass
c.) the crayon's shape
d.) the number of atoms in the crayon

PLANT DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



- 2.) The plant roots allow two important things to enter the plant. Name them. _____
- 3.) What is inside the plant's stem that allow water and nutrients (minerals) to reach the leaves?
- a.) cardboard paper
b.) small vertical tubes to transport water/minerals
c.) sunlight
d.) precipitation
- 4.) What is the purpose or function of the flowers or fruits on a plant or tree?
- a.) to look pretty
b.) to reproduce the species and make more plants/trees
c.) to attract sunlight
d.) to defend the plant from herbivores
- 5.) During photosynthesis, what is the plant making?
- a.) it is reproducing
b.) it is in the process of pollination
c.) fertilizing the ground with minerals
d.) making a sugar or its food
- 6.) What gas is absorbed into the leaf during photosynthesis?
- a.) nitrogen
b.) carbon dioxide
c.) oxygen
d.) phosphorous
- 7.) What gas is emitted or given off during the process of photosynthesis?
- a.) nitrogen
b.) carbon dioxide
c.) oxygen
d.) phosphorous
- 8.) What is also absorbed into the leaf during photosynthesis for the plant to make sugar or its food?
- a.) helium
b.) sunlight
c.) moon rays
d.) phosphorous
-
- 9.) What is the main reason for the four seasons (winter, summer, fall, and spring) we have on Earth?
- a.) the distance of earth from the sun
b.) the moon's orbit around the earth
c.) the tilt (declination) of the earth
d.) the rotation of the earth on its axis
- 10.) The ocean tides occur twice every day. What object is the main reason for the ocean tides? _____

5th Grade Science Spring Review Warm-Up Number 25

(12 to 15 minutes, maximum)

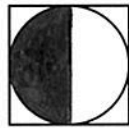
Name: _____

- 1.) A timber company harvests trees to have wood to build homes. What may happen as the timber company continues to harvest trees in the same area where many animals live?
- a.) a law will declare no fishing in that area c.) animals will lose their habitats in that area
b.) the timber company will lose money d.) animals will dig holes since there are no trees
-

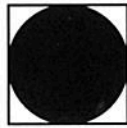
PHASES OF THE MOON DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



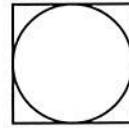
1



2



3



4

- 2.) “Phases of the Moon” means a change of what on the moon? _____
- 3.) What is the order of the phases of the moon starting at the beginning of the month?
- a.) 2, 4, 1, 3 c.) 3, 4, 1, 2
b.) 3, 2, 4, 1 d.) 1, 2, 3, 4
- 4.) What is the moon called that is labeled number 3 in the Phases of the Moon Diagram above?
- a.) the pretty moon c.) the old moon
b.) the new moon d.) the full moon
- 5.) What is the moon called that is labeled number 4 in the Phases of the Moon Diagram above?
- a.) the pretty moon c.) the old moon
b.) the new moon d.) the full moon
- 6.) How many weeks does it take the moon to revolve around the earth one time?
- a.) about four weeks c.) about 1 year
b.) about 1 day d.) about 365 ¼ days
- 7.) What is another name for the moon?
- a.) solar c.) Suzy
b.) lunar d.) None of the above
- 8.) What does the moon’s gravitational pull on earth cause twice a day on the earth’s surface?
- a.) recess c.) earthquakes
b.) the ocean tides d.) large mountains to form
-
- 9.) Seasons (fall, winter, spring, and summer) of the earth occur due to the earth’s tilt and as _____
- a.) the sun rotates on its axis c.) the earth rotates on its axis
b.) the moon revolves around the earth d.) the earth revolves around the sun
- 10.) A fifth grader’s shadow from the sun is very long and extends far toward the west. About what time of day is it?
- a.) 12 PM (noon) c.) 6 PM
b.) 12 AM (midnight) d.) 8 AM

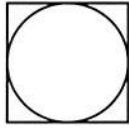
5th Grade Science Spring Review Warm-Up Number 26

(12 to 15 minutes, maximum)

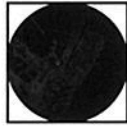
Name: _____

- 1.) The moon is between the earth and the sun. What type of eclipse is occurring? (Draw three circles. Correctly label each circle as either the sun, moon and earth. "Eclipse" means 'going away'.)
- a.) lunar eclipse
b.) night time eclipse
c.) Eclipse of the Heart
d.) solar eclipse

PHASES OF THE MOON DIAGRAM (Use the Diagram to answer questions 2 – 9 below)



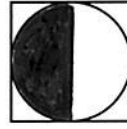
1



2



3



4

- 2.) "Phases of the Moon" means a change of what on the moon? _____
- 3.) What is the order of the phases of the moon starting at the beginning of the month?
- a.) 2, 4, 1, 3
b.) 3, 2, 4, 1
c.) 3, 4, 1, 2
d.) 1, 2, 3, 4
- 4.) What is the moon called that is labeled number 2 in the Phases of the Moon Diagram above?
- a.) the pretty moon
b.) the new moon
c.) the old moon
d.) the full moon
- 5.) What is the moon called that is labeled number 1 in the Phases of the Moon Diagram above?
- a.) the pretty moon
b.) the new moon
c.) the old moon
d.) the full moon
- 6.) How many weeks does it take the moon to revolve around the earth one time?
- a.) about four weeks or 30 days
b.) about 1 day
c.) about 1 year
d.) about 365 ¼ days
- 7.) What is another name for the moon?
- a.) solar
b.) lunar
c.) Suzy
d.) None of the above
- 8.) What does the moon's gravitational pull on earth cause twice a day on the earth's surface?
- a.) recess
b.) the ocean tides
c.) earthquakes
d.) large mountains to form
- 9.) If it is a full moon, *about* how many days until a new moon appears in the nighttime sky?
- a.) 15 days
b.) 30 days
c.) 45 days
d.) 60 days
-
- 10.) A fifth grader's shadow from the sun is very long and extends far toward the east. About what time of day is it?
- a.) 12 PM (noon)
b.) 12 AM (midnight)
c.) 5 PM
d.) 8 AM

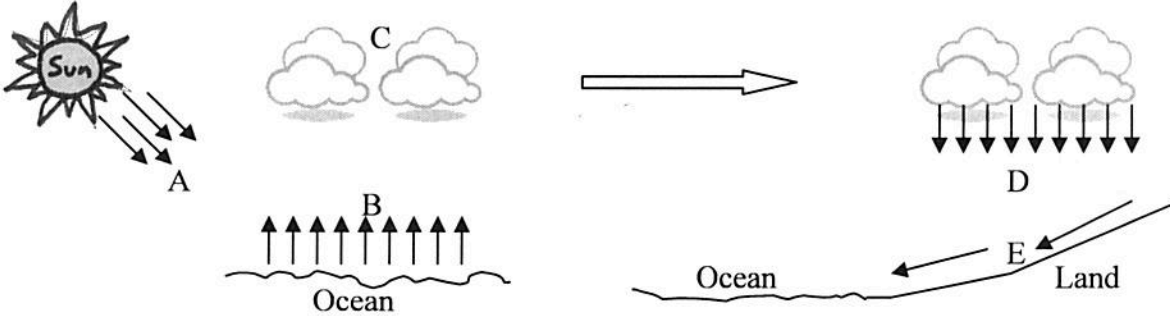
5th Grade Science Spring Review Warm-Up Number 27

(12 to 15 minutes, maximum)

Name: _____

- 1.) The sun does not move, but it appears to move across the earth's sky. What is causing this situation?
- | | |
|---------------------------------------|---|
| a.) rotation of the moon on its axis | c.) rotation of the sun on its axis |
| b.) rotation of the earth on its axis | d.) revolution of the moon around the earth |

The Water Cycle (Use the Diagram to answer questions 2 – 8 below)



- 2.) Label the Water Cycle Diagram for Letters A, B, C, D and E.
- 3.) What causes condensation in the clouds that are labeled by Letter 'C'?
- | | |
|------------------------|--|
| a.) fluffy air | c.) colder temperatures and expansion of air |
| b.) higher temperature | d.) airplanes flying too low in the sky |
- 4.) In the process labeled Letter 'E', where does the runoff begin?
- | | |
|-------------------|--|
| a.) in the desert | c.) in the mountains and plains |
| b.) in the lakes | d.) runoff flows toward the clouds not the ocean |
- 5.) Is the evaporation of salt water a chemical or physical change? _____
- 6.) Is the condensation that forms clouds a chemical or physical change? _____
- 7.) What object in the solar system begins the water cycle on earth?
- | | |
|--------------|-----------|
| a.) the sun | c.) Earth |
| b.) the moon | d.) Venus |
- 8.) Name the material that is carried by erosion forces from the mountains and fields and is deposited in river deltas.
- | | |
|---------------------------------------|------------------|
| a.) large rocks | c.) glaciers |
| b.) small sediments, pebbles and soil | d.) solar energy |

- 9.) If it is a full moon, about how many days until a SECOND full moon appears in the nighttime sky?
- | | |
|-------------|-------------|
| a.) 15 days | c.) 45 days |
| b.) 30 days | d.) 60 days |
- 10.) As the teacher walks her students across the playground, the students notice that their shadow from the sun is directly underneath their bodies. About what time of day is it?
- | | |
|----------------------|----------|
| a.) 12 PM (noon) | c.) 5 PM |
| b.) 12 AM (midnight) | d.) 8 AM |
- 11.) Name ALTERNATIVE energy sources compared to the use of fossil fuels. _____

5th Grade Science Spring Review Warm-Up Number 28

(15 to 20 minutes, maximum)

Name: _____

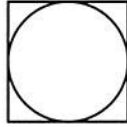
1.) The earth is between the moon and the sun. What type of eclipse is occurring? (Draw three circles Label each the sun, moon and earth correctly. "Eclipse" means 'going away'.)

- a.) lunar eclipse
- b.) night time eclipse
- c.) Eclipse of the Heart
- d.) solar eclipse

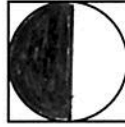
PHASES OF THE MOON DIAGRAM (Use the Diagram to answer questions 2 – 9 below)



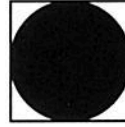
1



2



3



4

- 2.) "Phases of the Moon" means a change of what on the moon? _____
- 3.) What is the order of the phases of the moon starting at the beginning of the month?
- a.) 4, 3, 2, 1
 - b.) 3, 2, 4, 1
 - c.) 3, 4, 1, 2
 - d.) 1, 2, 3, 4
- 4.) What is the moon called that is labeled number 2 in the Phases of the Moon Diagram above?
- a.) the pretty moon
 - b.) the new moon
 - c.) the old moon
 - d.) the full moon
- 5.) What is the moon called that is labeled number 4 in the Phases of the Moon Diagram above?
- a.) the pretty moon
 - b.) the new moon
 - c.) the old moon
 - d.) the full moon
- 6.) How many weeks does it take the moon to revolve around the earth one time?
- a.) about four weeks (or 30 days)
 - b.) about 1 day
 - c.) about 1 year
 - d.) about 365 ¼ days
- 7.) What is another name for the moon?
- a.) lunar
 - b.) solar
 - c.) Suzy
 - d.) None of the above
- 8.) What does the moon's gravitational pull on the earth cause twice a day on the earth's surface?
- a.) recess
 - b.) the ocean tides
 - c.) earthquakes
 - d.) large mountains to form
- 9.) If it is a full moon, about how many days until another full moon appears in the nighttime sky?
- a.) 15 days
 - b.) 30 days
 - c.) 45 days
 - d.) 60 days

10.) A fifth grader's shadow is almost directly below him. About what time of day is it?

- a.) 12 PM (noon)
- b.) 12 AM (midnight)
- c.) 5 PM
- d.) 8 AM

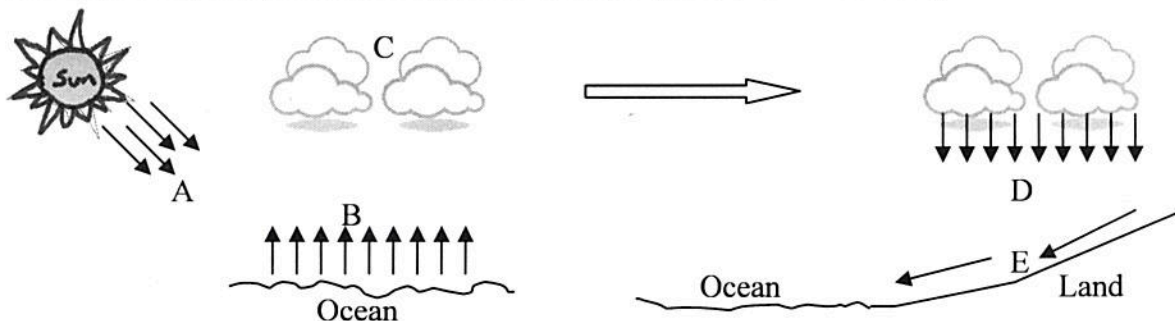
5th Grade Science Spring Review Warm-Up Number 29

(15 to 20 minutes, maximum)

Name: _____

- 1.) Each day, the sun appears to move across the earth's sky. What is causing this phenomenon?
- a.) rotation of the earth on its axis
 - b.) rotation of the moon on its axis
 - c.) rotation of the sun on its axis
 - d.) revolution of the moon around the earth

The Water Cycle (Use the Diagram to answer questions 2 – 8 below)



- 2.) Label the Water Cycle Diagram for Letters A, B, C, D and E.
- 3.) What causes condensation in the clouds that are labeled by Letter 'C'?
- a.) fluffy air
 - b.) higher temperature
 - c.) colder temperatures and expansion of air
 - d.) airplanes flying too low in the sky
- 4.) In the process called Letter 'E', where does the runoff begin?
- a.) in the desert
 - b.) in the lakes
 - c.) in the mountains and plains
 - d.) runoff flows toward the clouds not ocean
- 5.) Is the evaporation of salt water a chemical or physical change? _____
- 6.) Is the condensation that forms clouds a chemical or physical change? _____
- 7.) What force pulls the precipitation to the earth's surface?
- a.) friction
 - b.) thrust
 - c.) gravity
 - d.) all of the above
- 8.) Name the material that is carried by erosion forces from the mountains and fields and is deposited in river deltas.
- a.) large rocks
 - b.) small sediments, pebbles and soil
 - c.) glaciers
 - d.) solar energy
-
- 9.) If it is a new moon, about how many days until a SECOND full moon appears in the nighttime sky?
- a.) 15 days
 - b.) 30 days
 - c.) 45 days
 - d.) 60 days
- 10.) As a group of students stand on the playground, they notice their shadows extend toward the west. About what time of day is it?
- a.) 12 PM (noon)
 - b.) 12 AM (midnight)
 - c.) 5 PM
 - d.) 9 AM
- 11.) Name **ALTERNATIVE** energy sources compared to the use of fossil fuels. _____

5th Grade Science Spring Review Warm-Up Number 30

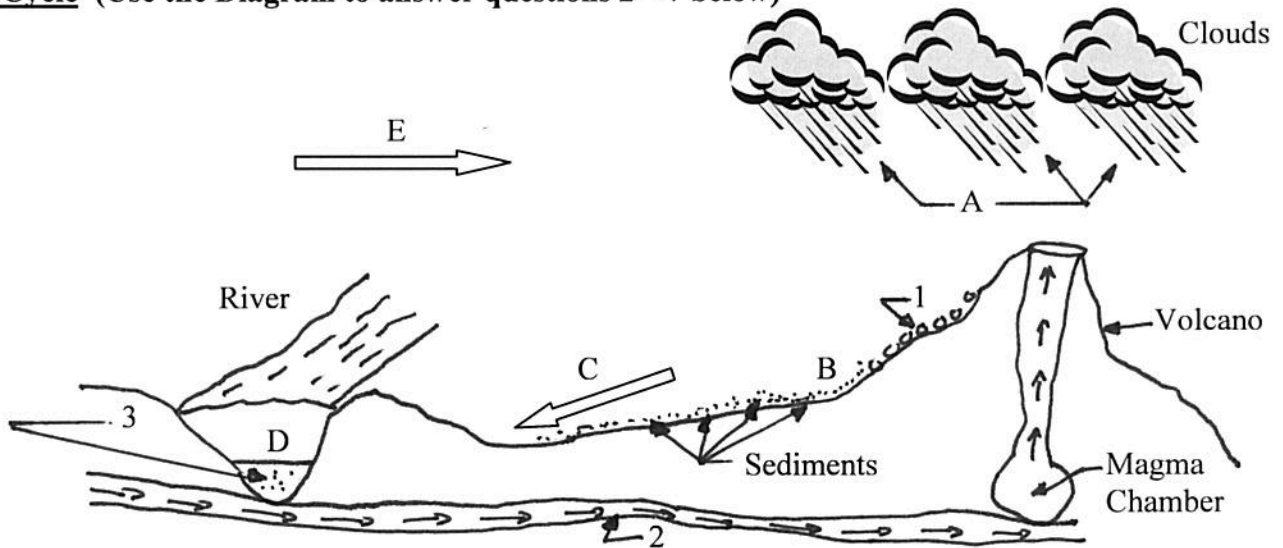
(15 to 20 minutes, maximum)

Name: _____

1.) A bird builds his nest in back window of an abandoned car. What is this called in science?

- a.) dangerous
- b.) a poor place for a habitat
- c.) a nocturnal predator
- d.) an adaption to the bird's environment

The Rock Cycle (Use the Diagram to answer questions 2 – 7 below)



2.) Label the Rock Cycle Diagram for Letters A, B, C, D and E. (USE: Wind, Erosion, Compaction, Weathering and Precipitation)

3.) Label the Rock Cycle Diagram for Numbers 1, 2, and 3 (USE: Sedimentary Rock, Metamorphic Rock, and Igneous Rock)

4.) What force (Letter C in the Rock Cycle Diagram) carries the weathered rock to the river?

- a.) friction and thrust
- b.) erosion and gravity
- c.) electricity and magnetism
- d.) none of the above

5.) What two forces shown in the Rock Cycle Diagram weather the igneous rock (Letter B)?

- a.) the wind and precipitation (water/sleet/ice)
- b.) the volcano and magma
- c.) mudslides and rockslides
- d.) lava and magma

6.) What type of rock is formed underground with heat and pressure? _____

7.) In what type of rock would fossils most likely be formed? _____

8.) All of the following help an animal defend itself against predators EXCEPT _____.

- a.) a hard shell
- b.) short legs
- c.) sharp claws, teeth and quills
- d.) the ability to run very fast

9.) A conductor allows what two things to easily pass through it? _____

10.) Name as many conductors as possible. _____

11.) On the line below, name as many insulators that do not allow electricity or heat to pass through itself. _____

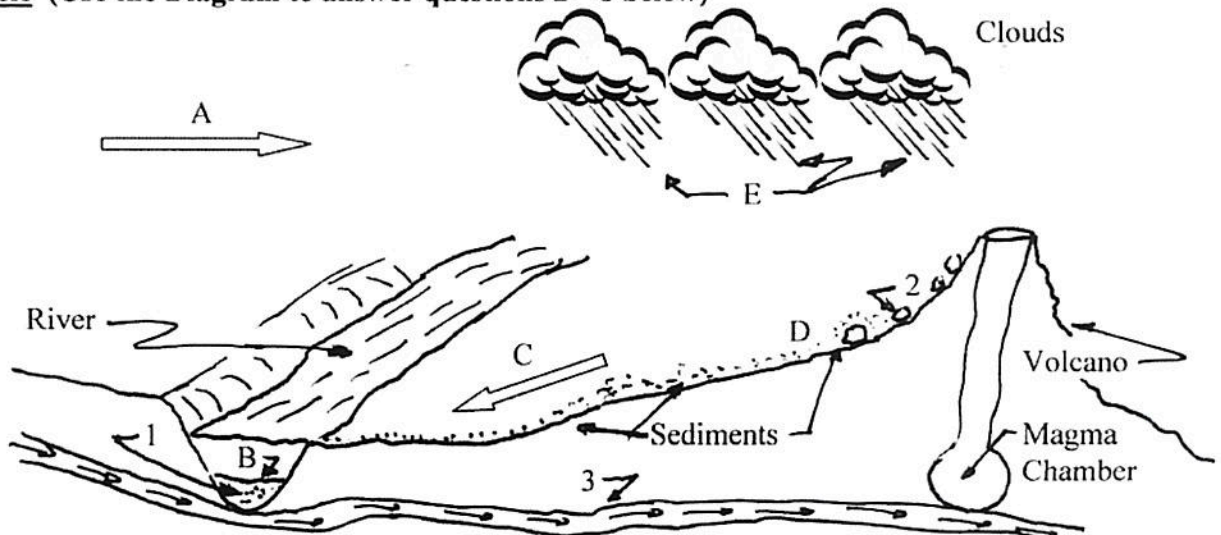
5th Grade Science Spring Review Warm-Up Number 31

(15 to 20 minutes, maximum)

Name: _____

- 1.) A young man reads a book with a see through glass hemisphere to make the print bigger. What type of science principle is taking place?
- a.) reflection of light
b.) condensation
c.) refraction of light
d.) decomposer

The Rock Cycle (Use the Diagram to answer questions 2 – 8 below)



- 2.) Label the Rock Cycle Diagram for Letters A, B, C, D and E. (USE: Wind, Erosion, Compaction, Weathering, and Precipitation)
- 3.) Label the Rock Cycle Diagram for Numbers 1, 2, and 3 (USE: Sedimentary Rock, Metamorphic Rock, and Igneous Rock)
- 4.) What force (Letter C in the Rock Cycle Diagram) carries the weathered rock to the river?
- a.) friction and thrust
b.) electricity and magnetism
c.) erosion and gravity
d.) all of the above
- 5.) What two forces shown in the Rock Cycle Diagram weather the igneous rock (Letter D)?
- a.) lava and magma
b.) the volcano and magma
c.) mudslides and rockslides
d.) the wind and precipitation (water/sleet/ice)
- 6.) What type of rock is formed underground with heat and pressure? _____
- 7.) In what type of rock would fossil fuels and fossils most likely be formed? _____
- 8.) True or False. A metamorphic rock may be changed into a sedimentary or an igneous rock? _____
-
- 9.) How many 'things' are changed or tested in any science experiment? _____.
- 10.) A conductor allows what two things to easily pass through it? _____
- 11.) Name as many conductors as possible. _____
- 12.) On the line below, name as many insulators that do not allow electricity or heat to pass through itself. _____

5th Grade Science Spring Review Warm-Up Number 32

(15 to 18 minutes, maximum)

Name: _____

1.) Melissa listed 4 characteristics for a predator using what she learned in her science class. Write the 4 characteristics of predators she wrote down on her paper.

1.) _____ 3.) _____

2.) _____ 4.) _____

2.) How many things or variables are changed in any science experiment? _____

3.) In a science class, Dante did the following to set-up his experiment. He used the same amount of water on each of three plants. He used the same amount of sunlight and the same soil type on all three plants as well. Dante used three different types of plants in each pot holder. What was Dante testing during his science experiment?

a.) How water affects plant growth

c.) Which type of plant grows best in the soil

b.) How soil affects plant growth

d.) How changing the sunlight affects the plant

4.) Why would an organism like a blow fish expand its lungs and appear to be twice the size normally when it sees a predator?

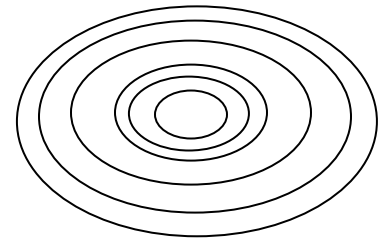
a.) to eat more food

c.) to appear much bigger and protect itself

b.) to get more oxygen to its lungs

d.) to take up more space in its environment

Jose sawed a tree down and examined the tree trunk tree rings shown in the picture to right.



5.) How old was the tree that Jose cut down?

a.) 3 years old

c.) 5 years old

b.) 4 years old

d.) 6 years old

6.) In what year of the tree's life was there most likely a drought?

a.) 3 years old

c.) 5 years old

b.) 4 years old

d.) impossible to tell

7.) What helps protect a tree against a fire and insects?

a.) the inner most ring

c.) the outside bark

b.) the leaves of the tree

d.) None of the above

8.) What is the function of a flower on either a tree or a plant?

a.) to hold water

c.) to look pretty in the backyard

b.) to reproduce the species

d.) to hold nectar for sunlight

9.) How is a plant able to reproduce using its flower for pollen to move to another flower?

a.) insects like bees and butterflies

c.) pollen gets stuck in a passing animal's fur

b.) wind carrying pollen

d.) all choices help plants reproduce

10.) Name two ways a fruit tree like an apple tree reproduces: _____

5th Grade Science Spring Review Warm-Up Number 33

(12 to 15 minutes, maximum)

Name: _____

1.) Travis lists a predator using 4 characteristics she learned in her science class. List the 4 characteristics she wrote down on her paper.

1.) _____ 3.) _____

2.) _____ 4.) _____

2.) How many things or variables are changed in any science experiment? _____

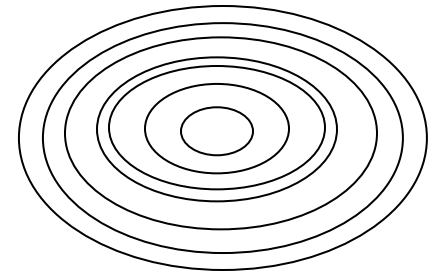
3.) In a science experiment, a fifth grader can ALWAYS tell what is being tested in the experiment by ____.

- a.) reviewing the type of science equipment used c.) checking the temperature of the water
b.) looking at the one thing that is changed d.) taking note of the constants in the experiment

4.) The temperature of a glass of water is 55° Celsius. How many degrees must the water temperature increase to reach the water's boiling temperature?

- a.) 55° Celsius c.) 212° Celsius
b.) 0° Celsius d.) 45° Celsius

Elaine looked at a tree trunk tree rings shown in the picture to the right.



5.) How old was the tree that Elaine is looking at?

- a.) 4 years old c.) 6 years old
b.) 5 years old d.) 7 years old

6.) In what year of the tree's life was there most likely a drought?

- a.) 3 years old c.) 5 years old
b.) 4 years old d.) impossible to tell

7.) What helps protect a tree against a fire and insects?

- a.) the inner most ring c.) the outside bark
b.) the leaves of the tree d.) None of the above

8.) A bird builds its nest on top of a light on a building. What is the bird doing besides building his habitat?

- a.) making sure the habitat is out of the wind c.) attracting predators
b.) adapting to the environment d.) staying out of the sun

9.) Glaciers are large masses of ice that move slowly over the land. Which one of these features is most likely formed by a glacier?

- a.) a high mountain c.) a wide valley
b.) a deep ocean d.) a desert

10.) Name two ways a fruit tree reproduces: _____

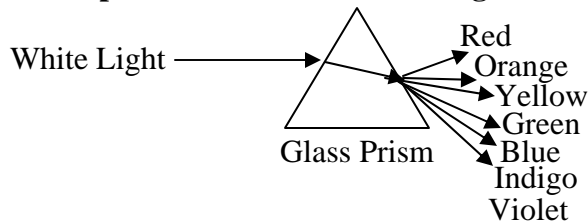
11.) What type of energy is released by a light bulb that is turned on? _____

5th Grade Science Spring Review Warm-Up Number 34

(12 to 15 minutes, maximum)

Name: _____

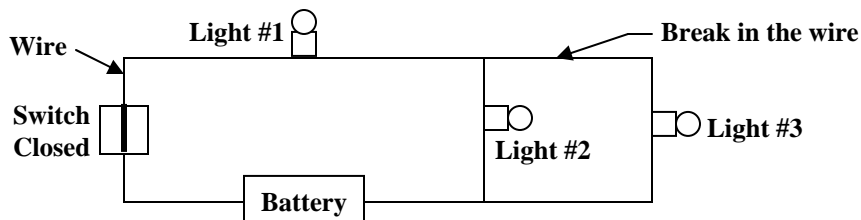
- 1.) Shown below is white, visible light as it travels through a glass triangular prism. It separates into seven colors (ROYGBIV) – Red, Orange, Yellow, Green, Blue, Indigo and Violet as it travels through the glass prism. This is an example of refraction since the light is bent by the glass prism.



What is another example of refraction?

- a.) when light bounces back from a mirror c.) when sunlight strikes the moon
b.) when light strikes your paper on your desk d.) when light goes into water
- 2.) A animal skull has flat teeth. What type of animal was it most likely when it was alive?
h.) omnivore j.) skullivore
i.) herbivore k.) carnivore
- 3.) The temperature of a glass of water is 26° Celsius. How many degrees must the water temperature decrease to reach water’s freezing temperature?
a.) 26° Celsius c.) 212° Celsius
b.) 32° Celsius d.) 45° Celsius
-

The Electrical Circuit shown in the diagram below will be used to answer questions 4-6.



- 4.) What light will NOT come on in this circuit as it is shown above?
a.) Light # 1 c.) Light # 3
b.) Light # 2 d.) All Light will not work
- 5.) IF the switch were OPEN, what lights will light up?
h.) Light # 1 j.) Light # 3
i.) Light # 2 k.) None of the lights will not shine light or work
- 6.) Why is rubber or plastic wrapped around the copper (metal) in the wires in the circuit shown above?
a.) rubber and plastic are insulators c.) so humans do not get electrocuted.
b.) the copper inside the wire is a conductor d.) All of the above are reasons to use plastic/rubber around the wires.
-

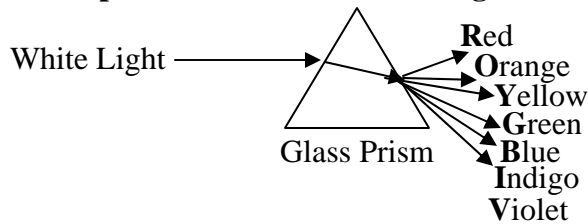
- 7.) What scientific principle is being tested if Oliver throws rocks and baseballs up in the sky and they fall back to earth?
h.) mass j.) gravity
i.) solubility k.) density

5th Grade Science Spring Review Warm-Up Number 35

(12 to 15 minutes, maximum)

Name: _____

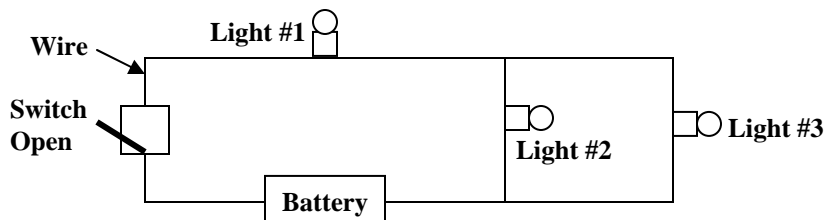
- 1.) Shown below is white, visible light as it travels through a glass triangular prism. It separates into seven colors (ROYGBIV) – Red, Orange, Yellow, Green, Blue, Indigo and Violet as it travels through the glass prism. This is an example of refraction since the light is bent by the glass prism.



Which answer choice is NOT an example of refraction but of reflection?

- a.) when light bounces back from a mirror c.) when light enters your eyeglasses
b.) when light goes into a raindrop forming a rainbow d.) when light goes into water
- 2.) A animal skull has sharp and flat teeth. What type of animal was it (most likely) when it was alive?
- h.) omnivore j.) skullivore
i.) herbivore k.) carnivore
- 3.) The temperature of a glass of water is 26° Celsius. How many degrees must the water temperature increase to reach water’s boiling temperature?
- a.) 26° Celsius c.) 74° Celsius
b.) 32° Celsius d.) 45° Celsius

The Electrical Circuit shown in the diagram below will be used to answer questions 4-6.



- 4.) What light will NOT come on in this circuit as it is shown above?
- a.) Light # 1 c.) Light # 3
b.) Light # 2 d.) All of the lights will not shine light or work
- 5.) IF the switch were Closed, what lights will light up?
- h.) Light # 1 j.) Light # 3
i.) Light # 2 k.) All of the lights will shine light or work
- 6.) Why is rubber or plastic wrapped around the copper (metal) in the wires in the circuit shown above?
- a.) rubber and plastic are insulators c.) so humans do not get electrocuted.
b.) the copper inside the wire is a conductor d.) All of the above are reasons to use plastic/rubber around the wires.

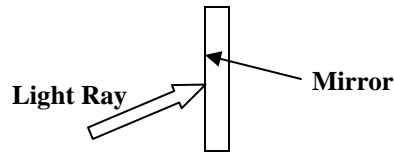
- 7.) What scientific principle is being tested if a marble, cork and oil are all dumped into a very large graduated cylinder full of water?
- h.) mass j.) gravity
i.) solubility k.) density

5th Grade Science Spring Review Warm-Up Number 36

(12 to 15 minutes, maximum)

Name: _____

1.) Shown below is a light ray striking a mirror. What direction will the ray be reflected from the mirror?



a.)

b.)

c.)

d.)

2.) Which item below is the best insulator of electricity and heat?

h.) copper

i.) air

j.) rubber

k.) human being

3.) Some organisms like mushrooms break down dead animals. How does this function benefit plants?

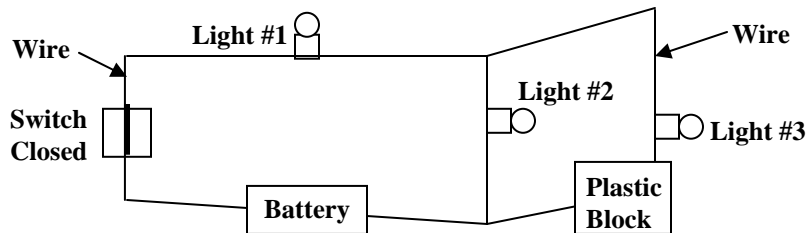
a.) through photosynthesis

b.) by getting rid of a diseased animal

c.) by returning nutrients to the soil

d.) by killing predators to plants

The Electrical Circuit shown in the diagram below will be used to answer questions 4-7.



4.) What light will NOT come on in this circuit as it is shown above? Think why!!!

a.) Light # 1

b.) Light # 2

c.) Light # 3

d.) All of the lights will not shine light or work

5.) IF the switch were Open, what lights will light up?

h.) Light # 1

i.) Light # 2

j.) Light # 3

k.) All of the lights will not shine light or work

6.) When the switch is in the position shown above, the circuit is called a _____.

a.) complete or closed circuit

b.) insulated circuit

c.) a open circuit

d.) a conducted circuit

7.) Why does the electricity flow through the wire?

a.) the metal/copper is a conductor

b.) electricity is all about sound energy

c.) the plastic that surrounds the wire is round

d.) the plastic is an insulator

8.) Which of these answers best demonstrates reflection of light?

h.) Looking though a glass fish bowl

i.) Looking at the sun's radiant energy

j.) Looking at my image on a car window

k.) All are examples of refraction

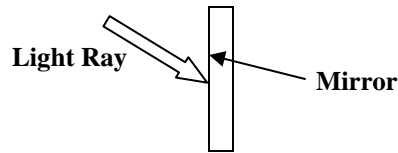
9.) The 'rises' in the _____ and it 'sets' in the _____. Use: North, East, South, or West

5th Grade Science Spring Review Warm-Up Number 37

(12 to 15 minutes, maximum)

Name: _____

1.) Shown below is a light ray striking a mirror. What direction will the ray be reflected from the mirror?



a.)

b.)

c.)

d.)

2.) Which item below is the best conductor of electricity and heat?

h.) copper

i.) air

j.) rubber

k.) human being

3.) In the Water Cycle, which stage is AFTER the evaporation of water from the ocean or a lake?

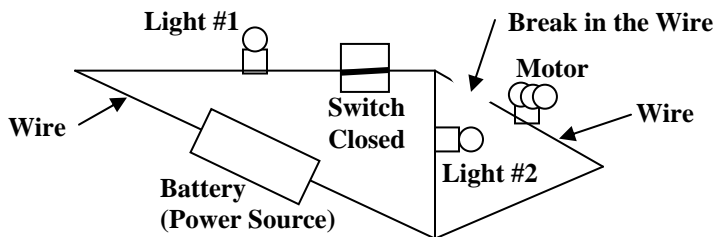
a.) run-off of water down a hill

b.) a downpour of rain over land

c.) the formation of clouds (condensation)

d.) the delta forming in the river

The Electrical Circuit shown in the diagram below will be used to answer questions 4-6.



Hint: Draw the electric current.

4.) What light or motor will NOT come on in this circuit as it is shown above?

a.) Light # 1

b.) Light # 2

c.) Motor

d.) All of the lights will not shine light or work

5.) IF the switch were Open, what lights or motor will shine or work?

h.) Light # 1

i.) Light # 2

j.) Motor

k.) All of the lights will not shine light or work

6.) When the switch is in the position shown above, the circuit is called a _____.

a.) complete or closed circuit

b.) insulated circuit

c.) an open circuit

d.) a conducted circuit

7.) Which of these answers best demonstrates refraction of light?

h.) Looking at oneself in the mirror

i.) Light bouncing off the shingles on a house

j.) Looking at my image on a metal surface

k.) wearing eyeglasses to see better

8.) Dogs run around the park to get exercise. They also drink water to satisfy their thirst. They do small tricks like 'shaking' their paw at people walking by to get a dog snack. They also sleep under the trees in the shade when they are tired. What is a learned behavior in the dog's busy day?

a.) dogs sleeping under trees

b.) dogs running around the park

c.) dogs drinking water

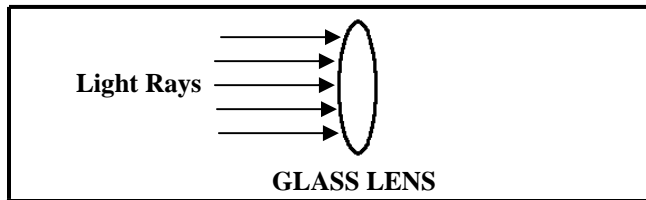
d.) dogs doing small tricks for food

5th Grade Science Spring Review Warm-Up Number 38

(12 to 15 minutes, maximum)

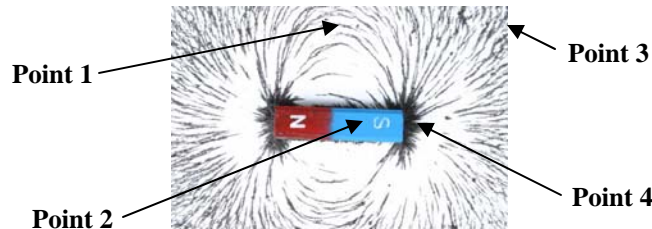
Name: _____

- 1.) Shown below is a light ray striking a convex *GLASS* lens. What will happen to the light rays as they proceed through the glass lens? (Hint: Draw them.)



- a.) The light rays will REFLECT outward
b.) The light rays will REFRACT outward
c.) The light rays will REFRACT inward
d.) The light rays will REFLECT inward
- 2.) Amanda wants to see the sunset. Which side of the house should she look out the window?
- h.) north
i.) east
j.) west
k.) south
- 3.) In the Water Cycle, which stage is AFTER the precipitation of water from a cloud?
- a.) run-off of water down a hill
b.) a downpour of rain over land
c.) the formation of clouds (condensation)
d.) the delta forming in the river

The Magnet shown in the diagram below will be used to answer questions 4 and 5.



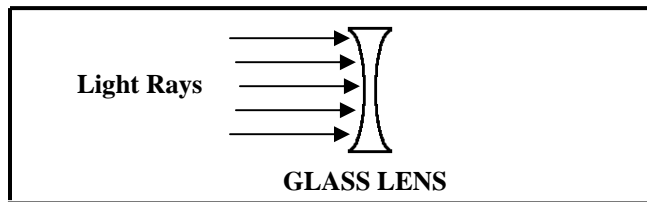
- 4.) In what location on the magnet does it have the most ability to repel or attract metal objects?
- a.) Point # 1
b.) Point # 2
c.) Point # 3
d.) Point # 4
- 5.) Since the EARTH is a big magnet, where is the magnetic attraction the strongest on our planet? (Think)
- h.) at the Equator
i.) at the North and South Poles
j.) nearest the moon
k.) near the top of the mountains
-
- 6.) Which of these answers best demonstrates reflection of light?
- h.) Looking at your image in shiny metal
i.) refracting light with a telescope
j.) looking at a rainbow in the sky
k.) wearing a baseball cap
- 7.) Monkeys at the zoo are fun to watch. They have black fur and brown colored eyes. They can use a stick to defend themselves against predators. They like to make loud and interesting sounds, too. What is a learned behavior in the monkey's day at the zoo?
- a.) monkeys have black fur and brown eyes
b.) monkeys use sticks to defend themselves
c.) monkeys make loud and interesting sounds
d.) monkeys think about other monkeys
- 8.) In problem 7, what is an inherited trait for the monkeys? _____

5th Grade Science Spring Review Warm-Up Number 39

(12 to 15 minutes, maximum)

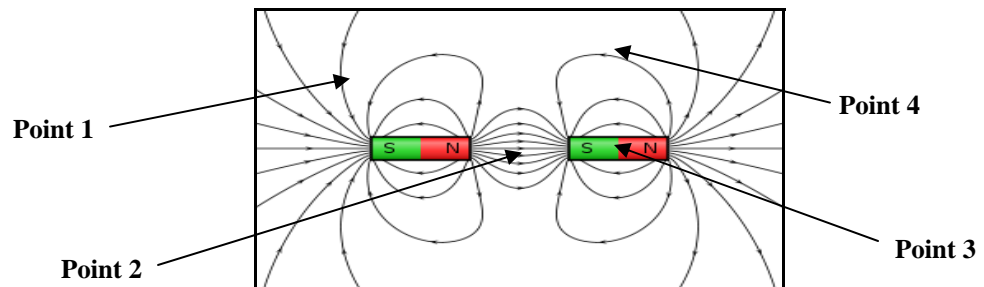
Name: _____

- 1.) Shown below is a light ray striking a concave *GLASS* lens. What will happen to the light rays as they proceed through the glass lens? (Hint: Draw them.)



- a.) The light rays will REFLECT outward
b.) The light rays will REFRACT outward
c.) The light rays will REFRACT inward
d.) The light rays will REFLECT inward
- 2.) Amanda wants to see the sun rise. Which side of the house should she look out the window?
h.) north
i.) east
j.) west
k.) south
- 3.) In the Rock Cycle, which type of rock will fossils most likely be formed?
a.) metamorphic rocks due to heat and pressure
b.) sedimentary rocks due to compaction of sand
c.) igneous rocks due to lava flow
d.) refraction of light on the beach

The two magnets shown in the diagram below will be used to answer questions 4, 5, and 6.



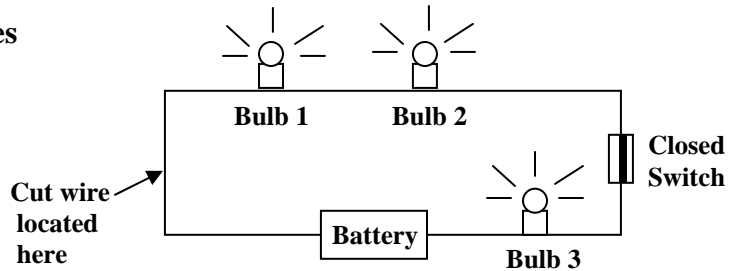
- 4.) In what location on the magnet does it have the most ability to repel or attract metal objects?
a.) Point # 1
b.) Point # 2
c.) Point # 3
d.) Point # 4
- 5.) Since the *EARTH* is a big magnet, where is the magnetic attraction the strongest on our planet? (Think)
h.) at the Equator
i.) at the North and South Poles
j.) nearest the moon
k.) near the top of the mountains
- 6.) As an iron object is placed farther and farther from a magnet, the magnet's 'magnetic' field becomes _____.
a.) stronger
b.) weaker
c.) the strength of the magnet does not change
d.) Not Here
-
- 7.) Owls are nocturnal predators that hunt mostly at night. The owls hunt mice at a nearby farmyard where the farmer continually drops small amounts of wheat when he is unloading grain. The owl always flies to the farmyard first to see if there are mice to eat. What is a learned behavior the owl's hunt?
a.) the owl is a nocturnal hunter
b.) the owl is a predator
c.) the mice are not very intelligent
d.) the owl hunts where mice gather to feed
- 8.) In problem 7, what is an inherited trait for the owls? _____

5th Grade Science Spring Review Warm-Up Number 40

(12 to 15 minutes, maximum)

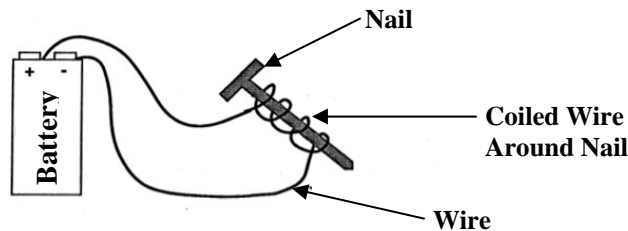
Name: _____

- 1.) The electric circuit to the right shows a series circuit with three lit bulbs. How many of the bulbs will remain lit if the wire is cut at the point shown by the arrow?



- a.) Zero - 0 c.) Two - 2
b.) One - 1 d.) Three - 3
- 2.) Scientists observe squirrels dropping nuts with hard shells from high tree branches to the ground below to break open the hard shells. The squirrels scamper down to the ground and eat the nuts after the shell has been cracked open. Which of these investigations would best help the scientists determine whether this skill is a learned behavior or an inherited skill?
- h.) Determining what sizes and kinds of nuts are most often eaten by squirrels
i.) Determining the type of shells that are used by squirrels
j.) Observing families of squirrels to determine if young squirrels also crack shells in the same way
k.) Raising young squirrels away from adult squirrels that crack nuts open by dropping them from trees

The ELECTROMAGNET shown in the diagram below will be used to answer questions 3, 4, and 5.



- 3.) In an electromagnet, the MORE wire coils wrapped around the nail makes the electromagnet _____.
- a.) weaker c.) no effect
b.) stronger d.) less
- 4.) A stronger electromagnet could be made shown in the picture IF _____.
- h.) a magnet is used instead of a nail j.) larger wires to carry more current are used
i.) a bigger battery is used k.) ALL choices make a stronger Electromagnet
- 5.) An electromagnet works because when electric current flows through the wire, _____.
- a.) refraction is created around the wire c.) reflection of electric current is created
b.) a magnetic field is created around the wire d.) Not Here

-
- 6.) Birds eat out of bird feeders and make their nests on the roofs of houses. This behavior from the birds is a very good example of the bird's ability to _____.
- a.) live and eat for free c.) a refraction of the bird's eyesight
b.) adapt to changes in their environment d.) an inherited behavior from their parent

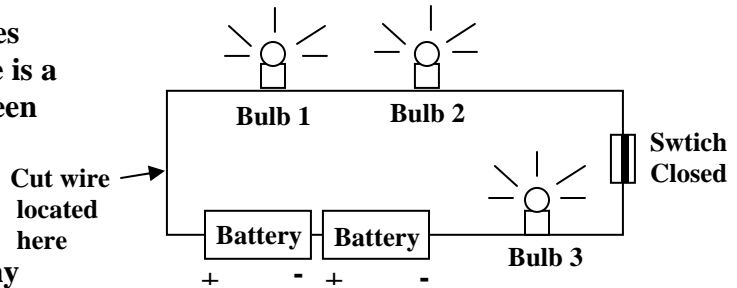
- 7.) True or False. The higher the temperature of the water the slower the water will evaporate.
8.) True or False. A person's mass is unchanged from the Earth to the Moon, but their weight changes.

5th Grade Science Spring Review Warm-Up Number 41

(12 to 15 minutes, maximum)

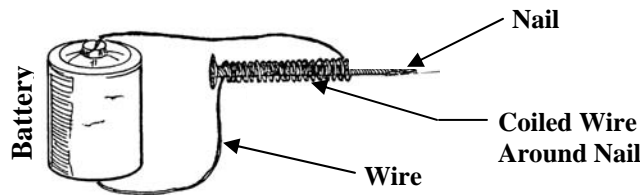
Name: _____

- 1.) The electric circuit to the right shows a series circuit with three lit bulbs. Suddenly, there is a cut in the wire. What could be placed between the wires to make the circuit work again, so the three bulbs are lit, again?



- a.) plastic c.) copper penny
b.) glass d.) toothpick
- 2.) In the circuit above, what would happen if one of the batteries was flipped around so the two positive ends were facing one another? _____
- 3.) Many students are confused between the difference of weather and climate. What is an example of weather and not climate?
- h.) The temperatures are always hot like this every summer for the last twenty years.
i.) It was very hot yesterday and it is even hotter today.
j.) Reading the temperatures off a chart for a 3 month period that has not changed in fifty years.
k.) Climate is short-term and weather is a long-term condition over many, many years.

The ELECTROMAGNET shown in the diagram below will be used to answer questions 4 through 7.



- 4.) In an electromagnet, the LESS wire coils wrapped around the nail makes the electromagnet _____.
a.) weaker c.) no effect
b.) stronger d.) less
- 5.) A stronger electromagnet could be made shown in the picture IF _____.
h.) a magnet is used instead of a nail j.) larger wires to carry more current
i.) a bigger battery is used k.) ALL choices make a stronger Electromagnet
- 6.) An electromagnet works because when electric current flows through the wire, _____.
a.) refraction is created around the wire c.) reflection of electric current is created
b.) a magnetic field is created around the wire d.) Not Here
- 7.) How do we make the electromagnet not work? _____

- 8.) Two ice cubes are placed on separate plates. One ice cube has a mass of 50 grams and the other ice cube has a mass of 180 grams. Which result would be the same for both ice cubes?
a.) the time it takes for each to melt to liquid c.) the total volume of each cube
b.) the temperature at which each cube melted d.) the amount of liquid from each ice cube
- 9.) True or False. My mass is the same on the Earth and Moon, but my weight changes.
- 10.) True or False. Children adapt to their school environments depending on if school and classroom rules are enforced and children are held accountable for their conduct.

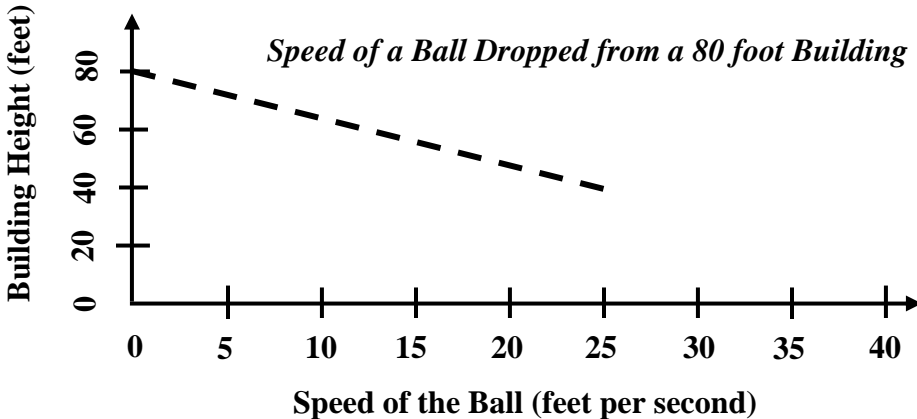
5th Grade Science Spring Review Warm-Up Number 42

(12 to 15 minutes, maximum)

Name: _____

- 1.) A river falls over a high cliff creating a cascading waterfall. At the bottom of the waterfall a couple friends build a big wheel that is turned by the falling water. This is an example of what type of energy?
- A.) solar B.) thermal C.) mechanical D.) sound

- 2.) The graph shows the speed of a ball as it is dropped from a building that is 80 feet tall.



If the ball continues to fall to the ground, what will happen to the Ball Speed according to the graph as it falls the last 40 feet to the ground (at 0 feet)? (Think!!!!)

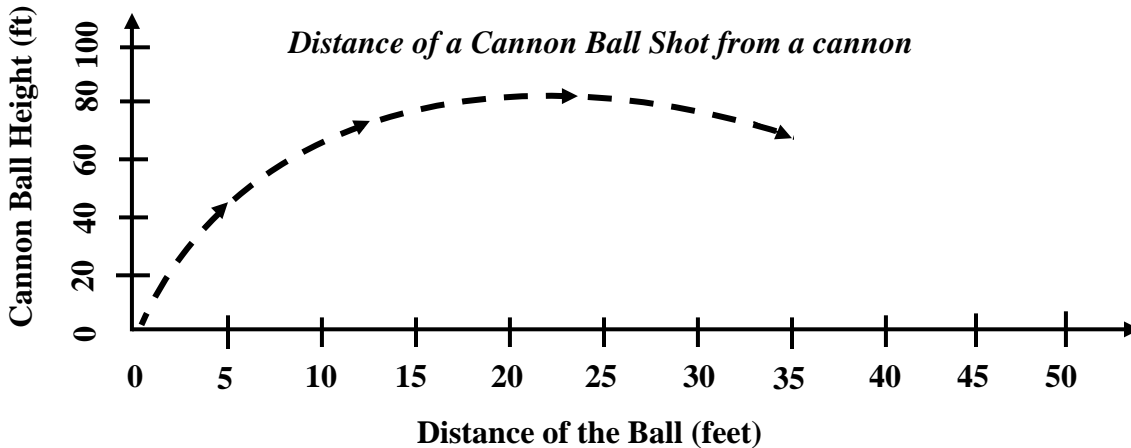
- A.) The speed of the ball will stay the same.
B.) The speed of the ball will decrease.
C.) The speed of the ball will increase.
D.) The speed of the ball will decrease then it will increase.
- 3.) Many students are confused between the difference of weather and climate. What is an example of climate and NOT weather?
- H.) The temperatures are always hot like this every summer for the last twenty years.
I.) The day is so cold.
J.) Recording the temperature at the beach every day for one week.
K.) Two friends decide to meet in a month on a Saturday, if the temperature is above 30° C.
- 4.) Juan built an electromagnet in science class. If he wanted to make the most powerful electromagnet possible, he should do what of the following?
- A.) Use thicker copper wires C.) coiled the wire many times around the nail
B.) Use a large battery D.) He should do all of these choices.
- 5.) The temperature of a glass of water is 76° C. How many degrees must change for the glass of water to be brought to the boiling point of water?
- H.) 76° C J.) 100° C
I.) 24° C K.) 0° C
- 6.) Two ice cubes are placed on separate plates. One ice cube has an equivalent liquid amount of 50 liters and the other ice cube has an equivalent liquid amount of 90 liters. Which result would be the same for both ice cubes?
- A.) the time it takes for each to melt to liquid C.) the total volume of each cube
B.) the temperature at which each cube melted D.) the amount of liquid from each ice cube

5th Grade Science Spring Review Warm-Up Number 43

(12 to 15 minutes, maximum)

Name: _____

- 1.) A toaster cord is plugged into the wall socket. This is an example of what type of energy?
A.) solar B.) thermal C.) mechanical D.) electrical
- 2.) The graph shows the distance a cannon ball travels as it is shot out of a cannon.



If the ball continues to move in the direction shown on the graph, what will happen to the distance of the cannon ball (according to the graph) as it falls the last 20 feet to the ground (at 50 feet)?

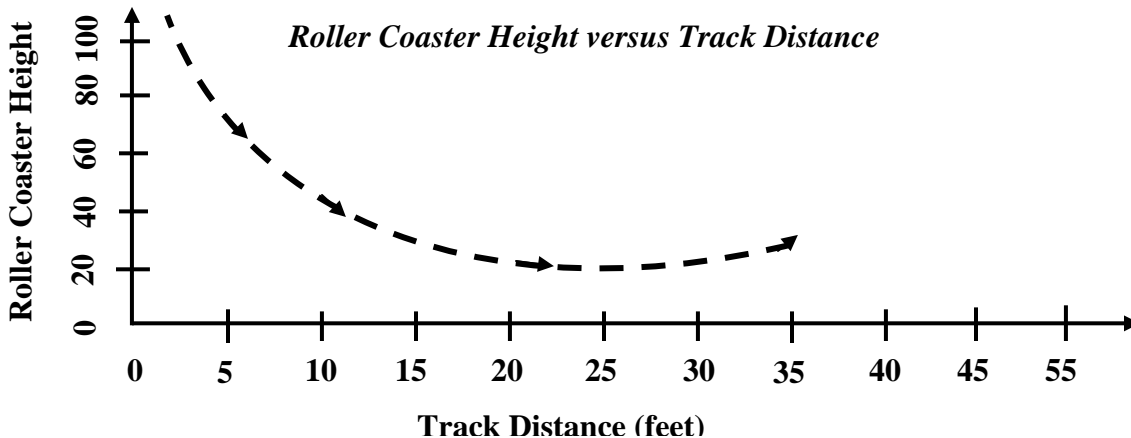
- A.) The distance of the canon ball will stay the same.
B.) The distance of the cannon ball will decrease.
C.) The distance of the cannon ball will increase.
D.) The distance of the cannon ball will decrease then it will decrease.
- 3.) Many students are confused between the difference of weather and climate. What is an example of climate and NOT weather?
H.) The temperatures are always cold during the winter for the last hundred years.
I.) The day is so warm and balmy.
J.) Noticing the weather for the last two Saturdays.
K.) The fifth grade schedule a picnic since the temperature is 31° C.
- 4.) Pedro put salt tablets in a bottle of water. What happened to the salt tablets placed in the water?
A.) The salt tablets evaporated C.) The salt tablets dissolved in the water
B.) The salt tablets are absorbed into the bottle D.) Impossible to say what happened to the salt
- 5.) The temperature of a glass of water is 34° C. How many degrees must change for the glass of water to be brought to the freezing point of water?
H.) 66° C J.) 100° C
I.) 34° C K.) 0° C
- 6.) Two glasses of water are placed on the kitchen counter. One glass of water contains 125 milliliters and the other glass of water contains amount of 290 milliliters. Which result is the same for both glasses of water?
A.) the time it takes for each to evaporate C.) the mass of each glass of water
B.) the temperature at that each glass of D.) the amount of thermal energy to boil each of water will boil

5th Grade Science Spring Review Warm-Up Number 44

(12 to 15 minutes, maximum)

Name: _____

- 1.) The sun heats panels placed on a roof that power the house. This is an example of what type of energy?
A.) solar B.) thermal C.) mechanical D.) electrical
- 2.) The graph shows the movement of a roller coaster as it travels down the tracks.



If the Roller Coaster continues to travel in the direction shown on the graph, what will happen to the Track Distance (according to the graph) as it travels the last 20 feet to the top of the hill (at 55 feet)?

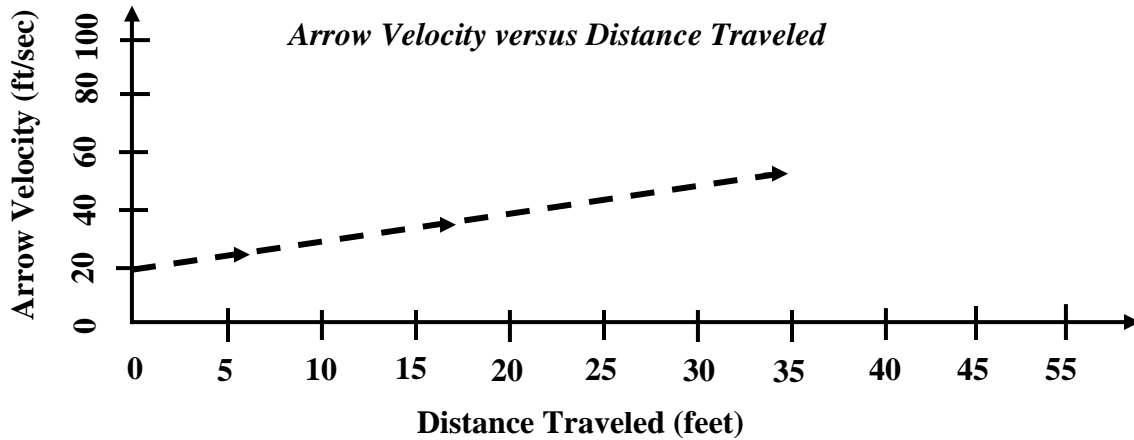
- H.) The Track Distance will stay the same.
I.) The Track Distance will decrease
J.) The Track Distance will increase.
K.) The Track Distance will decrease then it will increase.
- 3.) Large plastic tubes are placed vertically deep into the ground that allow the transfer of heat from under-water thermal streams to provide heat to homes. This is an example of using what energy resource?
A.) fossil fuels B.) hydroelectric energy C.) geothermal energy D.) solar energy
- 4.) A consumer eats what type of food?
H.) only carnivores J.) producers
I.) only omnivores K.) None of the above
- 5.) Due to pollution from fossil fuels, the City of Dallas decided to begin using a new form of energy more to power its homes and businesses. What ALTERNATIVE energy resource might they decide to use?
A.) burning logs in fireplaces C.) using biofuels to generate electricity
B.) fracking natural gas and oil in limestone D.) using a new coal plant to generate electricity
- 6.) A favorite canned drink of Pablo’s was placed in the refrigerator at the beginning of 5th grade. In May, he discovered the treat, but the directions stated, “Shake well before drinking.” Why these directions?
H.) the ingredients have different densities J.) the ingredients will always be a mixture
I.) the ingredients easily become a solution K.) the ingredients are now hard rock
- 7.) A farmer bought a new plant from China and planted it in South Dakota so his cows would have plenty of grass to eat. However, the new plant reproduced rapidly and soon covered all his fields as well as his neighbors’ farms. What is a likely effect that this new plant from China will have on the native plants in that part of South Dakota?
A.) An increase of native plants B.) A decrease of native plants C.) No effect on native plants

5th Grade Science Spring Review Warm-Up Number 45

(10 to 15 minutes, maximum)

Name: _____

- 1.) A toaster burns bread with its heating elements. This is an example of what type of energy?
 A.) solar B.) thermal C.) mechanical D.) electrical
- 2.) The graph shows the flight of an Arrow as it flies through the air.



If the arrow continues to fly in the direction shown on the graph, what will happen to the Arrow Velocity (according to the graph) as it flies the last 20 feet (at 55 feet)?

- H.) The Arrow Velocity will stay the same. J.) The Arrow Velocity will increase.
 I.) The Arrow Velocity will decrease K.) The Arrow Velocity will decrease then decrease.
- 3.) Given the following information in the table.

Diets of Animals

Type of Animal	Foods Eaten
Coyotes	Mice, Hawks, Rabbits
Mice	Snails, Grass, Leaves
Blue Jays	Mice, Worms, Bugs
Snails	Grass
Hawks	Mice, Rabbits, Blue Jays

- A.) Coyotes → Mice → Snails
 B.) Blue Jay → Hawks → Rabbits
 C.) Snails → Mice → Coyotes
 D.) Snails → Coyotes → Hawks
- 4.) Which is an example of solar energy being absorbed?
 H.) Run off of water from mountains and plains toward rivers
 I.) Precipitation as the water falls on the land
 J.) The breaking down of rocks by weathering with plant roots, wind, water and ice
 K.) The heating of lake and ocean water that results in the evaporation of water
 - 5.) A glacier is a heavy, massive ice block. What effect will a glacier have on a valley as it moves over land?
 A.) It will make the valley walls very steep C.) It will make the valley river flow uphill
 B.) It will flatten the valley walls into a “U” shape D.) None of the above

Science STAAR Preps

5th Grade

Annotated Solutions

5th Grade Science Spring Review Warm-Up Number 1 & 2
 (8 to 12 minutes, maximum) Name: ANSWER KEY

1.) Name the three types of fossil fuels: oil (petroleum), coal, natural gas

2.) Where do fossil fuels come from (what were they made of)? organisms (small plants and animals) that live long ago.

3.) How long (time) did it take fossil fuels to form? millions of years

4.) Fossil Fuels are which type of resource?

a.) renewable resource ^{make more}

c.) inexhaustible resource ^{sun and wind (will not be used up for a}

b.) nonrenewable resource ^{use up - all gone}

d.) none of the above x ^{very long time - millions of years)}

5.) We use fossil fuels for energy to run our cars and produce electricity for our homes and schools. What is the problem when we use fossil fuels like coal, oil and natural gas?

they pollute (contaminate) the air

6.) Fossils are most likely found in what type of rock?

a.) igneous rock - volcanic

c.) sedimentary rock ^{→ deposition compact over time in sediment}

b.) metamorphic rock ^{heat and pressure formed underground}

d.) a nice, big rock x

7.) A sedimentary rock can change over time into a metamorphic or an igneous rock.

As a matter of fact, the rock cycle means that any type of rock can change in to any other type of rock. Are these statements true or false? yes - any rock can change into one of the other renewable two forms

On Questions 8-10 - USE: inexhaustible resource, nonrenewable resource, renewable resource

8.) The sun and wind are what type of resources? inexhaustible

9.) Soil, grass, animals, trees are what type of resources? renewable

10.) Gold, fossil fuels, aluminum and silver are what type of resources? Non-Renewable

5th Grade Science Spring Review Warm-Up Number 3 & 4

(8 to 12 minutes, maximum)

Name: ANSWER/SOLUTIONS

- 1.) There are 4 ways to ^{break-down} weather rocks (Name them): ① Wind + ② Water + ③ Ice (water expands 10% when freezing) + ④ tree/plant roots
- 2.) What scientific word describes the movement of rocks and pebbles? erosion
- 3.) Why is it important that soil is a renewable resource? we would starve to death - nothing to eat
- 4.) Why don't erosion, weathering and fire happen on the moon?
- a.) the moon is too far away c.) the moon is not as big as earth
- b.) the moon has no atmosphere
no wind, water, oxygen d.) none of the above
- 5.) Why are we trying to use solar energy, wind energy and hydroelectric power instead of fossil fuels as our major energy source to power our homes and cars in the United States?
- they are "clean" energy forms - Do NOT POLLUTE ENVIRONMENT
- 6.) How does sand and small pebbles get deposited on the beach OR at the delta of a river?
- a.) the wind c.) the waves or river water carried the sand deposition
- b.) the sun heated the water d.) electricity can electrocute through a conductor
- 7.) There was a large rock on the beach in 2000, but it was much, much smaller in 2014. What happened to the rock over the last 14 years? 2014 - 2000 = 14
weathered by waves and wind
then erosion - carried away
- 8.) All amounts of water boil at what temperature in Celsius? 100°C
evaporates faster with increased temperature
- 9.) All amounts of water freeze at what temperature in Celsius? 0°C
- 10.) Did you understand questions 8 and 9? Let's check. Ms. Smith takes her daughter swimming in Lake Travis (a very large lake). However, there is a small puddle of water on the sidewalk outside after a recent rain. If each amount of water is heated, at what temperature will the water boil for both Lake Travis and the puddle of water? 100°C
more heat required to boil Lake Travis, but it is still 100°C. Basic property of water.

5th Grade Science Spring Review Warm-Up Number 5

(8 to 12 minutes, maximum)

Name: SOLUTIONS/Key

- 1.) There are 4 ways to ^{break down} weather rocks (Name them): ① Water ② Wind
③ Ice ④ Plants And Tree Roots
- 2.) Name the 3 types of fossil fuels? ^{↳ local water expands by 10% when it freezes} oil (petroleum), coal, and Natural Gas
- 3.) What is the problem that is created when we use fossil fuels? they pollute air and water - non renewable, too.
- 4.) Why do not erosion, weathering and fire happen on the moon but they all occur on earth?
- a.) the moon is too far away c.) the moon is not as big as earth
b.) the moon has no atmosphere d.) none of the above
- 5.) Why are we trying to use solar energy, wind energy and hydroelectric power instead of fossil fuels as our major energy source to power our homes and cars in the United States?
clean energy - no pollution (hydro = water)
- 6.) How does sand and small pebbles get ^(deposition) deposited on the beach OR at the ^Δ delta of a river?
- a.) the wind c.) the waves or river water carried the sand
b.) the sun heated the water d.) electricity can electrocute through a conductor
- 7.) There was a large rock on the beach in 1962, but it was much, much smaller in 2010. What happened to the rock over the last 48 years? weathered, then eroded (erosion) took sand away
- 8.) All amounts of water boil at what temperature in Celsius? 100°C
- 9.) All amounts of water freeze at what temperature in Celsius? 0°C
- 10.) Jorge looked at the following chart below. What is the boiling temperature of the 25 ml water if the 50 ml glass of water boiled at 100 degrees Celsius?

Amount of Water	Temperature	Amount of Water	Temperature
50 ML	25 degrees Celsius	25 ML	10 degrees Celsius

- a.) 50 degrees Celsius c.) 12.5 degrees Celsius
b.) 75 degrees Celsius d.) 100 degrees Celsius

All water amounts boil and freeze @ same temperature. Important physical property of H₂O. Water evaporates @ all temperatures above 0°C. It just evaporates faster with increased temp.

still boils @ 100°C

5th Grade Science Spring Review Warm-Up Number 6

(8 to 12 minutes, maximum)

Name: Key

1.) A white polar bear (predator) covers his black nose with his white paw so it is not seen by a seal (prey). What is this called when the polar bear is covering his black nose?

- a.) being smart
b.) holding his breath
c.) using camouflage
d.) using migration

2.) Name the nine planets in order from the Sun outward?

M, V, E, Mars, J, S, U, N

3.) Which planet makes the quickest orbit around the sun? Mercury

4.) Which planet makes the longest orbit around the sun? Neptune

5.) What type of rock is most likely to form in the delta of a river over a long period of time?

- a.) igneous rock
b.) sedimentary rock
c.) metamorphic rock
d.) none of the above

5.) Why do fossils usually form in a sedimentary rock?

animal dies. falls in sand. more sediment falls on top of organism. then COMPACTS OVER millions of years.

6.) What object is found at the center of our solar system and is a big ball of gas?

- a.) the moon
b.) the sun
c.) Jupiter
d.) Earth
e.) Saturn
f.) the Principal

7.) Your science teacher lights a candle. Then, she places a glass over the candle. The candle's light or flame slowly goes out. Why did the candle's flame/light go out?

No oxygen => must have oxygen to burn

8.) Jonathan listed types of energy on the left. Please match the right definition with the energy.

- | | |
|--------------------------------|--------------------------------------|
| 1.) <u>B</u> radiant energy | a.) stored energy |
| 2.) <u>C</u> thermal energy | b.) light bulb, fire, or sun light |
| 3.) <u>A</u> potential energy | c.) heat |
| 4.) <u>E</u> kinetic energy | d.) flow of electrons in a conductor |
| 5.) <u>D</u> electrical energy | e.) speeding train or moving energy |

5th Grade Science Spring Review Warm-Up Number 7

(8 to 12 minutes, maximum)

Name: Key Soluh

1.) A soldier wears all green to go into the jungle on a training mission. Green allows him to blend into the surroundings with all the leaves and plants. What science word is he using?

- a.) being smart
 b.) using camouflage

- c.) holding his breath
d.) using migration

2.) Name the nine planets in order from the Sun outward?

M, V, E, MARS, J, S, U, N

3.) Which planet makes the quickest orbit around the sun? Mercury

4.) Which planet makes the longest orbit around the sun? Neptune

5.) What type of rock is most likely to form in the delta of a river over a long period of time?

a.) igneous rock

c.) sedimentary rock

b.) metamorphic rock

d.) none of the above

5.) Why do fossils usually form in a sedimentary rock?

organism gets buried in sediment => compact

6.) What object is found at the center of our solar system and is a big ball of gas?

a.) the moon

c.) Jupiter

e.) Saturn

b.) the sun

d.) Earth

f.) the Principal

7.) Your science teacher lights a candle. Then, she places a glass over the candle. The candle's light or flame slowly goes out. Why did the candle's flame/light go out?

No oxygen => Fire must have oxygen

8.) Jonathan listed types of energy on the left. Please match the right definition with the energy.

1.) E radiant energy

a.) heat

2.) A thermal energy

b.) speeding train or moving energy

3.) C potential energy

c.) stored energy

4.) B kinetic energy

d.) flow of electrons in a conductor

5.) D electrical energy

e.) light bulb, fire, or sun light

5th Grade Science Spring Review Warm-Up Number 8

(8 to 12 minutes, maximum)

Name: Key Solutions

1.) An animal dies in the woods. The animal's body is broken down by what organisms?

- a.) scavenger - eats things it did not kill
b.) decomposers - worms
c.) camouflage - blends
d.) migration - movement of specific species.

2.) A red crayon is thrown in a frying pan. It melts. What type of change is taking place?

- a.) chemical change
b.) property change
c.) physical change
d.) color change
- still a crayon* →

3.) All water evaporates at temperatures above 0 degrees Celsius? True/False TRUE

4.) In question 3.) above, ORDER from greatest to least, the temperatures that water evaporates the fastest. Given the following temperatures: 95 C, 82 C, 3 C, 14 C, 45 C, 100 C, 23 C.

100°C, 95°C, 82°C, 45°C, 23°C, 14°C, 3°C

5.) From question 3 and 4.), what type of energy increases with increased temperature or heat?

- a.) potential energy
b.) radiant energy
c.) electrical energy
d.) kinetic energy → KE ↑ with temp

5.) Jessica digs a hole in the ground. The deeper she digs into the earth, the soil is...

- a.) younger
b.) older
c.) all soil is the same age
d.) impossible to tell the age of soil
- ↓ older*

6.) Which is the largest planet in the solar system?

- a.) Venus
b.) Mars
c.) Jupiter
d.) Earth

7.) As the earth rotates on its axis one time, we get.....

- a.) day and night
b.) a solar eclipse
c.) a lunar eclipse
d.) deposition

8.) Your mother cuts a large hunk cheese in two separate pieces. This is what type of a change?

- a.) chemical change
b.) property change
c.) physical change
d.) color change
- still cheese*


9.) How long does it take...

- A.) The Earth to rotate one time on its axis: 1 DAY = 24 hours
B.) The Moon to make one revolution around the Earth: 1 month = 4 weeks
C.) The Earth to make one revolution around the Sun: 1 year
D.) And, how many revolutions does the moon make around the Earth in ONE year: 12
(12 months in a year)

5th Grade Science Spring Review Warm-Up Number 9

(8 to 12 minutes, maximum)

Name: Key / Solutions

- 1.) A vulture eats dead animals that it did not kill. The vulture is called a _____.
- a.) scavenger
b.) decomposers
c.) camouflage
d.) migration
- 2.) A red crayon is thrown in a frying pan until it is burned. What is this change called?
- a.) chemical change
b.) property change
c.) physical change
d.) color change
- No longer a crayon*
- 3.) Name two inexhaustible resources: wind, sun
- 4.) In science, a bowl of different kinds of fruit is an example of a _____.
- a.) suspension
b.) mixture
c.) solution
d.) something good to eat
- separate easily*
- 5.) A fish fossil is found 10 feet below the surface and a shell fossil 20 feet below the surface. Which fossil is older?
- a.) fish fossil
b.) shell fossil
c.) both are the same age
d.) none of the above
- 6.) Which of the following objects rotate?
- a.) Earth
b.) Sun
c.) Moon
d.) the Earth, Sun and Moon all rotate
- once per month (takes all month to rotate one time)*
- 7.) As the earth rotates on its axis one time, we get.....
- a.) day and night
b.) a solar eclipse
c.) a lunar eclipse
d.) deposition
- 8.) The metal on my car is rusting and slowing causing holes. This is what type of a change?
- a.) chemical change
b.) property change
c.) physical change
d.) color change
- No longer metal oxidation*
- 9.) How long does it take...
- A.) The Earth to rotate one time on its axis: 1 day = 24 hours
B.) The Moon to make one revolution around the Earth: 1 month ≈ 4 weeks
C.) The Earth to make one revolution around the Sun: 1 year = 365 1/4 days
D.) And, how many revolutions does the moon make around the Earth in ONE year: 12
- 12 months in a year*
- 10.) An oil tanker hit a rocky reef and oil leaked out in to the ocean. The oil is on top of the water causing two layers of fluids, one with oil and one with water below it. In science, this situation best describes a suspension.
- a.) suspension
b.) mixture
c.) solution
d.) a lot of dead fish
- H₂O*  *oil*

5th Grade Science Spring Review Warm-Up Number 10

(8 to 12 minutes, maximum)

Name: Solutions / Ky

1.) Birds fly south for the winter for warmer weather. This animal movement is called _____.

- a.) scavenger
b.) decomposers

- c.) camouflage
 d.) migration → movement of animals (including humans)

2.) A glass of water is left outside on a hot day and it evaporates after 12 hours. This is an example of what type of change?

- a.) chemical change
b.) property change

- c.) physical change → still water (different form)
d.) color change

3.) Minerals and fossil fuels are examples of what type resource? non-renewable

4.) In science, a can of Mt. Dew is an example of a _____.

- a.) suspension
b.) mixture

- c.) solution → mixed contents
d.) a drink with far too much sugar

5.) Jesus found a fossil of a small dinosaur. Inside what type of rock is the most likely that Jesus found the fossil?

- a.) metamorphic rock
 b.) sedimentary rock

→ sediment falls on dead organisms & compresses over time

- c.) igneous rock
d.) none of the above

6.) Which of the following objects rotate?

- a.) Earth
b.) Sun

- c.) Moon (always see same face) (geosynchronous orbit)
 d.) the Earth, Sun and Moon all rotate

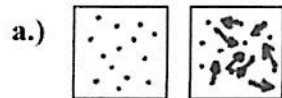
7.) The earth revolves around the sun one complete revolution, we get.....

- a.) solar eclipse
b.) a month of time

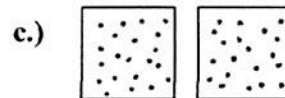
your Birthday

- c.) one year of time
d.) day and night

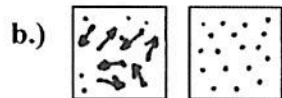
8.) Which of these best describes freezing from the first box to the second box?



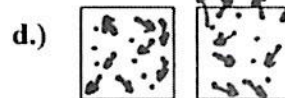
Freezing → Melted (water) liquid



Frozen → Frozen Not moving



Moving (liquid) to stationary (freezing)



Liquid ⇒ Boiling (100°C)

9.) How long does it take...

- A.) The Moon to make one revolution around the Earth 1 Month = 4 weeks 30 days
B.) The Earth to rotate one time on its axis: 24 hours ⇒ 1 day
C.) The Earth to make one revolution around the Sun: 1 year ⇒ 365 1/4 days
D.) And, how many revolutions does the moon make around the Earth in ONE year: 12

10.) A beaker is has three layers of fluid. Oil is the top layer, vinegar is the next layer, and water is the bottom layer. We call this situation a suspension


Fill in the blank with one of the following: mixture, suspension or a solution.

5th Grade Science Spring Review Warm-Up Number 11


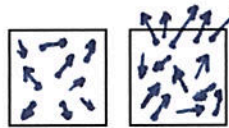
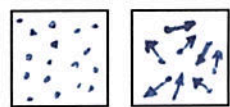
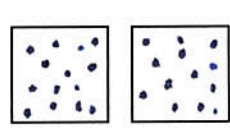


(8 to 12 minutes, maximum)

Name: Solutions / Key

- What is one advantage of using wind and solar energy and not fossil fuels?
 - more expensive
 - do not have dig coal from the ground
 - no pollution of the air
 - no pollination of the air
- A block of ice melts into liquid water. This is an example of what type of change?
 - chemical change
 - property change
 - physical change
 - color change

Still water reversible
- What does 'biohydro' mean? life-water What does 'geothermal' mean? earth-heat
- In science, a bottle of shampoo and salt water are examples of _____.
 - solutions
 - mixtures - bowl of fruit
 - suspensions →  oil water
 - none of the above
- Why are there more meteor craters on the moon than on the earth's surface?
 - the moon is struck with more meteors than earth
 - the moon has no atmosphere or erosion so craters are not filled up with dirt as they are on earth from wind and water erosion after many years. ← Key
 - the earth is bigger than the moon and meteors miss the moon
 - the earth and moon's atmospheres burn-up meteors from friction
- How long does it take the moon to revolve one time completely around earth?
 - 1 year = 365 ¼ days - earth around sun
 - 1 day = 24 hours - rotation of earth
 - 1 month = 4 weeks
 - five years 7 months and 2 days

Month comes from the word "moos"
- The earth revolves around the sun one complete revolution, we get.....
 - one year of time
 - a month of time
 - one day
 - day and night

your birthday
- Which best describes ice melting to liquid water from the first box to the second box?
 -  liquid → solid freezing
 -  liquid → boiling 100°C - gas
 -  solid → liquid (ice) melting
 -  solid - solid 2 ice cubes
- At the start of each month when the moon is between the earth and the sun, what is the name of the moon?
 - a new moon  completely dark - all light from sun on other side of moon
 - a quarter moon
 - a full moon 
 - a half moon
- What do we call light from a fire or sunlight or the classroom lights?
 - kinetic energy - moving energy
 - radiant energy - light
 - sound energy - noise
 - potential energy - stored energy

5th Grade Science Spring Review Warm-Up Number 12

(12 to 15 minutes, maximum)

Name: Key / Solution

- A river brings sediment and deposits it in the delta of the river. How did the sediment get into the river?

a.) from the erosion of mountains and plains c.) from sand dunes in the deserts
 b.) from meteors that hit the earth d.) from an ice storm upstream
- Water evaporates into a gas or vapor. This is an example of what type of change?

a.) physical change *still water* c.) chemical change
 b.) property change d.) condensation change
- What does 'hydroelectric' mean? water-electricity What does 'geology' mean? study of Earth
- In science, an energy drink and Dr. Pepper are examples of _____.

a.) solutions c.) suspensions
 b.) mixtures d.) none of the above
- Why do many meteors NOT reach the earth's surface when the meteor enters the Earth's atmosphere?

a.) the meteors do not have enough speed to reach the earth's surface
 b.) the meteors are burned up in the earth's atmosphere due to friction with air
 c.) the meteors are pulled to Venus at light speed and completely miss the surface of the earth
 d.) no meteors reach the earth's surface
- How long does it take the moon to revolve one time completely around earth?

a.) 2 years = 730 1/2 days ~~1 year = 365 1/4 days~~
 b.) 1 day = 24 hours ~~1 month = 4 weeks~~
 c.) 1 month = 4 weeks ←
 d.) 1 year = 365 1/4 days
- The earth revolves around the sun one complete revolution, we get.....

a.) one year of time *think*
 b.) a month of time *be there* c.) one day
 d.) day and night
- Which best describes liquid water to a gas (vapor) from the first box to the second box?

a.) *Melting* c.) *L → solid freezing*
 b.) *boiling*
 d.) *Liquid → Liquid*
- Half-way through every month, when earth is between the moon and the sun, what is the moon's name?

a.) a new moon c.) a full moon
 b.) a quarter moon d.) a half moon
- If there is a full moon, about how many days until another full moon appears in the sky?

a.) 10 days c.) 30 days (*about 4 weeks*)
 b.) 20 days d.) 60 days

5th Grade Science Spring Review Warm-Up Number 13

(12 to 15 minutes, maximum)

Name: Key/Solution

1.) A river brings sediment and deposits it in the delta of the river. How did the sediment get into the river?

- a.) from the erosion of mountains and plains c.) from sand dunes in the deserts
b.) from meteors that hit the earth d.) from an ice storm upstream

2.) A bat flies at very high speeds and turns quickly by identifying objects in their flight path by _____.

- a.) great eyesight c.) following very closely to the lead bat
b.) echolocation using sound waves d.) none of the above

3.) Whales communicate with other whales in the ocean by using _____.

- a.) their dorsal fins c.) their sound waves traveling through the water
b.) flags found on the bottom of the ocean d.) none of the above

4.) What causes meteors to burn up in the earth's atmosphere?

- a.) the sun burns up their mass
b.) the friction between the earth's atmosphere and the surface of the meteor causes heat
c.) the moon's gravitational pull on the meteor burns up the meteor the closer it gets to earth
d.) no meteors ever reach the earth's surface
- friction => rubbing together (hands, for example) => heat*

5.) What causes raindrops, meteors, and baseballs thrown in air to fall or move toward earth?

- a.) friction c.) gravity => holds all to earth
b.) thrust d.) sound *Sun => planets earth => moon*

6.) On what type of floor surface would friction be high so a person would not slide very far?

- a.) a tile floor
b.) a rough carpet floor *↑ rough ↑ Move friction*
c.) a tile floor covered with water
d.) a smooth wooden floor

7.) A solar eclipse occurs when which of the following occur? (Draw a picture)

- a.) the sun leaves the solar system c.) the sun is between the earth and moon
b.) the moon is between the earth and sun d.) the earth is between the moon and sun
- sun "go away" → eclipse means "go away"*
- (E) (M) (S)*

8.) A lunar eclipse occurs when which of the following occur? (Draw a picture)

- a.) the sun leaves the solar system c.) the sun is between the earth and moon
b.) the moon is between the earth and sun d.) the earth is between the moon and sun
- moon "go away"*
- (M) (E) (S)*

9.) If there is a new moon, about how many days until a full moon appears in the sky?

- a.) 10 days *2 weeks ≈ 15 days* c.) 30 days
b.) 15 days d.) 60 days

10.) Soil is renewable. Which of the following help make soil a renewable resource and give the soil back nutrients so grass, plants and crops can grow the following year?

- a.) manure (cow poop) c.) fertilizer *← buy @ Lowe's or Home Depot*
b.) decayed/dead plants and organisms d.) All of the above make soil renewable

5th Grade Science Spring Review Warm-Up Number 14

(12 to 15 minutes, maximum)

Name: Key/Solutions

1.) An animal only comes out at night and sleeps during the day. What is this behavior called?

- a.) diurnal → day
b.) a night owl
c.) migration
d.) nocturnal → night

2.) All food chains and food webs all begin with what object? (Think)

- a.) producer
b.) consumer
c.) the Sun and its energy
d.) photosynthesis

starts all on earth - life (photosynthesis)
→ oxygen
→ plants growing
→ etc.

3.) Metamorphosis → change occurs with what type of animals or insects?

- a.) caterpillar to butterfly
b.) tadpole to frog
c.) both answers a.) and b.)
d.) none of these answers

4.) What is the name of an animal that eats both plants and animals?

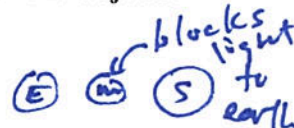
- a.) herbivore → herb → plants
b.) omnivore → omni - all
c.) carnivore ⇒ meat → carne
d.) nottoochoosey

5.) A spaceship lifts off from earth in Florida. What force tries to pull the ship back to earth?

- a.) friction
b.) thrust
c.) gravity
d.) sound

6.) When two objects rub together creating friction, what type of energy is present between the objects?

- a.) sound energy
b.) thermal energy → rub hands together - heat
c.) potential energy
d.) kinetic energy



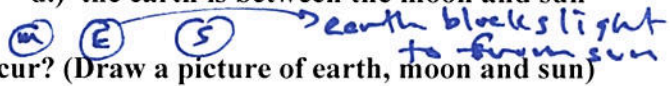
7.) A solar eclipse occurs when which of the following occur? (Draw a picture of earth, moon and sun)

- a.) the sun leaves the solar system
b.) the sun is between the moon and earth
c.) the moon is between the earth and sun
d.) the earth is between the moon and sun

→ sun "goes away"

8.) A lunar eclipse → moon "goes away" occurs when which of the following occur? (Draw a picture of earth, moon and sun)

- a.) the sun leaves the solar system
b.) the moon is between the earth and sun
c.) the sun is between the earth and moon
d.) the earth is between the moon and sun



9.) If there is a new moon, about how many days until another new moon appears in the sky?

- a.) 10 days
b.) 15 days
c.) 30 days → 4 weeks
d.) 60 days

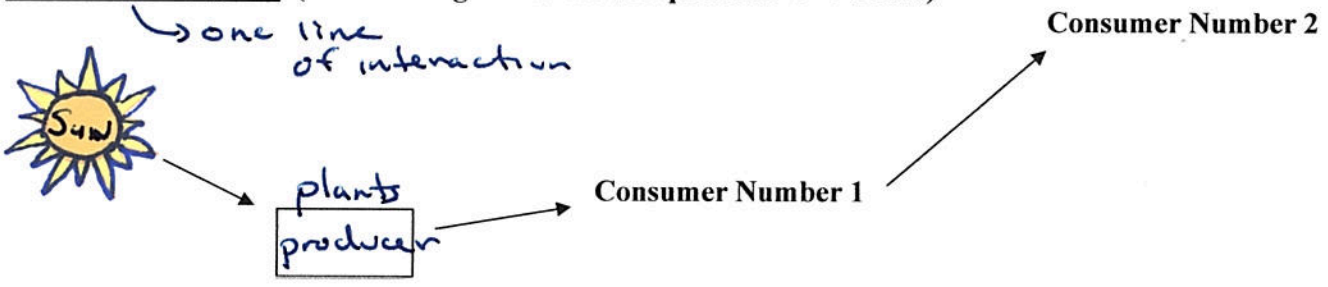
10.) Soil is renewable. Which of the following help make soil a renewable resource and give the soil back rich nutrients so grass, plants and crops can grow the following year?

- a.) manure (cow poop)
b.) decayed/dead plants and organisms
c.) fertilizer
d.) All of the above make soil renewable → ALL

5th Grade Science Spring Review Warm-Up Number 15
 (12 to 15 minutes, maximum) Name: Answer/Key/Solutions

- 1.) Abbey is studying ^{night} nocturnal predators. What is a characteristic of a successful ^{night} nocturnal predator?
- a.) bright feathers c.) big eyes => lets light in during the night
 b.) long legs d.) flat teeth Think: owls

Food Chain Diagram (Use the Diagram to answer questions 2 - 5 below)



- 2.) Which of the following choices should go in the box in the Food Chain Diagram above.
- a.) producer => uses sun to make their food c.) carnivore
 b.) consumer d.) herbivore
- 3.) What do the 'arrows' mean in the Food Chain Diagram?
- a.) who is eating who c.) the metamorphosis of a consumer
 b.) a transfer of energy ~ chemical energy d.) all plants need the sun
- 4.) Consumer Number 1 in the Food Chain Diagram is an _____?
- a.) omnivore c.) herbivore - eating plants
 b.) sunivore d.) carnivore also, Consumer #1 is prey for Consumer #2
- 5.) Consumer Number 2 in the Food Chain Diagram is a _____?
- a.) omnivore c.) herbivore
 b.) sunivore d.) carnivore - predator

- 6.) The first stage of the metamorphosis of a butterfly is _____?
- a.) a larva or caterpillar c.) an egg - laid by adult butterfly
 b.) an adult or butterfly d.) a cocoon or pupa or chrysalis

- 7.) What is the name of an animal that eats both plants and animals?
- a.) herbivore c.) carnivore
 b.) omnivore d.) nottoochoosey
 omni = all

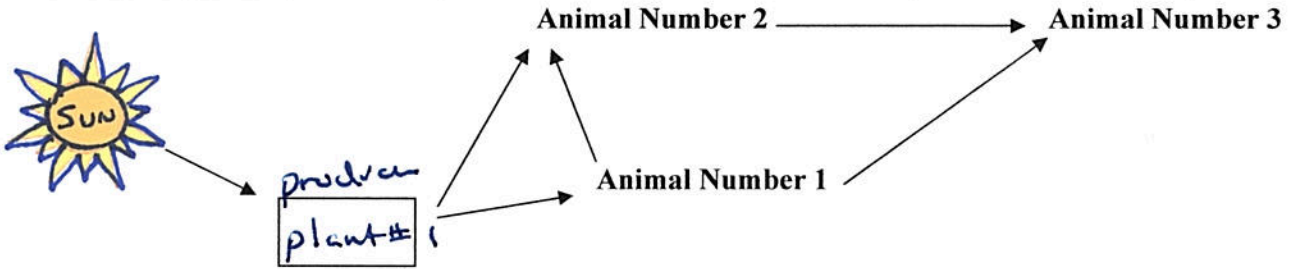
- 8.) If there is a full moon, about how many days until a new moon appears in the sky?
- a.) 10 days 2 weeks ≈ 15 days c.) 30 days
 b.) 15 days d.) 60 days

- 9.) People get drinkable water from two places. Name them. Rivers/lakes and underground H₂O (Groundwater)
- Hence, we cannot pollute the ground => ends up in our water supply

5th Grade Science Spring Review Warm-Up Number 16
 (12 to 15 minutes, maximum) Name: Answer Key/Solution

- 1.) An owl is a ^{nocturnal} predator. What is a characteristic of owls that make them successful nighttime hunters?
- a.) big eyes that lets light in c.) small feathers
 b.) fast runners d.) sharp teeth

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



- 2.) Which of the following choices should go in the box in the Food Web Diagram above.
- a.) Plant Number 1 c.) omnivore
 b.) Animal Number 4 d.) herbivore
- 3.) What do the 'arrows' mean in the Food Web Diagram?
- a.) who is eating who c.) the metamorphosis of a consumer
 b.) a transfer of energy d.) all plants need the sun
 (food in mouth) => how I have always remembered it.
- 4.) Animal Number 2 in the Food Web Diagram is an _____?
- a.) omnivore => eating plants and animals c.) herbivore
 b.) sunivore d.) carnivore
- 5.) Animal Number 3 in the Food Web Diagram is _____?
- a.) a predator - carnivore c.) prey
 b.) an herbivore d.) hungry
- 6.) Animal Number 1 in the Food Web Diagram is _____?
- a.) the predator c.) a prey
 b.) an herbivore eating plants d.) hungry

- 7.) The last stage of the metamorphosis of a butterfly is called _____?
- a.) a larva or caterpillar c.) an egg
 b.) an adult or butterfly d.) a cocoon or pupa or chrysalis
- 8.) If there is a new moon, about how many days until a second full moon appears in the sky? (Think!) 15
15
15
45
- a.) 10 days c.) 30 days
 b.) 15 days d.) 45 days
- 9.) People get drinkable water from two places. Name them. Rivers/Lakes and Underground H₂O

can't pollute the ground => seeps into the ground water => rivers/lakes

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Ground water

5th Grade Science Spring Review Warm-Up Number 17

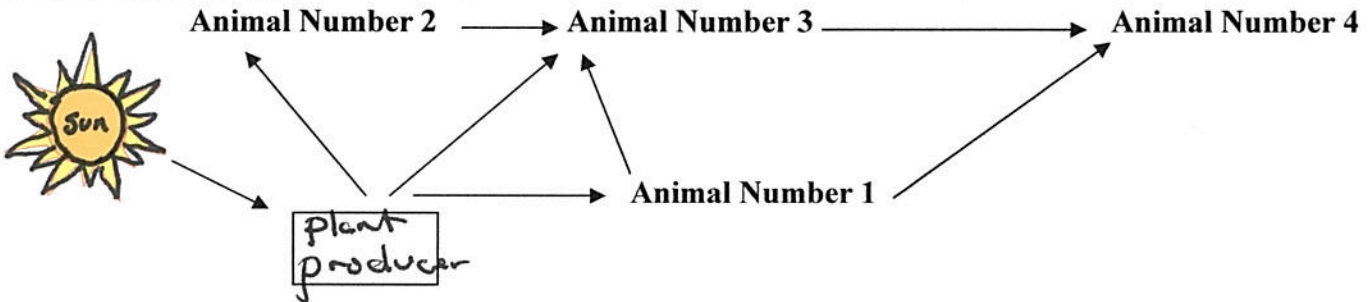
(12 to 15 minutes, maximum)

Name: Key/Solution

1.) A raccoon sneaks into a house and finds stored cans of food in the kitchen pantry. He figures out how to use his paws to pry open a can of food so he can eat it. After eating 3 cans of food, the raccoon leaves and returns the next day to the kitchen for food? What type of behavior is the raccoon demonstrating?

- a.) a canivore *-joke*
- b.) inherited behavior *-parent born with*
- c.) being really smart or clever
- d.) learned behavior

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) Which of the following choices should go in the box in the Food Web Diagram above.

- a.) a consumer
- b.) Animal Number 5
- c.) a producer
- d.) an herbivore

3.) What do the 'arrows' mean in the Food Web Diagram?

- a.) who is eating who
- b.) which animal likes another animal
- c.) the metamorphosis of a consumer
- d.) a transfer of energy

4.) Animal Number 3 in the Food Web Diagram is an _____?

- a.) omnivore
- b.) suniovore
- c.) herbivore
- d.) carnivore

5.) Animal Number 4 in the Food Web Diagram is _____?

- a.) a consumer
- b.) an herbivore
- c.) prey
- d.) hungry

6.) Animal Number 2 in the Food Web Diagram is _____?

- a.) the predator
- b.) an herbivore
- c.) a prey
- d.) hungry

7.) The stage of the metamorphosis of a butterfly when it makes a cocoon is also called _____?

- a.) a larva or caterpillar
- b.) an adult or butterfly
- c.) an egg
- d.) a pupa or chrysalis

8.) Esteban changes the oil on his car. He dumps the used oil on the ground instead of disposing of the oil in a recycle container. What is the problem the oil he dumped on the ground may cause the environment?

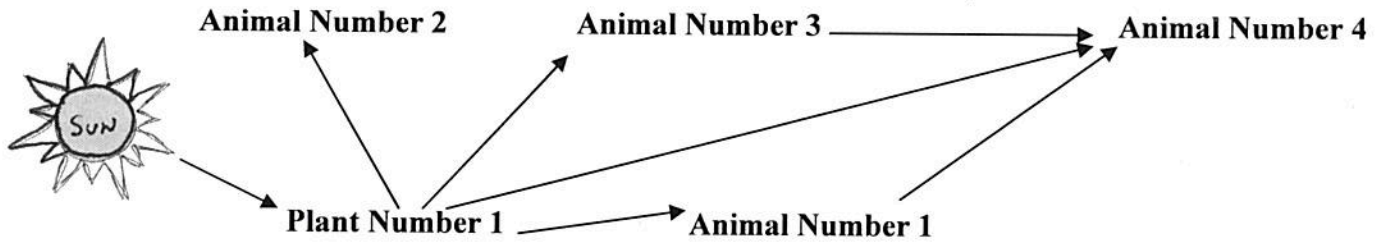
- a.) kill the grass and plants in the area
- b.) harm animals in the area
- c.) pollute the groundwater beneath the ground
- d.) all of the above answers are possible problem from the dumping of oil on the ground

5th Grade Science Spring Review Warm-Up Number 18
 (12 to 15 minutes, maximum)

Name: Key/solution

- 1.) A mother cat had a litter of kittens. All of the kittens had brown eyes like their mother. The brown eyes are an example of _____.
- a.) a decomposer
b.) an inherited trait
 c.) a learned behavior
 d.) none of the above

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



- 2.) How is Plant Number 1 using the sunlight in the Food Web Diagram above?
- a.) making their own food
 b.) giving off or emitting oxygen
 c.) absorbing or taking in carbon dioxide
d.) all of the above *MUST KNOW*
- 3.) Animal Number 1 and Animal Number 2 are both called _____.
- a.) an omnivore**
 b.) a decomposer
 c.) an herbivore
 d.) a carnivore
- 4.) Animal Number 4 in the Food Web Diagram is _____.
- a.) an omnivore**
 b.) a predator
 c.) a consumer
d.) all of the above *ALL*
- 5.) All life of all animals and plants always begins in the Food Web Diagram with _____?
- a.) Animal Number 1
 b.) Plant Number 1
 c.) the sun
 d.) producers
- 6.) Animal Number 3 in the Food Web Diagram is _____?
- a.) a predator
 b.) a producer
c.) both a prey and a consumer
 d.) an omnivore

- 7.) The sun is made of _____, and the moon is made out of _____?
- a.) impossible for anyone to know
 b.) both the sun and moon are made of gases
c.) sun is made of gases and moon of dirt & rocks
 d.) sun is made of rocks and moon of gases
- 8.) Humans get most of their drinkable water from rivers/lakes and ground water. Why do we not get our drinkable water from the ocean waters?
- a.) the water is too deep
 b.) sharks and whales keep humans away
 c.) the waters flow away from our shores
d.) the high salt content in the ocean water causes dehydration in human beings
- 9.) Name the three (3) layers of the earth. core, mantle, crust

5th Grade Science Spring Review Warm-Up Number 19
 (12 to 15 minutes, maximum)

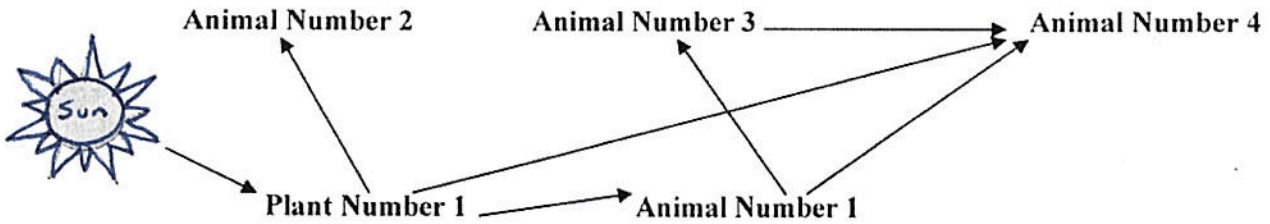
Name: KEY/SOLUTION

1.) A seal balances a ball on its nose. What is this behavior called?

- a.) a conductor
- b.) an inherited trait
- c.) a learned behavior
- d.) an insulator

WAS NOT BORN with skill

Food Web Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) How is Plant Number 1 using the sunlight in the Food Web Diagram above?

- a.) **making their own food**
- b.) uses the sunlight to drink water
- c.) taking Carbon Dioxide from nearby rocks
- d.) absorbs Oxygen to the plant

3.) Animal Number 1 and Animal Number 2 are both called _____.

- a.) omnivores
- b.) decomposers
- c.) **herbivores**
- d.) carnivores

4.) Animal Number 4 in the Food Web Diagram is _____.

- a.) an omnivore
- b.) a predator
- c.) a consumer
- d.) **all of the above**

5.) All life of all animals and plants always begins in the Food Web Diagram with _____?

- a.) Animal Number 1
- b.) Plant Number 1
- c.) **the sun**
- d.) producers

6.) Animal Number 3 in the Food Web Diagram is _____?

- a.) a carnivore
- b.) a consumer
- c.) **both prey and predator**
- d.) all of the above

7.) The sun is made of _____, and the moon is made out of _____?

- a.) impossible for anyone to know
- b.) both the sun and moon are made of gases
- c.) **sun is made of gases and moon of dirt & rocks**
- d.) sun is made of rocks and moon of gases

8.) On a field trip to a landfill or garbage dump, a fifth grader asks why they put a thick sheet of plastic under the garbage so there is a plastic sheet or liner between the garbage and the soil beneath the landfill. There is a reservoir of ground water directly underneath the garbage dump or landfill. Why do we use the plastic liner under the landfill?

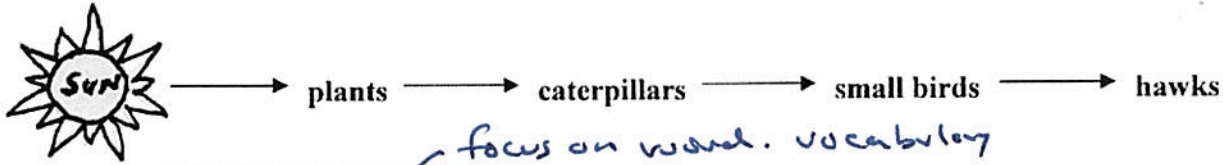
- a.) to hurt the soil and earthworms
- b.) **to protect the groundwater from pollution**
- c.) so animals will not dig through the plastic
- d.) to protect the garbage from thieves

9.) Which layer of the earth is the thickest? Mantle Which layer of the earth does erosion occur? crust

5th Grade Science Spring Review Warm-Up Number 20
 (12 to 15 minutes, maximum) Name: Key/Solutions

- 1.) It was foggy on Saturday morning. This is an example of water changing from a gas to liquid water. What is this change called in science?
- a.) evaporation c.) condensation *usually temperature change ↓. clouds form by air expansion and temperature drop ↓*
 b.) melting d.) freezing

Food Chain Diagram (Use the Diagram to answer questions 2 - 6 below)



- 2.) Which organism (living thing) is necessary for all animals to be able to survive in the food chain diagram?
- a.) hawks c.) caterpillars
 b.) small birds d.) plants *- remove and food chain all dies*
- 3.) Which organisms in the food chain diagram may be classified as predators?
- a.) caterpillars and small birds c.) small birds and hawks
 b.) plants and hawks d.) plants only
- 4.) Based on the food chain diagram, if the population of small birds increases, what will happen to the caterpillar population?
- birds ↑ - eat more caterpillars*
caterpillars ↓
- a.) stay the same c.) increases
 b.) decreases d.) all of the above
- 5.) If the number of plants decreases due to pesticides, what will happen to the caterpillar population?
- a.) stay the same c.) increases
 b.) decreases *- nothing to eat* d.) none of the above
- 6.) Hawks in the food chain diagram are classified as _____.
- a.) carnivores c.) predators
 b.) consumers d.) all of the above

- 7.) A heavy marble sinks to the bottom of glass of water while a small cork floats on top of the water. What statement is true when comparing the density of the water, cork and marble?



- a.) the cork is the most dense object c.) water is less dense than the cork
 b.) the marble is the most dense object d.) the marble is the least dense object
- 8.) Salt and sugar are dissolved in a pan of water. After 3 days, only the sugar and salt remain since the water evaporated. Why did the salt and sugar NOT evaporate like the water?
- invisible*
sinks
- a.) salt and sugar are too heavy c.) salt and sugar dissolved and are invisible
 b.) water is a liquid and salt and sugar are not d.) all ingredients evaporated in the pan of water
- 9.) Which layer of the earth is the thinnest? crust Which layer of the earth is the hottest? Core

- 10.) My cat sees itself in the bathroom mirror. In science, this is an example of _____.
- a.) refraction of light b.) reflection of light *bounced back* c.) the cat's good eyesight

5th Grade Science Spring Review Warm-Up Number 21

(12 to 15 minutes, maximum)

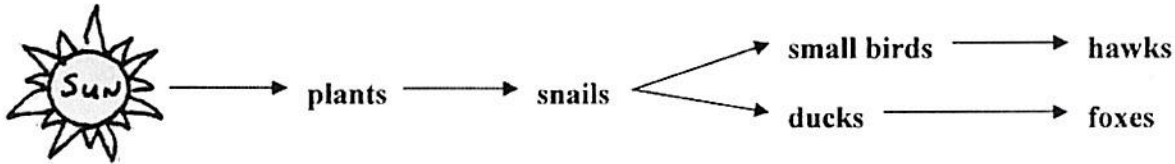
Name: Key/Sourton

1.) A fifth grader's younger brother reaches into the refrigerator to grasp a gallon of milk and discovers water droplets all over the container. The fifth grader explains to his brother it is most likely due to the change in temperature after the milk was left on the counter earlier compared to the temperature inside the refrigerator and water vapor changed back to a liquid form. What is the name for this?

- a.) evaporation
- b.) melting

- c.) condensation - temp. ↓ below vapor pressure cause the condensation
- d.) freezing

Food Chain Diagram (Use the Diagram to answer questions 2 - 6 below)



2.) Which organism (living thing) is necessary for all animals to be able to survive in the food chain diagram?

- a.) plants
- b.) small birds

- c.) caterpillars
- d.) foxes

3.) Which organisms in the food chain diagram may be classified as predators?

- a.) caterpillars and small birds
- b.) plants and hawks

- c.) small birds, ducks, foxes and hawks
- d.) plants only

4.) Based on the food chain diagram, if the population of snails decreases, what will most likely happen to the hawk population?

- a.) stay the same
- b.) decreases

snails ↓
small birds ↓
hawks ↓

- c.) increases
- d.) all of the above

5.) If the number of foxes decreases due to overhunting by man, what will happen to the snail population?

- a.) stay the same
- b.) decreases

ducks ↑
snails ↓

- c.) increases
- d.) none of the above

6.) Hawks and foxes in the food chain diagram are classified as _____.

- a.) carnivores
- b.) consumers

- c.) predators
- d.) all of the above

7.) A suspension of oil (top layer) and water (bottom layer) are in a glass with a cork on the top of the oil. What statement is true when comparing the densities of the water, oil, and cork?



- a.) the cork is the most dense object
- b.) the oil is the most dense liquid

- c.) the oil and cork are less dense than the water
- d.) the water is the least dense of all the objects

8.) What is the easiest way to separate iron ore from soil?

- a.) use a sieve
- b.) use a hand lens

- c.) use a magnet
- d.) use a wire brush

10.) A rainbow is caused by sunlight passing through precipitation. This situation is an example of _____.

- a.) refraction of light
- light bent

b.) reflection of light

c.) the magic of optics in science

5th Grade Science Spring Review Warm-Up Number 22

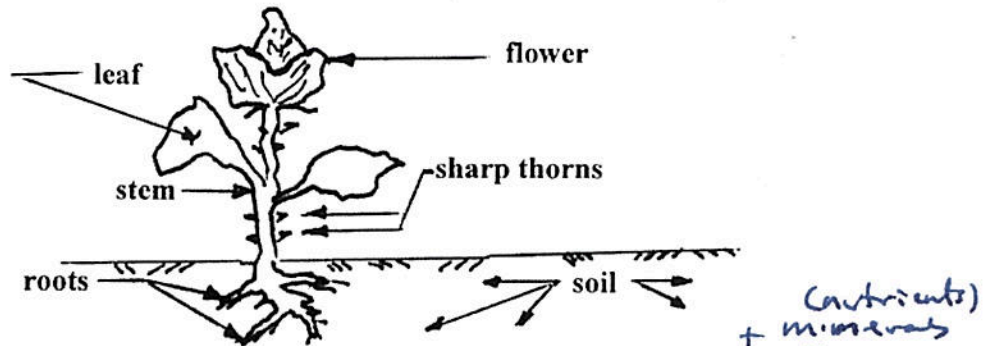
(12 to 15 minutes, maximum)

Name: Sutton/Key

1.) A blue crayon is placed in a frying pan on a hot stove. The blue crayon melts but does not burn. All of the following answer choices DID NOT change when the blue crayon melted EXCEPT _____.

- a.) the crayon's color - *same color, did not burn*
 b.) the crayon's mass - *just spread out - mass is the same*
 c.) the crayon's shape - *changed*
 d.) the number of atoms in the crayon - *same #*

PLANT DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



- 2.) The plant roots allow two important things to enter the plant. Name them. water (H₂O)
- 3.) What is inside the plant's stem that allow water and nutrients (minerals) to reach the leaves?
 a.) cardboard paper
 b.) small vertical tubes to transport water/minerals
 c.) precipitation
 d.) all of the above
- 4.) What is the purpose or function of the flowers or fruits on a plant or tree?
 a.) to look pretty
 b.) to reproduce and make more plants and trees
 c.) to attract sunlight
 d.) to defend the plant from herbivores
- 5.) During photosynthesis, what is the plant making?
 a.) it is reproducing
 b.) it is in the process of pollination
 c.) fertilizing the ground with minerals
 d.) making a sugar or its food
- 6.) What gas is absorbed into the leaf during photosynthesis?
 a.) nitrogen
 b.) carbon dioxide CO₂
 c.) oxygen O₂
 d.) phosphorous
- 7.) What gas is emitted or given off during the process of photosynthesis?
 a.) nitrogen
 b.) carbon dioxide
 c.) oxygen
 d.) phosphorous
- 8.) What is also absorbed into the leaf during photosynthesis for the plant to make sugar or its food?
 a.) helium
 b.) sunlight - *sun begins the food chain*
 c.) moon rays
 d.) phosphorous

- 9.) What is the main reason for the four seasons (winter, summer, fall, spring) we have on Earth?
 a.) the distance of earth from the sun - *does not matter*
 b.) the moon's orbit around the earth
 c.) the tilt (declination) of the earth
 d.) the rotation of the earth on its axis

- 10.) The ocean tides occur twice every day. What object is the main reason for the ocean tides? Moon
Sun, also => but mostly the moon

5th Grade Science Spring Review Warm-Up Number 23

(12 to 15 minutes, maximum)

Name: _____

1.) Your shadow is directly underneath your body as you walk to the playground. What time of day is it?

a.) 8 AM (morning)

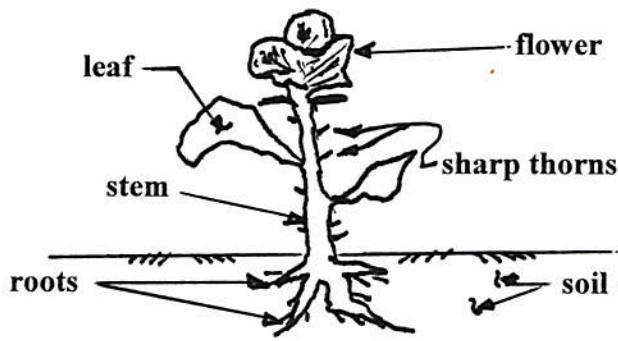
b.) 5 PM (school's out for the day)

c.) 12 PM (noon – lunch time) directly overhead

d.) Party time

Sun up in east shadow to west

PLANT DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



2.) The plant roots allow what two important things to enter the plant. Name them. H₂O + Nutrients

3.) What is inside the plant's stem that allow water and nutrients (minerals) to reach the leaves?

a.) cardboard paper

b.) small vertical tubes to transport water/minerals

c.) rubber

d.) none of the above

4.) What is the purpose or function of the flowers or fruits on a plant or tree?

a.) to look pretty

b.) to reproduce and make more plants and trees

c.) to attract sunlight

d.) to defend the plant from herbivores

5.) During photosynthesis, what is the plant making?

a.) it is reproducing

b.) it is in the process of pollination

c.) fertilizing the ground with minerals

d.) making a sugar or its food

6.) Why is a plant called a producer, and it is not called a consumer?

a.) a plant is unable to make its own food

b.) a plant makes its own food and a consumer cannot

c.) a plant is a performer not a producer

d.) a plant is a consumer

7.) A plant or tree sometimes has sharp thorns. What purpose or function do the thorns serve?

a.) to defend the plant or tree against predators

b.) to hurt and kill the plant

c.) to attract sunlight

d.) all of the above

8.) How does a flowering plant reproduce ~~to~~ for its species to live on the next year?

a.) insects pollinate when they get nectar

b.) plant pollen is transported by the wind

c.) plant pollen sticks to animal fur

d.) all of the above

9.) What is the main reason for the four seasons (winter, summer, fall, spring) we have on Earth?

a.) the distance of earth from the sun

b.) the moon's orbit around the earth

c.) the tilt (declination) of the earth

d.) the rotation of the earth on its axis

10.) During the rock cycle, what type of rock is formed underground due to heat and pressure?

a.) sedimentary rock

b.) metamorphic rock

c.) igneous rock

5th Grade Science Spring Review Warm-Up Number 24

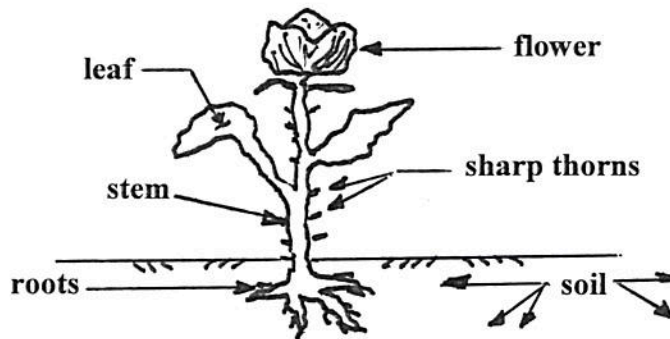
(12 to 15 minutes, maximum)

Name: Sourin/Key

1.) A blue crayon is placed in a frying pan on a hot stove. The blue crayon melts but does not burn. All of the following answer choices DID NOT change when the blue crayon melted EXCEPT _____.

- a.) the crayon's color
 b.) the crayon's mass
 c.) the crayon's shape
 d.) the number of atoms in the crayon

PLANT DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



- 2.) The plant roots allow two important things to enter the plant. Name them. H₂O + Minerals (Nutrients)
- 3.) What is inside the plant's stem that allow water and nutrients (minerals) to reach the leaves?
 a.) cardboard paper
 b.) small vertical tubes to transport water/minerals
 c.) sunlight
 d.) precipitation
- 4.) What is the purpose or function of the flowers or fruits on a plant or tree?
 a.) to look pretty
 b.) to reproduce the species and make more plants/trees
 c.) to attract sunlight
 d.) to defend the plant from herbivores
- 5.) During photosynthesis, what is the plant making?
 a.) it is reproducing
 b.) it is in the process of pollination
 c.) fertilizing the ground with minerals
 d.) making a sugar or its food
- 6.) What gas is absorbed into the leaf during photosynthesis?
 a.) nitrogen
 b.) carbon dioxide
 c.) oxygen
 d.) phosphorous
- 7.) What gas is emitted or given off during the process of photosynthesis?
 a.) nitrogen
 b.) carbon dioxide
 c.) oxygen
 d.) phosphorous
- 8.) What is also absorbed into the leaf during photosynthesis for the plant to make sugar or its food?
 a.) helium
 b.) sunlight
 c.) moon rays
 d.) phosphorous
-
- 9.) What is the main reason for the four seasons (winter, summer, fall, and spring) we have on Earth?
 a.) the distance of earth from the sun - does not matter much
 b.) the moon's orbit around the earth
 c.) the tilt (declination) of the earth
 d.) the rotation of the earth on its axis
- 10.) The ocean tides occur twice every day. What object is the main reason for the ocean tides? Moon

5th Grade Science Spring Review Warm-Up Number 25

(12 to 15 minutes, maximum)

Name: SOLUTIONS/KEY

- 1.) A timber company harvests trees to have wood to build homes. What may happen as the timber company continues to harvest trees in the same area where many animals live?
- a.) a law will declare no fishing in that area
 b.) the timber company will lose money
 c.) animals will lose their habitats in that area
 d.) animals will dig holes since there are no trees
- homes/casa

PHASES OF THE MOON DIAGRAM (Use the Diagram to answer questions 2 – 8 below)



- 2.) "Phases of the Moon" means a change of what on the moon? LIGHT ON MOON'S SURFACE

- 3.) What is the order of the phases of the moon starting at the beginning of the month?
- a.) 2, 4, 1, 3
 b.) 3, 2, 4, 1 New, 1st Q, Full, 3rd Q
 c.) 3, 4, 1, 2
 d.) 1, 2, 3, 4
- New Moon Always first, Full Always half-way in month

- 4.) What is the moon called that is labeled number 3 in the Phases of the Moon Diagram above?
- a.) the pretty moon
 b.) the new moon
 c.) the old moon
 d.) the full moon
- Sun - All light on other side of moon

- 5.) What is the moon called that is labeled number 4 in the Phases of the Moon Diagram above?
- a.) the pretty moon
 b.) the new moon
 c.) the old moon
 d.) the full moon
- Sun - All light on moon facing Earth

- 6.) How many weeks does it take the moon to revolve around the earth one time?
- a.) about four weeks ≈ 30 days
 b.) about 1 day
 c.) about 1 year
 d.) about 365 ¼ days
- Note: Moon's light is Reflected Sun-Light.

- 7.) What is another name for the moon?
- a.) solar - sun
 b.) lunar
 c.) Suzy - garbage
 d.) None of the above

- 8.) What does the moon's gravitational pull on earth cause twice a day on the earth's surface?
- a.) recess
 b.) the ocean tides
 c.) earthquakes
 d.) large mountains to form
- Sun, too... but not nearly as much

- 9.) Seasons (fall, winter, spring, and summer) of the earth occur due to the earth's tilt and as _____

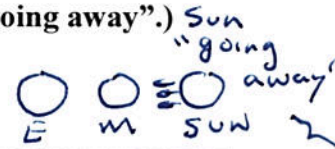
- a.) the sun rotates on its axis
 b.) the moon revolves around the earth
 c.) the earth rotates on its axis
 d.) the earth revolves around the sun

- 10.) A fifth grader's shadow from the sun is very long and extends far toward the west. About time of day is it?

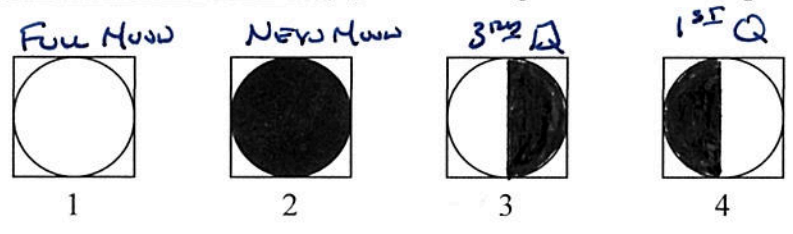
- a.) 12 PM (noon)
 b.) 12 AM (midnight)
 c.) 6 PM
 d.) 8 AM
- Must Be Morning
- W E sun

5th Grade Science Spring Review Warm-Up Number 26
 (12 to 15 minutes, maximum) Name: SOLUTIONS/KEY

- 1.) The moon is between the earth and the sun. What type of eclipse is occurring? (Draw three circles. Correctly label each circle as either the sun, moon and earth. "Eclipse" means 'going away'.)
- a.) lunar eclipse c.) Eclipse of the Heart
 b.) night time eclipse d.) solar eclipse



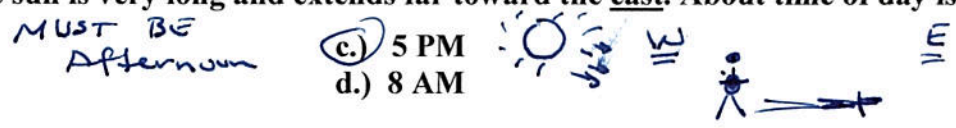
PHASES OF THE MOON DIAGRAM (Use the Diagram to answer questions 2 – 9 below)



MOON blocks light from Sun
 ← AS VIEWED FROM EARTH LOOKING @ THE MOON

- 2.) "Phases of the Moon" means a change of what on the moon? light (Sun-Light)
- 3.) What is the order of the phases of the moon starting at the beginning of the month?
 a.) 2, 4, 1, 3 c.) 3, 4, 1, 2
 b.) 3, 2, 4, 1 d.) 1, 2, 3, 4
- 4.) What is the moon called that is labeled number 2 in the Phases of the Moon Diagram above?
 a.) the pretty moon c.) the old moon
 b.) the new moon d.) the full moon
- 5.) What is the moon called that is labeled number 1 in the Phases of the Moon Diagram above?
 a.) the pretty moon c.) the old moon
 b.) the new moon d.) the full moon
- 6.) How many weeks does it take the moon to revolve around the earth one time?
 a.) about four weeks or 30 days c.) about 1 year
 b.) about 1 day d.) about 365 ¼ days
- 7.) What is another name for the moon?
 a.) solar c.) Suzy
 b.) lunar d.) None of the above
- 8.) What does the moon's gravitational pull on earth cause twice a day on the earth's surface?
 a.) recess c.) earthquakes
 b.) the ocean tides d.) large mountains to form
- 9.) If it is a full moon, about how many days until a new moon appears in the nighttime sky?
 a.) 15 days c.) 45 days
 b.) 30 days d.) 60 days

- 10.) A fifth grader's shadow from the sun is very long and extends far toward the east. About time of day is it?
 a.) 12 PM (noon) c.) 5 PM
 b.) 12 AM (midnight) d.) 8 AM



5th Grade Science Spring Review Warm-Up Number 27

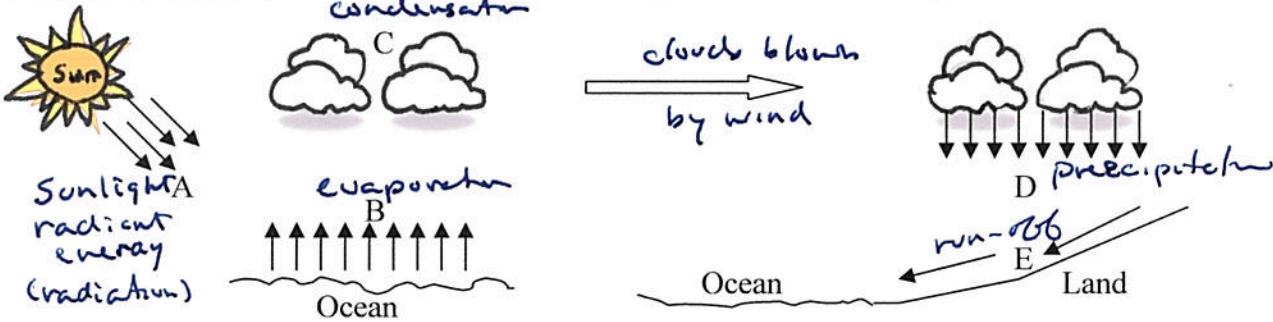
(12 to 15 minutes, maximum)

Name: Southern/Key

1.) The sun does not move, but it appears to move across the earth's sky. What is causing this situation?

- a.) rotation of the moon on its axis
 b.) rotation of the earth on its axis
 c.) rotation of the sun on its axis
 d.) revolution of the moon around the earth
- Looks like sun is moving from stationary position on earth*

The Water Cycle (Use the Diagram to answer questions 2 – 8 below)



- 2.) Label the Water Cycle Diagram for Letters A, B, C, D and E.
- 3.) What causes condensation in the clouds that are labeled by Letter 'C'?
- a.) fluffy air
 b.) higher temperature
 c.) colder temperatures and expansion of air
 d.) airplanes flying too low in the sky
- 4.) In the process labeled Letter 'E', where does the runoff begin?
- a.) in the desert
 b.) in the lakes
 c.) in the mountains and plains
 d.) runoff flows toward the clouds not the ocean
- 5.) Is the evaporation of salt water a chemical or physical change? physical => changing water form
- 6.) Is the condensation that forms clouds a chemical or physical change? same answer
- 7.) What object in the solar system begins the water cycle on earth?
- a.) the sun
 b.) the moon
 c.) Earth
 d.) Venus
- 8.) Name the material that is carried by erosion forces from the mountains and fields and is deposited in river deltas.
- a.) large rocks
 b.) small sediments, pebbles and soil
 c.) glaciers
 d.) solar energy

9.) If it is a full moon, about how many days until a SECOND full moon appears in the nighttime sky?

- a.) 15 days
 b.) 30 days
 c.) 45 days
 d.) 60 days
- 1 Full Moon (30) + 2 Full Moon (30) = 60*

10.) As the teacher walks her students across the playground, the students notice that their shadow from the sun is directly underneath their bodies. About time of day is it?

- a.) 12 PM (noon) => *synch time sun is directly overhead*
 b.) 12 AM (midnight)
 c.) 5 PM
 d.) 8 AM

11.) Name ALTERNATIVE energy sources compared to the use of fossil fuels. wind, solar, bio fuels, hydroelectric, geothermal

also called "green" and "clean" -> no pollution

pollution (radiative material spent) not clean though.

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5th Grade Science Spring Review Warm-Up Number 28

(15 to 20 minutes, maximum)

Name: SOLUTION / KEY

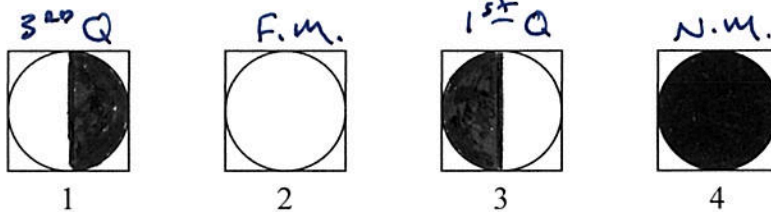
- 1.) The earth is between the moon and the sun. What type of eclipse is occurring? (Draw three circles Label each the sun, moon and earth correctly. "Eclipse" means 'going away".)

a.) lunar eclipse ⇒ Moon "Going Away" AS EARTH BLOCKS SUN'S LIGHT

c.) Eclipse of the Heart
d.) solar eclipse

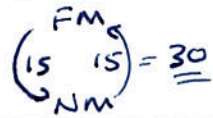


PHASES OF THE MOON DIAGRAM (Use the Diagram to answer questions 2 – 9 below)



VIEWED FROM EARTH - LOOKING @ MOON

- 2.) "Phases of the Moon" means a change of what on the moon? LIGHT - SUN LIGHT ON MOON
- 3.) What is the order of the phases of the moon starting at the beginning of the month?
 a.) 4, 3, 2, 1
 b.) 3, 2, 4, 1
 c.) 3, 4, 1, 2
 d.) 1, 2, 3, 4
- 4.) What is the moon called that is labeled number 2 in the Phases of the Moon Diagram above?
 a.) the pretty moon
 b.) the new moon
 c.) the old moon
 d.) the full moon
- 5.) What is the moon called that is labeled number 4 in the Phases of the Moon Diagram above?
 a.) the pretty moon
 b.) the new moon
 c.) the old moon
 d.) the full moon
- 6.) How many weeks does it take the moon to revolve around the earth one time?
 a.) about four weeks or 30 days
 b.) about 1 day
 c.) about 1 year
 d.) about 365 ¼ days
- 7.) What is another name for the moon?
 a.) lunar
 b.) solar
 c.) Suzy
 d.) None of the above
- 8.) What does the moon's gravitational pull on earth cause twice a day on the earth's surface?
 a.) recess
 b.) the ocean tides
 c.) earthquakes
 d.) large mountains to form
- 9.) If it is a full moon, about how many days until another full moon appears in the nighttime sky?
 a.) 15 days
 b.) 30 days - 1 month
 c.) 45 days
 d.) 60 days



- 10.) A fifth grader's shadow is almost directly below him. About time of day is it?

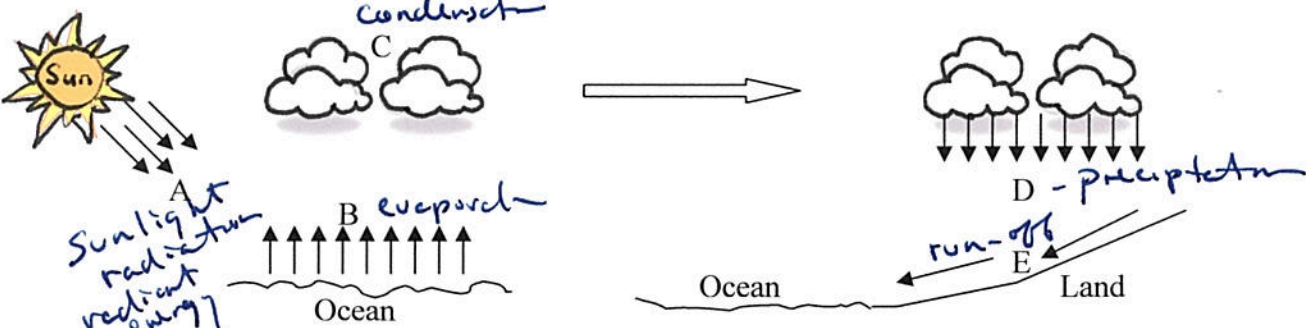
a.) 12 PM (noon)
 b.) 12 AM (midnight)
 c.) 5 PM
 d.) 8 AM

SUN DIRECTLY OVERHEAD (MID DAY)

5th Grade Science Spring Review Warm-Up Number 29
 (15 to 20 minutes, maximum) Name: Solution/Key

- 1.) Each day, the sun does appears to move across the earth's sky. What is causing this situation?
- a.) rotation of the earth on its axis c.) rotation of the sun on its axis
 b.) rotation of the moon on is axis d.) revolution of the moon around the earth

The Water Cycle (Use the Diagram to answer questions 2 – 8 below)



- 2.) Label the Water Cycle Diagram for Letters A, B, C, D and E.
- 3.) What causes condensation in the clouds that are labeled by Letter 'C'?
- a.) fluffy air c.) colder temperatures and expansion of air
 b.) higher temperature d.) airplanes flying too low in the sky
- 4.) In the process called Letter 'E', where does the runoff begin?
- a.) in the desert c.) in the mountains and plains *soil from fields*
 b.) in the lakes d.) runoff flows toward the clouds not ocean
- 5.) Is the evaporation of salt water a chemical or physical change? Physical
- 6.) Is the condensation that forms clouds a chemical or physical change? Physical
- 7.) What force pulls the precipitation to the earth's surface?
- a.) friction c.) gravity
 b.) thrust d.) all of the above
- 8.) Name the material that is carried by erosion forces from the mountains and fields and is deposited in river deltas.
- a.) large rocks c.) glaciers
 b.) small sediments, pebbles and soil d.) solar energy

- 9.) If it is a new moon, about how many days until a SECOND full moon appears in the nighttime sky?
- a.) 15 days c.) 45 days
 b.) 30 days d.) 60 days
- Handwritten calculation: 30 (NM) + 15 (FM) = 45*
- 10.) As a group of students stand on the playground, they notice their shadows extend toward the west. About what time of day is it?
- a.) 12 PM (noon) c.) 5 PM
 b.) 12 AM (midnight) d.) 9 AM
- W ← E*
pollutes
- 11.) Name ALTERNATIVE energy sources compared to the use of fossil fuels. wind, solar, biofuels
hydroelectric, nuclear

5th Grade Science Spring Review Warm-Up Number 30

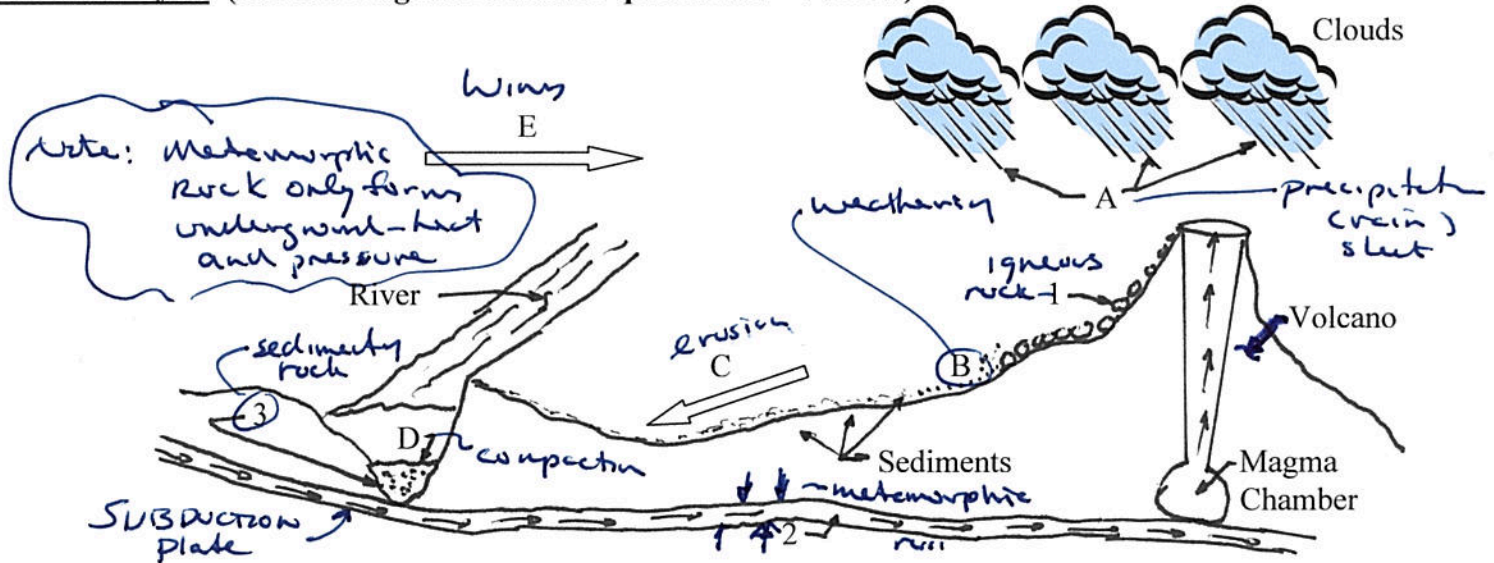
(15 to 20 minutes, maximum)

Name: Solutuna / Key

1.) A bird builds his nest in back window of an abandoned car. What is this called in science?

- a.) dangerous
 b.) a poor place for a habitat
 c.) a nocturnal predator
 d.) an adaption to the bird's environment

The Rock Cycle (Use the Diagram to answer questions 2 – 7 below)



2.) Label the Rock Cycle Diagram for Letters A, B, C, D and E. (USE: Wind, Erosion, Compaction, Weathering and Precipitation)

3.) Label the Rock Cycle Diagram for Numbers 1, 2, and 3 (USE: Sedimentary Rock, Metamorphic Rock, and Igneous Rock)

4.) What force (Letter C in the Rock Cycle Diagram) carries the weathered rock to the river?

- a.) friction and thrust
 b.) erosion and gravity *pulling rock with wind/water*
 c.) electricity and magnetism
 d.) none of the above

5.) What two forces shown in the Rock Cycle Diagram weather the igneous rock (Letter B)?

- a.) the wind and precipitation (water/sleet/ice)
 b.) the volcano and magma
 c.) mudslides and rockslides
 d.) lava and magma

6.) What type of rock is formed underground with heat and pressure? Metamorphic

7.) What type of rock would fossils most likely be formed? Sedimentary (Compaction)

8.) All of the following help an animal defend itself against predators EXCEPT _____.

- a.) a hard shell
 b.) short legs
 c.) sharp claws, teeth and quills
 d.) the ability to run very fast

9.) A conductor allows what two things to easily pass through it? heat & electricity

10.) Name as many conductors as possible. metals (iron); water, air, humans

11.) On the line below, name as many insulators that do not allow electricity or heat to pass through itself.
rubber, plastic, wood, porcelain, glass, wood, cloth

5th Grade Science Spring Review Warm-Up Number 31


(15 to 20 minutes, maximum)

Name: Solutions / Key

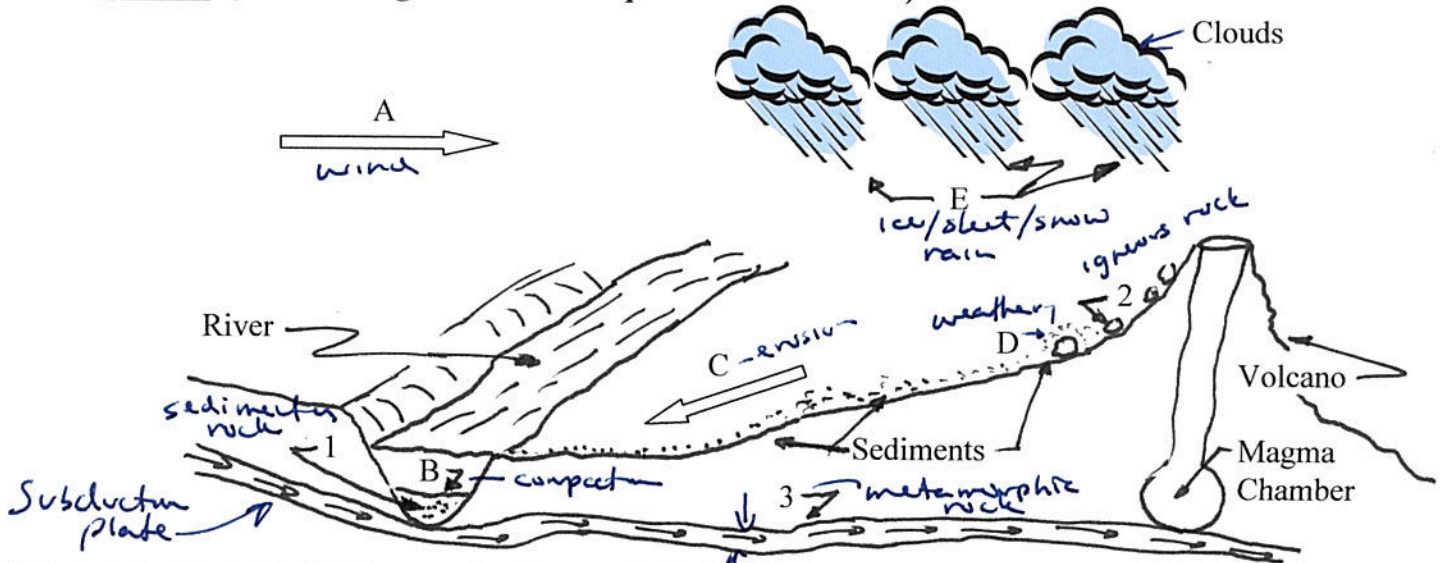
1.) A young man reads a book with a see through glass hemisphere to make the print bigger. What type of science principle is taking place?

- a.) reflection of light
- b.) condensation

- c.) refraction of light
- d.) decomposer

Light Bent


The Rock Cycle (Use the Diagram to answer questions 2 – 8 below)



2.) Label the Rock Cycle Diagram for Letters A, B, C, D and E. (USE: Wind, Erosion, Compaction, Weathering, and Precipitation)

3.) Label the Rock Cycle Diagram for Numbers 1, 2, and 3 (USE: Sedimentary Rock, Metamorphic Rock, and Igneous Rock)

4.) What force (Letter C in the Rock Cycle Diagram) carries the weathered rock to the river?

- a.) friction and thrust
- b.) electricity and magnetism
- c.) erosion and gravity
- d.) all of the above

5.) What two forces shown in the Rock Cycle Diagram weather the igneous rock (Letter D)?

- a.) lava and magma
- b.) the volcano and magma
- c.) mudslides and rockslides
- d.) the wind and precipitation (water/sleet/ice)

6.) What type of rock is formed underground with heat and pressure? Metamorphic

7.) What type of rock would fossils most likely be formed? Sedimentary

8.) True or False. A metamorphic rock may be changed into a sedimentary or an igneous rock? True
All rocks can change into any one of the other two

9.) How many 'things' are changed or tested in any science experiment? 1 one - all else left constant

10.) A conductor allows what two things to easily pass through it? heat + electricity

11.) Name as many conductors as possible. metals like copper, iron; Water, Air; Humans

12.) On the line below, name as many insulators that do not allow electricity or heat to pass through itself. glass, rubber, plastic, wood, porcelain; cloth

5th Grade Science Spring Review Warm-Up Number 32

(15 to 18 minutes, maximum)

Name: Key / Souton

1.) Melissa listed 4 characteristics for a predator using what she learned in her science class. Write the 4 characteristics of predators she wrote down on her paper.

- 1.) sharp teeth 3.) built for speed
 2.) sharp claws 4.) eyes in front of head

2.) How many things or variables are changed in any science experiment? one - only change 1 thing

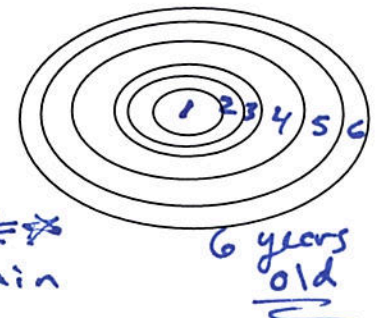
3.) In a science class, Dante did the following to set-up his experiment. He used the same amount of water on each of three plants. He used the same amount of sunlight and the same soil type on all three plants as well. Dante used three different types of plants in each pot holder. What was Dante testing during his science experiment?

- plants only thing changed
 a.) How water affects plant growth c.) Which type of plant grows best in the soil
 b.) How soil affects plant growth d.) How changing the sunlight affects the plant

4.) Why would an organism like a blow fish expand its lungs and appear to be twice the size normally when it sees a predator?

- appear bigger - scare/intimidate
 a.) to eat more food c.) to appear much bigger and protect itself
 b.) to get more oxygen to its lungs d.) to take up more space in its environment

Jose sawed a tree down and examined the tree trunk tree rings shown in the picture to right.



5.) How old was the tree that Jose cut down?

- ~~a.) 3 years old~~ c.) 5 years old
 b.) 4 years old d.) 6 years old ←
- 6 rings →

6.) In what year of the tree's life was there most likely a drought? no rain

- a.) 3 years old with thinnest ring grew the least c.) 5 years old
 b.) 4 years old d.) impossible to tell

7.) What helps protect a tree against a fire and insects? termites, for example

- a.) the inner most ring c.) the outside bark
 b.) the leaves of the tree d.) None of the above

8.) What is the function of a flower on either a tree or a plant?

- a.) to hold water c.) to look pretty in the backyard
 b.) to reproduce the species d.) to hold nectar for sunlight
- All reproduction in plants and tree comes from the flower

9.) How is a plant able to reproduce using its flower for pollen to move to another flower?

- a.) insects like bees and butterflies T c.) pollen gets stuck in a passing animal's fur T
 b.) wind carrying pollen T d.) all choices help plants reproduce

10.) Name two ways a fruit tree like an apple tree reproduces: 1) apples drop on ground - pulp rots - seeds in favorable soil 2) Birds eat pulp - seeds too => poop out seeds

5th Grade Science Spring Review Warm-Up Number 33

(12 to 15 minutes, maximum)

Name: Key/Solutions

1.) Travis lists a predator using 4 characteristics she learned in her science class. List the 4 characteristics she wrote down on her paper.

- 1.) eyes in front of head 3.) claws - sharp
 2.) sharp teeth 4.) built for speed

2.) How many things or variables are changed in any science experiment? 1

3.) In a science experiment, a fifth grader can ALWAYS tell what is being tested in the experiment by ____.

- a.) reviewing the type of science equipment used c.) checking the temperature of the water
 b.) looking at the one thing that is changed d.) taking note of the constants in the experiment

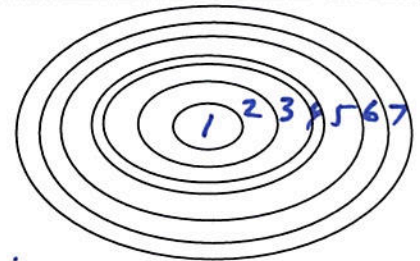
4.) The temperature of a glass of water is 55° Celsius. How many degrees must the water temperature increase to reach the water's boiling temperature?

- a.) 55° Celsius c.) 212° Celsius
 b.) 0° Celsius d.) 45° Celsius

100°C

$$\begin{array}{r} 100 \\ - 55 \\ \hline 45 \end{array}$$

Elaine looked at a tree trunk tree rings shown in the picture to the right



5.) How old was the tree that Elaine is looking at?

- a.) 4 years old c.) 6 years old
 b.) 5 years old d.) 7 years old

6.) In what year of the tree's life was there most likely a drought? no rain

- a.) 3 years old c.) 5 years old
 b.) 4 years old d.) impossible to tell

7.) What helps protect a tree against a fire and insects?

- a.) the inner most ring c.) the outside bark
 b.) the leaves of the tree d.) None of the above

8.) A bird builds its nest on top of a light on a building. What is the bird doing besides building his habitat?

- h.) making sure the habitat is out of the wind j.) attracting predators
 i.) adapting to the environment k.) staying out of the sun

chome

9.) Glaciers are large masses of ice that move slowly over the land. Which one of these features is most likely formed by a glacier? heavy-smash down land

- a.) a high mountain c.) a wide valley
 b.) a deep ocean d.) a desert

10.) Name two ways a fruit tree reproduces: 1) fall on ground - favorable soil

2) bird/animal eats pulp and seed too - poops it out

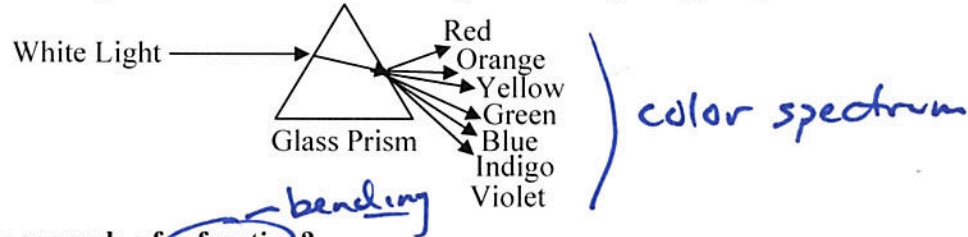
11.) What type of energy is released by a light bulb that is turned on? thermal and ~~heat~~ radiant

5th Grade Science Spring Review Warm-Up Number 34

(12 to 15 minutes, maximum)

Name: Key/selection

- 1.) Shown below is white, visible light as it travels through a glass triangular prism. It separates into seven colors (ROYGBIV) – Red, Orange, Yellow, Green, Blue, Indigo and Violet as it travels through the glass prism. This is an example of refraction since the light is bent by the glass prism.

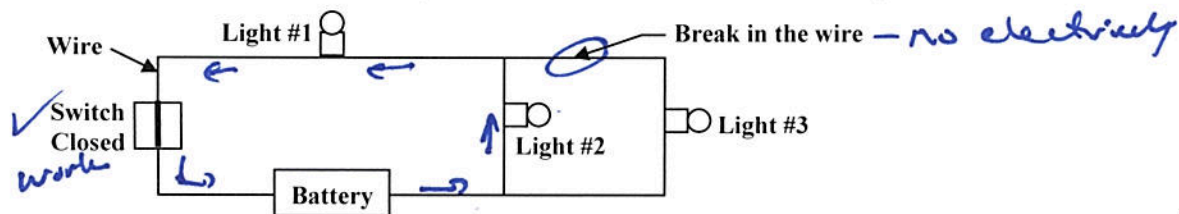


What is another example of refraction?

- a.) when light bounces back from a mirror
 b.) when light strikes your paper on your desk
 c.) when sunlight strikes the moon
 d.) when light goes into water - d. different medium
- 2.) A animal skull has flat teeth. What type of animal was it (most likely) when it was alive?
 h.) omnivore
 i.) herbivore plants
 j.) skullivore
 k.) carnivore
- 3.) The temperature of a glass of water is 26° Celsius. How many degrees must the water temperature decrease to reach water's freezing temperature?
 a.) 26° Celsius
 b.) 32° Celsius
 c.) 212° Celsius
 d.) 45° Celsius
- 100c

$$\begin{array}{r} 26^{\circ}\text{C} \\ - 26^{\circ}\text{C} \\ \hline 0 \end{array}$$

The Electrical Circuit shown in the diagram below will be used to answer questions 4-6.

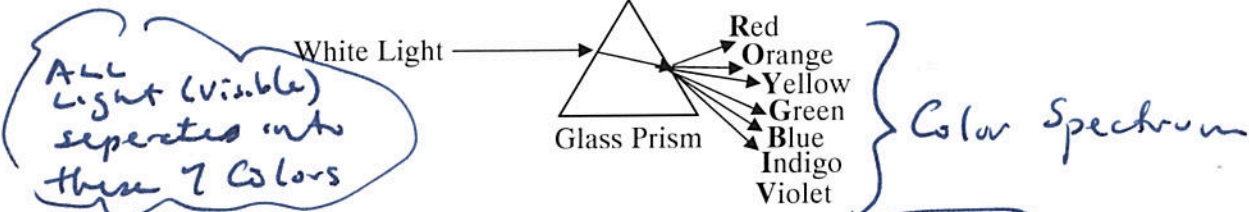


- 4.) What light will NOT come on in this circuit as it is shown above?
 a.) Light # 1
 b.) Light # 2
 c.) Light # 3
 d.) All Light will not work
- 5.) IF the switch were OPEN, what lights will light up?
 h.) Light # 1
 i.) Light # 2
 j.) Light # 3
 k.) None of the lights will not shine light or work no electricity
- 6.) Why is rubber or plastic wrapped around the copper (metal) in the wires in the circuit shown above?
 a.) rubber and plastic are insulators
 b.) the copper inside the wire is a conductor
 c.) so humans do not get electrocuted. we are conductors
 d.) All of the above are reasons to use plastic/rubber around the wires.

- 7.) What scientific principle is being tested if Oliver throws rocks and baseballs up in the sky and they fall back to earth?
 h.) mass
 i.) solubility
 j.) gravity ↓ grav. ↓
 k.) density

5th Grade Science Spring Review Warm-Up Number 35
 (12 to 15 minutes, maximum) Name: Key/Solution

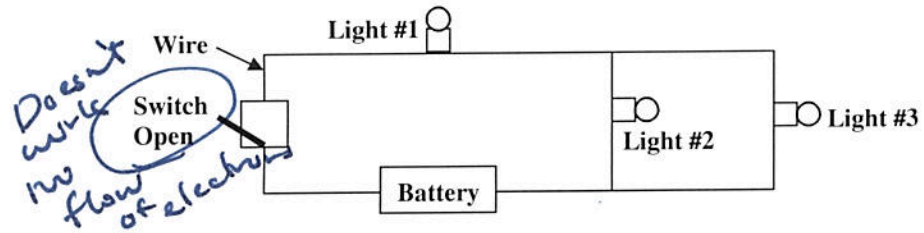
1.) Shown below is white, visible light as it travels through a glass triangular prism. It separates into seven colors (ROYGBIV) – Red, Orange, Yellow, Green, Blue, Indigo and Violet as it travels through the glass prism. This is an example of refraction since the light is bent by the glass prism.



Which answer choice is NOT an example of refraction but of reflection?

- a.) when light bounces back from a mirror
 - b.) when light goes into a raindrop forming a rainbow *refraction*
 - c.) when light enters your eyeglasses *refract*
 - d.) when light goes into water *refract*
- 2.) A animal skull has sharp and flat teeth. What type of animal was it (most likely) when it was alive?
- h.) omnivore *meat & plants*
 - i.) herbivore *↳ both*
 - j.) skullivore
 - k.) carnivore
- 3.) The temperature of a glass of water is 26° Celsius. How many degrees must the water temperature increase to reach water's boiling temperature?
- $$\begin{array}{r} 100 \\ -26 \\ \hline 74 \end{array}$$
- a.) 26° Celsius
 - b.) 32° Celsius
 - c.) 74° Celsius
 - d.) 45° Celsius

The Electrical Circuit shown in the diagram below will be used to answer questions 4-6.

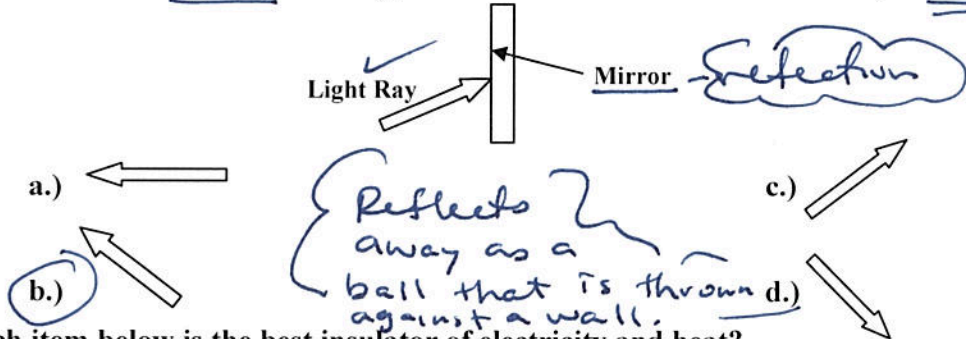


- 4.) What light will NOT come on in this circuit as it is shown above?
- a.) Light # 1
 - b.) Light # 2
 - c.) Light # 3
 - d.) All Light will not work
- 5.) IF the switch were Closed, what lights will light up?
- h.) Light # 1
 - i.) Light # 2
 - j.) Light # 3
 - k.) All of the lights will shine light or work
- 6.) Why is rubber or plastic wrapped around the copper (metal) in the wires in the circuit shown above?
- a.) rubber and plastic are insulators
 - b.) the copper inside the wire is a conductor
 - c.) so humans do not get electrocuted.
 - d.) All of the above are reasons to use plastic/rubber around the wires.

- 7.) What scientific principle is being tested if a marble, cork and oil are all dumped into a very large graduated cylinder full of water?
- h.) mass
 - i.) solubility
 - j.) gravity
 - k.) density
- Suspension - how packed the object is compared to water.*

5th Grade Science Spring Review Warm-Up Number 36
 (12 to 15 minutes, maximum) Name: KEY/SOLUTIONS

1.) Shown below is a light ray striking a mirror. What direction will the ray be reflected from the mirror?



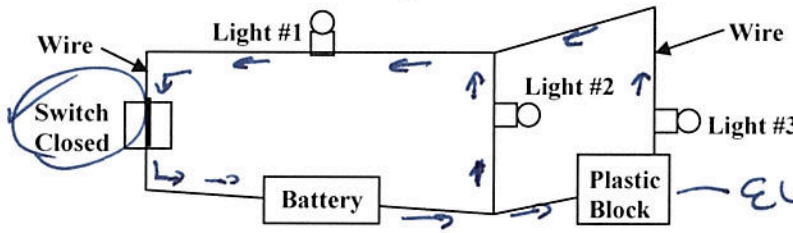
2.) Which item below is the best insulator of electricity and heat?

- h.) copper
 - i.) air
 - j.) rubber
 - k.) human being
- Handwritten note: Does not conduct electricity or heat*

3.) Some organisms like mushrooms break down dead animals. How does this function benefit plants?

- a.) through photosynthesis
- b.) by getting rid of a diseased animal
- c.) by returning nutrients to the soil
- d.) by killing predators to plants

The Electrical Circuit shown in the diagram below will be used to answer questions 4-7.



4.) What light will NOT come on in this circuit as it is shown above? Think why!!!

- a.) Light # 1
- b.) Light # 2
- c.) Light # 3
- d.) All of the lights will not shine light or work

5.) IF the switch were Open, what lights will light up?

- h.) Light # 1
- i.) Light # 2
- j.) Light # 3
- k.) All of the lights will not shine light or work

6.) When the switch is in the position shown above, the circuit is called a _____.

- a.) complete or closed circuit
- b.) insulated circuit
- c.) a open circuit
- d.) a conducted circuit

7.) Why does the electricity flow through the wire?

- a.) the metal/copper is a conductor
- b.) electricity is all about sound energy
- c.) the plastic that surrounds the wire is round
- d.) the plastic is an insulator

8.) Which of these answers best demonstrates reflection of light?

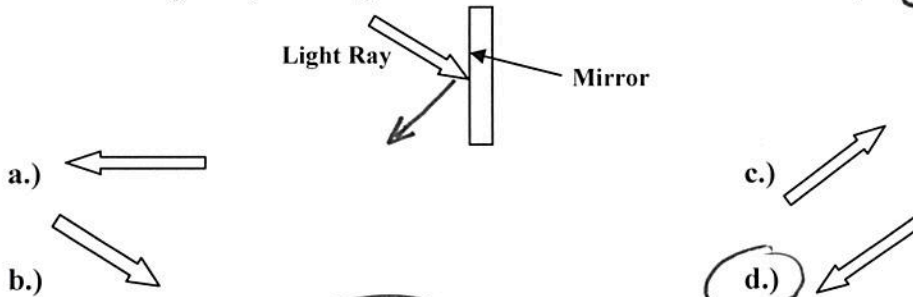
- h.) Looking though a glass fish bowl
- i.) Looking at the sun's radiant energy
- j.) Looking at my image on a car window
- k.) All are examples of refraction

9.) The 'rises' in the East and it 'sets' in the WEST. Use: North, East, South, or West

5th Grade Science Spring Review Warm-Up Number 37
 (12 to 15 minutes, maximum)

Name: Key/Sourton

1.) Shown below is a light ray striking a mirror. What direction will the ray be reflected from the mirror?



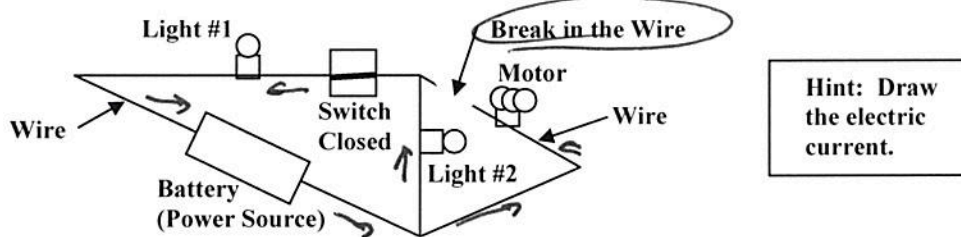
2.) Which item below is the best conductor of electricity and heat?

- a.) copper
- b.) air
- c.) rubber
- d.) human being

3.) In the Water Cycle, which stage is AFTER the evaporation of water from the ocean or a lake?

- a.) run-off of water down a hill
- b.) a downpour of rain over land
- c.) the formation of clouds (condensation)
- d.) the delta forming in the river

The Electrical Circuit shown in the diagram below will be used to answer questions 4-6.



4.) What light or motor will NOT come on in this circuit as it is shown above?

- a.) Light # 1
- b.) Light # 2
- c.) Motor
- d.) All of the lights will not shine light or work

5.) IF the switch were Open, what lights or motor will shine or work?

- a.) Light # 1
- b.) Light # 2
- c.) Motor
- d.) All of the lights will not shine light or work

6.) When the switch is in the position shown above, the circuit is called a _____.

- a.) complete or closed circuit
- b.) insulated circuit
- c.) an open circuit
- d.) a conducted circuit

7.) Which of these answers best demonstrates refraction of light?

- a.) Looking at oneself in the mirror
- b.) Light bouncing off the shingles on a house
- c.) Looking at my image on a metal surface
- d.) wearing eyeglasses to see better - Bending

8.) Dogs run around the park to get exercise. They also drink water to satisfy their thirst. They do small tricks like 'shaking' their paw at people walking by to get a dog snack. They also sleep under the trees in the shade when they are tired. What is a learned behavior in the dog's busy day?

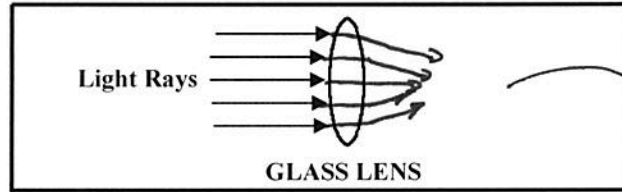
- a.) dogs sleeping under trees
- b.) dogs running around the park
- c.) dogs drinking water
- d.) dogs doing small tricks for food

5th Grade Science Spring Review Warm-Up Number 38

(12 to 15 minutes, maximum)

Name: KEY/SOLUTIONS

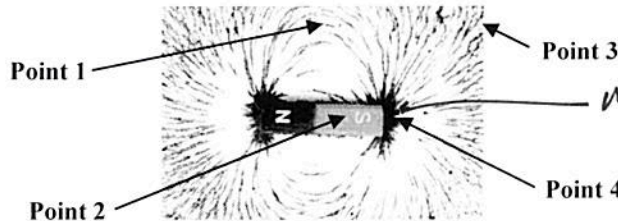
- 1.) Shown below is a light ray striking a convex **GLASS** lens. What will happen to the light rays as they proceed through the glass lens? (Hint: Draw them.)



*Converging
Bending - Refraction*

- a.) The light rays will REFLECT outward
 b.) The light rays will REFRACT outward
 c.) The light rays will REFRACT inward
 d.) The light rays will REFLECT inward
- 2.) Amanda wants to see the sunset. Which side of the house should she look out the window?
 h.) north
 i.) east
 j.) west
 k.) south
- 3.) In the Water Cycle, which stage is AFTER the precipitation of water from a cloud?
 a.) run-off of water down a hill
 b.) a downpour of rain over land
 c.) the formation of clouds (condensation)
 d.) the delta forming in the river

The Magnet shown in the diagram below will be used to answer questions 4 and 5.



*Magnetic field
the strongest*

- 4.) In what location on the magnet does it have the most ability to repel or attract metal objects?
 a.) Point # 1
 b.) Point # 2
 c.) Point # 3
 d.) Point # 4 ~ Poles
- 5.) Since the EARTH is a big magnet, where is the magnetic attraction the strongest on our planet? (Think)
 h.) at the Equator
 i.) at the North and South Poles ~ same as small magnet
 j.) nearest the moon
 k.) near the top of the mountains
- 6.) Which of these answers best demonstrates reflection of light?
 h.) Looking at your image in shiny metal
 i.) refracting light with a telescope
 j.) looking at a rainbow in the sky
 k.) wearing a baseball cap
- 7.) Monkeys at the zoo are fun to watch. They have black fur and brown colored eyes. They can use a stick to defend themselves against predators. They like to make loud and interesting sounds, too. What is a learned behavior in the monkey's day at the zoo?
 a.) monkeys have black fur and brown eyes
 b.) monkeys use sticks to defend themselves
 c.) monkeys make loud and interesting sounds
 d.) monkeys think about other monkeys
- 8.) In problem 7, what is an inherited trait for the monkeys? Black fur - Brown eyes

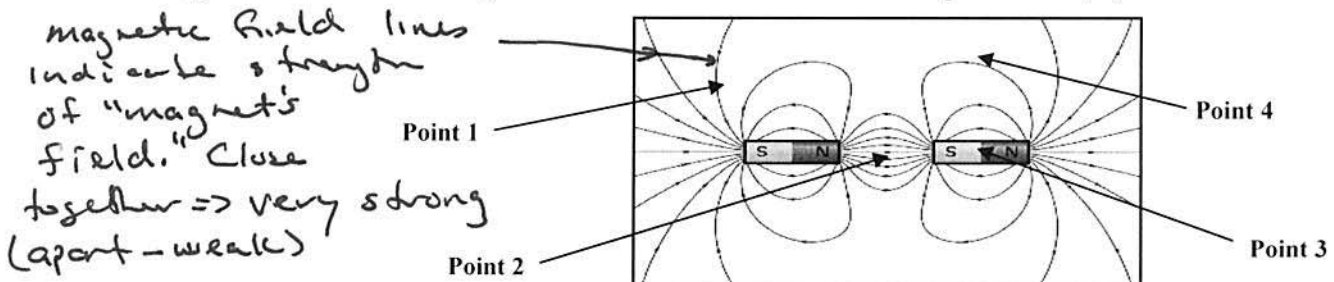
5th Grade Science Spring Review Warm-Up Number 39
(12 to 15 minutes, maximum) Name: Key/Solutions

- 1.) Shown below is a light ray striking a concave GLASS lens. What will happen to the light rays as they proceed through the glass lens? (Hint: Draw them.)



- a.) The light rays will REFLECT outward
b.) The light rays will REFRACT outward
 c.) The light rays will REFRACT inward
 d.) The light rays will REFLECT inward
- 2.) Amanda wants to see the sun rise. Which side of the house should she look out the window?
 h.) north
i.) east
 j.) west
 k.) south
- 3.) In the Rock Cycle, which type of rock will fossils most likely be formed?
 a.) metamorphic rocks due to heat and pressure
b.) sedimentary rocks due to compaction of sand
 c.) igneous rocks due to lava flow
 d.) refraction of light on the beach

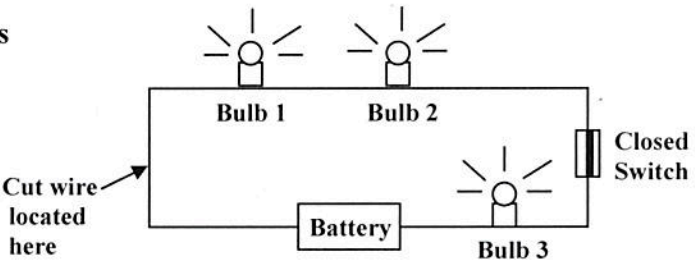
The two magnets shown in the diagram below will be used to answer questions 4, 5, and 6.



- 4.) In what location on the magnet does it have the most ability to repel or attract metal objects?
 a.) Point # 1
b.) Point # 2
 c.) Point # 3
 d.) Point # 4
- 5.) Since the EARTH is a big magnet, where is the magnetic attraction the strongest on our planet? (Think)
 h.) at the Equator
i.) at the North and South Poles
 j.) nearest the moon
 k.) near the top of the mountains
- 6.) As an iron object is placed farther and farther from a magnet, the magnet's 'magnetic' field is _____.
 a.) stronger
b.) weaker
 c.) the strength of the magnet does not change
 d.) Not Here
- 7.) Owls are nocturnal predators that hunt mostly at night. The owl hunts mice at a nearby farmyard where the farmer continually drops small amounts of grain during unloading. The owl always flies to the farmyard first each night to see if there are mice to eat. What is a learned behavior the owl's hunt?
 a.) the owl has nocturnal eyesight
 b.) the owl is a predator
 c.) the mice are not very intelligent
d.) the owl hunts where mice gather to feed
- 8.) In problem 7, what is an inherited trait for the owls? nocturnal eyesight

5th Grade Science Spring Review Warm-Up Number 40
 (12 to 15 minutes, maximum) Name: KEY/SOLUTION

1.) The electric circuit to the right shows a series circuit with three lit bulbs. How many of the bulbs will remain lit if the wire is cut at the point shown by the arrow?

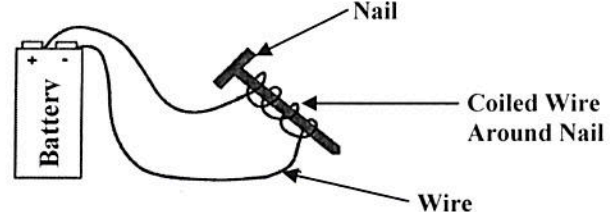


- Not A Complete Circuit*
- a.) Zero - 0
 - b.) One - 1
 - c.) Two - 2
 - d.) Three - 3

2.) Scientists observe squirrels dropping nuts with hard shells from high tree branches to the ground below to break open the hard shells. The squirrels scamper down to the ground and eat the nuts after the shell has been cracked open. Which of these investigations would best help the scientists determine whether this skill is a learned behavior or an inherited skill?

- H.) Determining what sizes and kinds of nuts are most often eaten by squirrels
- J.) Determining the type of shells that are used by squirrels
- K.) Observing families of squirrels to determine if young squirrels also crack shells in the same way
- L.) Raising young squirrels away from adult squirrels that crack nuts open by dropping them from trees ~ must make sure there is no influence from adult**

The ELECTROMAGNET shown in the diagram below will be used to answer questions 3, 4, and 5.



- 3.) In an electromagnet, the **MORE** wire coils wrapped around the nail makes the electromagnet _____.
- a.) weaker
 - b.) stronger**
 - c.) no effect
 - d.) less
- 4.) A stronger electromagnet could be made shown in the picture IF _____.
- h.) a magnet is used instead of a nail
 - i.) a bigger battery is used
 - j.) larger wires to carry more current are used
 - k.) ALL choices make a stronger Electromagnet**
- 5.) An electromagnet works because when electric current flows through the wire, _____.
- a.) refraction is created around the wire
 - b.) a magnetic field is created around the wire**
 - c.) reflection of electric current is created
 - d.) Not Here

6.) Birds eat out of bird feeders and make their nests on the roofs of houses. This behavior from the birds is a very good example of the bird's ability to _____.

- a.) live and eat for free
- b.) adapt to changes in their environment**
- c.) a refraction of the bird's eyesight
- d.) an inherited behavior from their parent

7.) True or False. The higher the temperature of the water the **slower** the water will evaporate. *faster*

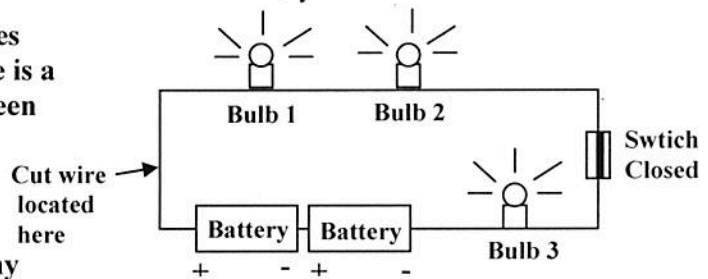
8.) **True** or False. A person's mass is unchanged from the Earth to the Moon, but their weight changes.

5th Grade Science Spring Review Warm-Up Number 41

(12 to 15 minutes, maximum)

Name: Key/Solutions

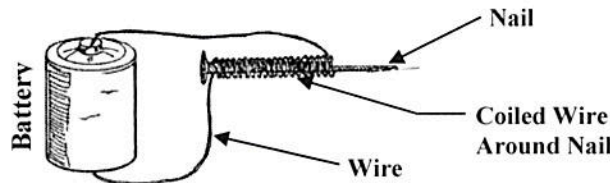
- 1.) The electric circuit to the right shows a series circuit with three lit bulbs. Suddenly, there is a cut in the wire. What could be placed between the wires to make the circuit work again, so the three bulbs are lit, again?



- a.) plastic } *insul.*
 b.) glass } *insul.*
 c.) copper penny } *conductor*
 d.) toothpick } *insul.*

- 2.) In the circuit above, what would happen if one of the batteries was flipped around so the two positive ends were facing one another? Will not work - electrons will not flow
- 3.) Many students are confused between the difference of weather and climate. What is an example of weather and not climate?
- H.) The temperatures are always hot like this every summer for the last twenty years.
 J.) It was very hot yesterday and it is even hotter today.
 K.) Reading the temperatures off a chart for a 3 month period that has not changed in fifty years.
 L.) Climate is short-term and weather is a long-term condition over many, many years.

The ELECTROMAGNET shown in the diagram below will be used to answer questions 4 through 7.



- 4.) In an electromagnet, the LESS wire coils wrapped around the nail makes the electromagnet _____.
- a.) weaker
 b.) stronger
 c.) no effect
 d.) less
- 5.) A stronger electromagnet could be made shown in the picture IF _____.
- h.) a magnet is used instead of a nail
 i.) a bigger battery is used
 j.) larger wires to carry more current
 k.) ALL choices make a stronger Electromagnet
- 6.) An electromagnet works because when electric current flows through the wire, _____.
- a.) refraction is created around the wire
 b.) a magnetic field is created around the wire
 c.) reflection of electric current is created
 d.) Not Here
- 7.) How do we make the electromagnet not work? detach the wires - no current.

- 8.) Two ice cubes are placed on separate plates. One ice cube has a mass of 50 grams and the other ice cube has a mass of 180 grams. Which result would be the same for both ice cubes?
- a.) the time it takes for each to melt to liquid
 b.) the temperature at which each cube melted
 c.) the total volume of each cube
 d.) the amount of liquid from each ice cube

9.) True or False. My mass is the same on the Earth and Moon, but my weight changes.

10.) True or False. Children adapt to their school environments depending on if school and classroom rules are enforced and children are held accountable for their conduct.

5th Grade Science Spring Review Warm-Up Number 42

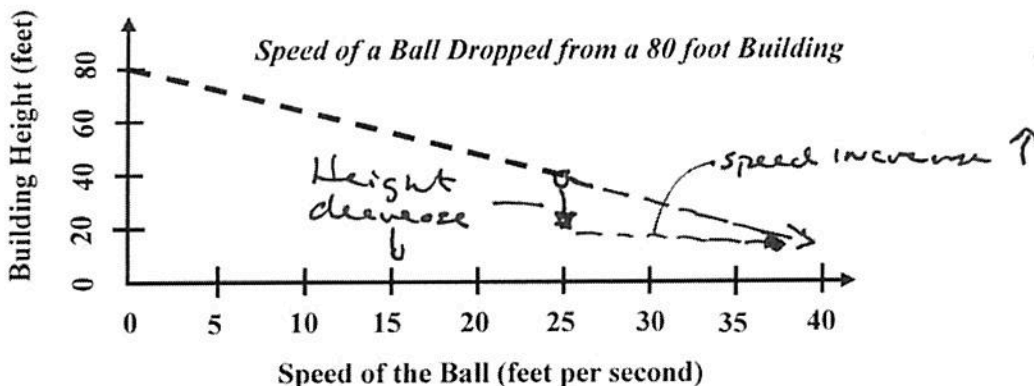
(12 to 15 minutes, maximum)

Name: KEY SOLUTIONS

1.) A river falls over a high cliff creating a cascading waterfall. At the bottom of the waterfall a couple friends build a big wheel that is turned by the falling water. This is an example of what type of energy?

- A.) solar B.) thermal **C.) mechanical** D.) sound

2.) The graph shows the speed of a ball as it is dropped from a building that is 80 feet tall.



If the ball continues to fall to the ground, what will happen to the Ball Speed according to the graph as it falls the last 40 feet to the ground (at 0 feet)? (Think!!!!)

- H.) The speed of the ball will stay the same.
 J.) The speed of the ball will decrease.
K.) The speed of the ball will increase.
 L.) The speed of the ball will decrease then it will decrease.
- 3.) Many students are confused between the difference of weather and climate. What is an example of climate and NOT weather?

- H.) The temperatures are always hot like this every summer for the last twenty years.**
 J.) The day is so cold.
 K.) Recording the temperature at the beach every day for one week.
 L.) Two friends decide to meet in a month on a Saturday, if the temperature is above 30° C.

4.) Juan built an electromagnet in science class. If he wanted to make the most powerful electromagnet possible, he should do what of the following?

- A.) Use thicker copper wires **C.) coiled the wire many times around the nail**
 B.) Use a large battery **D.) He should do all of these choices.**

5.) The temperature of a glass of water is 76° C. How many degrees must change for the glass of water to be brought to the boiling point of water?

- H.) 76° C $\begin{array}{r} 76 \\ + 24 \\ \hline 100 \end{array}$ K.) 100° C
J.) 24° C L.) 0° C

6.) Two ice cubes are placed on separate plates. One ice cube has an equivalent liquid amount of 50 liters and the other ice cube has an equivalent liquid amount of 90 liters. Which result would be the same for both ice cubes?

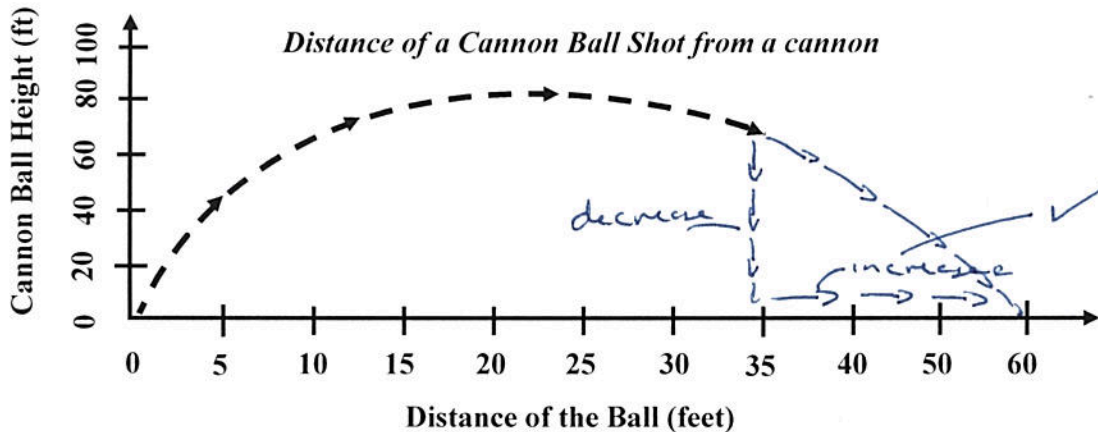
- A.) the time it takes for each to melt to liquid C.) the total volume of each cube
B.) the temperature at which each cube melted D.) the amount of liquid from each ice cube

5th Grade Science Spring Review Warm-Up Number 43

(10 to 12 minutes, maximum)

Name: KEY/SOLUTIONS

- 1.) A toaster cord is plugged into the wall socket. This is an example of what type of energy? *electrical*
- A.) solar B.) thermal C.) mechanical **D.) electrical**
- 2.) The graph shows the distance a cannon ball travels as it is shot out of a cannon.



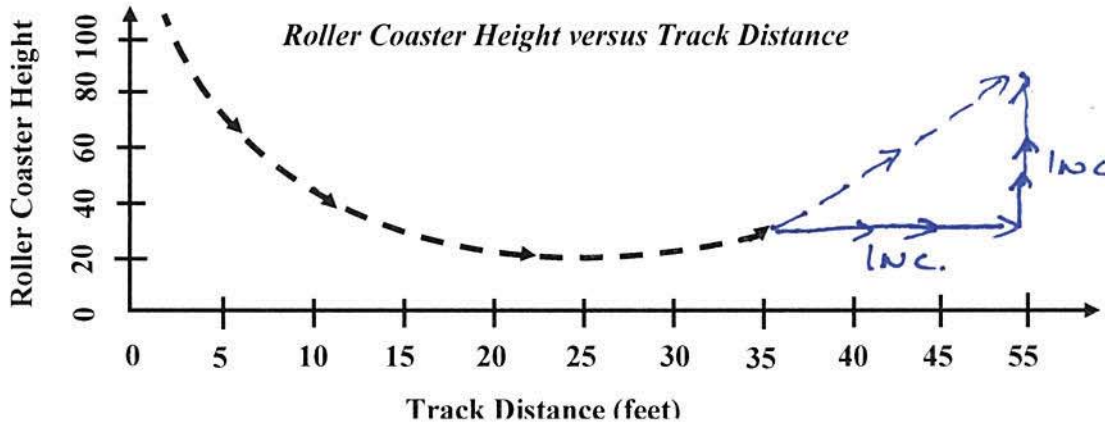
- If the ball continues to move in the direction shown on the graph, what will happen to the distance of the cannon ball (according to the graph) as it falls the last 25 feet to the ground (at 60 feet)?
- H.) The distance of the canon ball will stay the same.
J.) The distance of the cannon ball will decrease.
K.) The distance of the cannon ball will increase.
L.) The distance of the cannon ball will decrease then it will decrease.
- 3.) Many students are confused between the difference of weather and climate. What is an example of climate and NOT weather?
- H.) The temperatures are always cold during the winter for the last hundred years.**
J.) The day is so warm and balmy.
K.) Noticing the weather for the last two Saturdays.
L.) The fifth grade schedule a picnic since the temperature is 31° C.
- 4.) Pedro put salt tablets in a bottle of water. What happened to the salt tablets placed in the water?
- A.) The salt tablets evaporated **C.) The salt tablets dissolved in the water**
B.) The salt tablets are absorbed into the bottle D.) Impossible to say what happened to the salt
- 5.) The temperature of a glass of water is 34° C. How many degrees must change for the glass of water to be brought to the freezing point of water?
- H.) 66° C K.) 100° C
J.) 34° C L.) 0° C
- 6.) Two glasses of water are placed on the kitchen counter. One glass of water contains 125 milliliters and the other glass of water contains amount of 290 milliliters. Which result is the same for both glasses of water?
- A.) the time it takes for each to evaporate C.) the mass of each glass of water
B.) the temperature at that each glass of D.) the amount of thermal energy to boil each
of water will boil

5th Grade Science Spring Review Warm-Up Number 44

(12 to 15 minutes, maximum)

Name: Key/Solutions

- 1.) The sun heats panels placed on a roof that power the house. This is an example of what type of energy?
 A.) solar B.) thermal C.) mechanical D.) electrical
- 2.) The graph shows the movement of a roller coaster as it travels down the tracks.



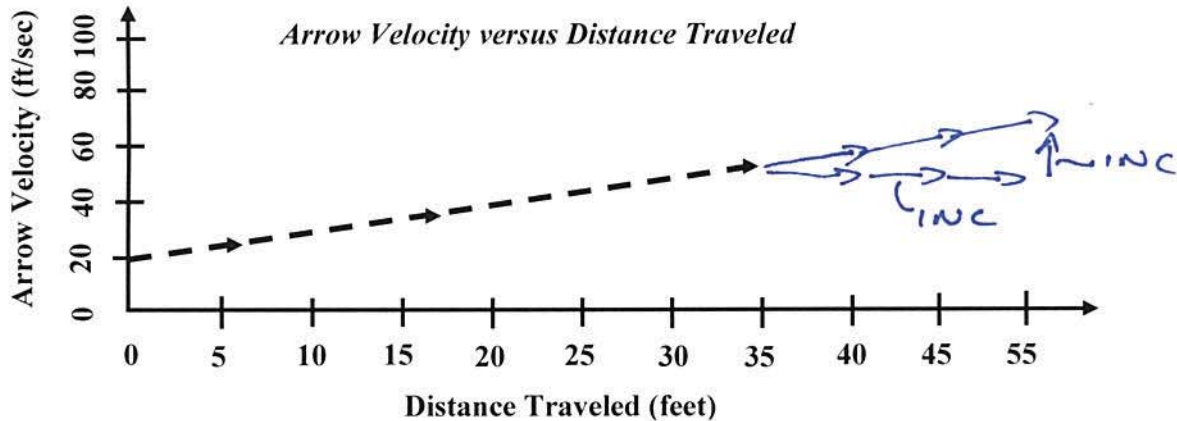
- If the Roller Coaster continues to travel in the direction shown on the graph, what will happen to the Track Distance (according to the graph) as it travels the last 20 feet to the top of the hill (at 55 feet)?
- H.) The Track Distance will stay the same.
J.) The Track Distance will decrease
 K.) The Track Distance will increase.
L.) The Track Distance will decrease then it will decrease.
- 3.) Large plastic tubes are placed vertically deep into the ground that allow the transfer of heat from underwater thermal streams to provide heat to homes. This is an example of using what energy resource?
A.) fossil fuels B.) hydroelectric energy C.) geothermal energy D.) solar energy
- 4.) A consumer eats what type of food?
H.) only carnivores K.) producers
J.) only omnivores J.) None of the above
- 5.) Due to pollution from fossil fuels, the City of Dallas decided to begin using a new form of energy more to power its homes and businesses. What ALTERNATIVE energy resource might they decide to use?
A.) burning logs in fireplaces C.) using biofuels to generate electricity
B.) fracking natural gas and oil in limestone D.) using a new coal plant to generate electricity
- 6.) A favorite canned drink of Pablo's was placed in the refrigerator at the beginning of 5th grade. In May, he discovered the treat, but the directions stated, "Shake well before drinking." Why these directions?
H.) the ingredients have different densities K.) the ingredients will always be a mixture
 J.) the ingredients easily become a solution J.) the ingredients are now hard rock
- 7.) A farmer bought a new plant from China and planted it in South Dakota so his cows would have plenty of grass to eat. However, the new plant reproduced rapidly and soon covered all his fields as well as his neighbors' farms. What is a likely effect that this new plant from China will have on the native plants in that part of South Dakota?
A.) An increase of native plants B.) A decrease of native plants C.) No effect on native plants

5th Grade Science Spring Review Warm-Up Number 45

(10 to 12 minutes, maximum)

Name: _____

- 1.) A toaster burns bread with its heating elements. This is an example of what type of energy?
 A.) solar **B.) thermal** C.) mechanical D.) electrical
- 2.) The graph shows the flight of an Arrow as it flies through the air.



If the arrow continues to fly in the direction shown on the graph, what will happen to the Arrow Velocity (according to the graph) as it flies the last 20 feet (at 55 feet)?

- H.) The Arrow Velocity will stay the same. **K.) The Arrow Velocity will increase.**
 J.) The Arrow Velocity will decrease L.) The Arrow Velocity will decrease then decrease.
- 3.) Given the following information in the table.

Diets of Animals

Type of Animal	Foods Eaten
Coyotes	Mice, Hawks, Rabbits
Mice	Snails, Grass, Leaves
Blue Jays	Mice, Worms, Bugs
Snails	Grass
Hawks	Mice, Rabbits, Blue Jays

- A.) Coyotes → Mice → Snails
 B.) Blue Jay → Hawks → Rabbits
C.) Snails → Mice → Coyotes
 D.) Snails → Coyotes → Hawks
- 4.) Which is an example of solar energy being absorbed? *Water cycle*
 H.) Run off of water from mountains and plains toward rivers
 J.) Precipitation as the water falls on the land
 K.) The breaking down of rocks by weathering with plant roots, wind, water and ice
L.) The heating of lake and ocean water that results in the evaporation of water
- 5.) A glacier is a heavy, massive ice block. What effect will a glacier have on a valley as it moves over land?
 A.) It will make the valley walls very steep C.) It will make the valley river flow uphill
B.) It will flatten the valley walls into a "U" shape D.) None of the above