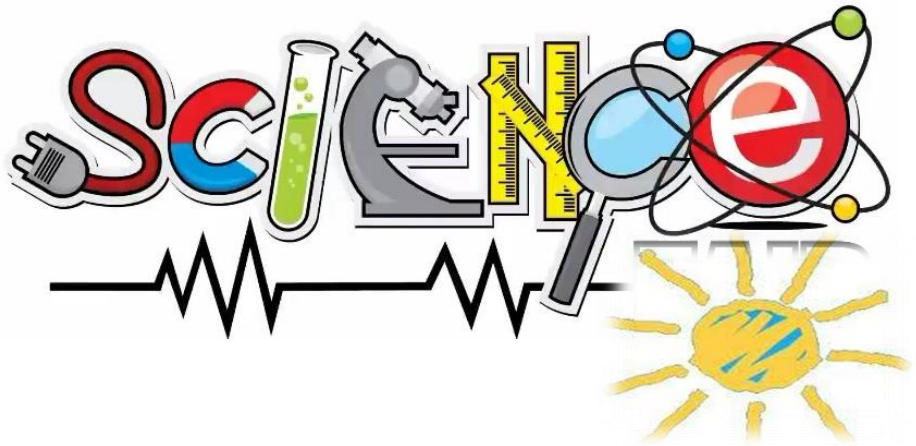
Name _____

5th Grade Science Remote Learning Packet

Week 17



Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

_____ _____

(Parent Signature) (Date)

Parents please note that all academic packets are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.

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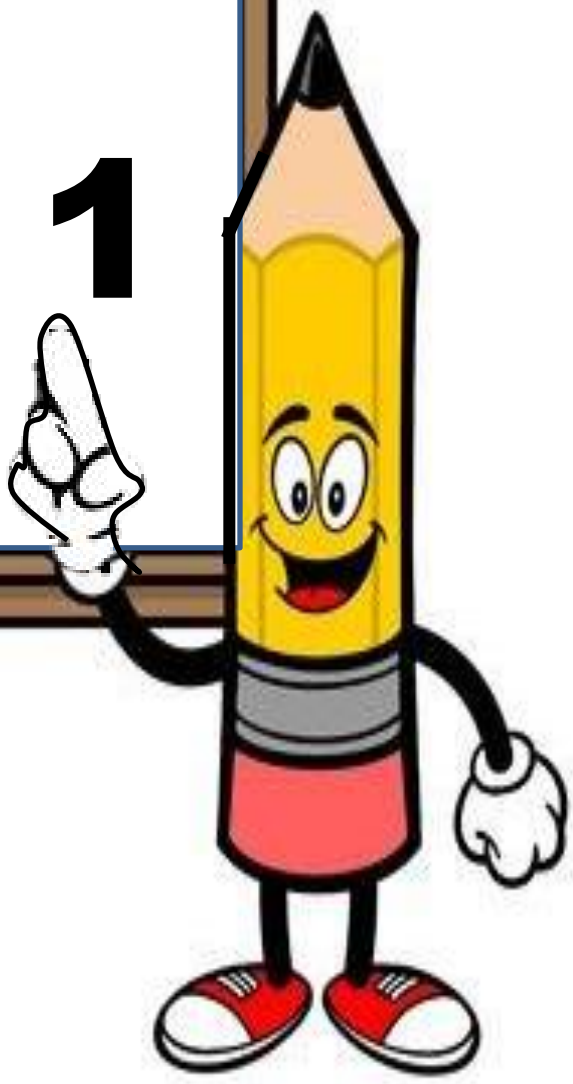
Charter School for Boys

Day # 1



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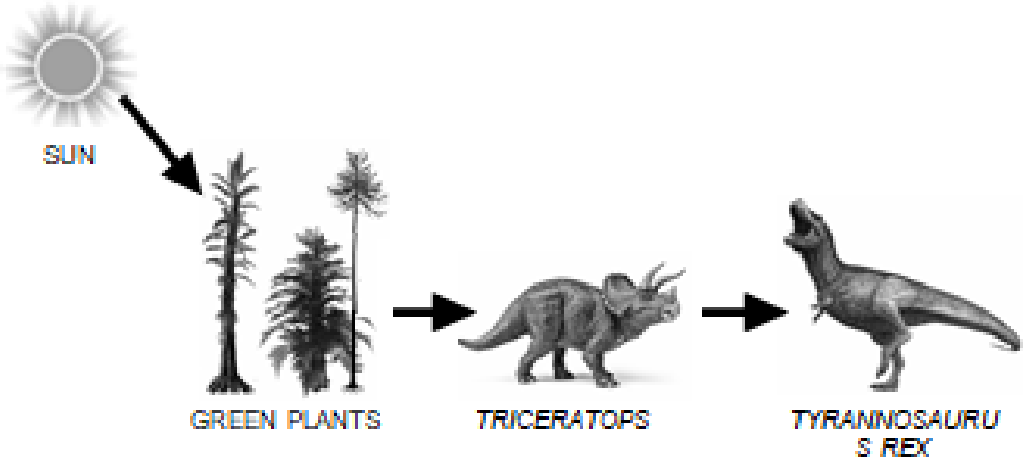
Unit Assessment



The image above is a simple model of how energy flows through a dinosaur food chain. The arrows represent energy moving through the food chain. Use this model to answer Questions 1 & 2.

1. Scientists think that *Tyrannosaurus rex* was able to run at a speed of 12 miles per hour. Where did *T. rex* get the energy that it used to run when it was alive?

a. *T. rex* got its energy from *Triceratops*. That energy is not connected to the Sun.
b. *T. rex* got its energy from green plants, which got their energy from the Sun.
c. *T. rex* got its energy from eating *Triceratops*. *Triceratops* ate green plants and green plants got their energy from the Sun.
d. *T. rex* got its energy directly from the Sun.

2. Scientists think that the dinosaurs went extinct because an asteroid hit the Earth and created a giant dust cloud that covered up the Sun. Diego doesn't think this explanation makes sense. He says, "Some dinosaurs ate other dinosaurs to get their energy. Why would removing the Sun cause the carnivores to go extinct?" Explain to Diego why carnivores would go extinct without the Sun. You can use evidence from the energy model above.

_____

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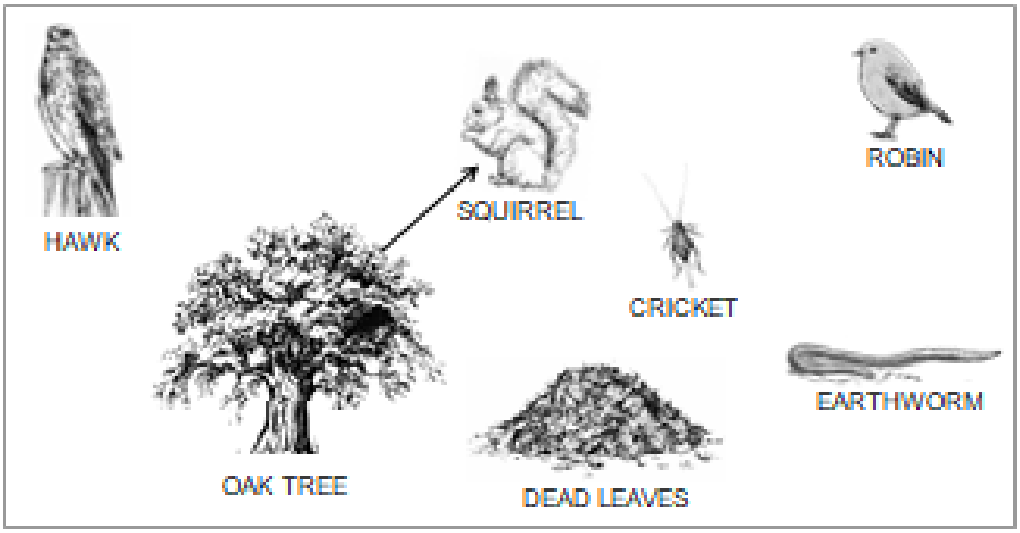


The images above show organisms that are part of a forest ecosystem. Use these images to answer Questions 3, 4, and 5.

3. Connect the organisms of the forest ecosystem with arrows to create food chains. Each arrow should point in the direction of how material (matter) travels in each food chain. For example, a squirrel eats acorns from an oak tree, so you would draw an arrow from the oak tree to the squirrel which is done for you.

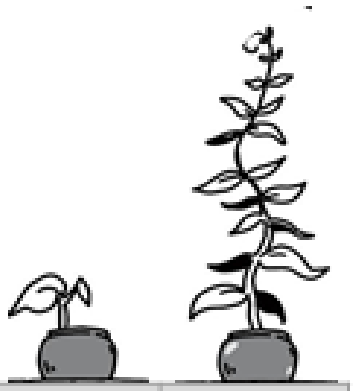
4. Scientists are worried that a disease that kills oak trees will spread into this forest. What would happen to this ecosystem if all the oak trees suddenly disappear? Choose all correct answers.

a. If there aren't any oak trees, the squirrels will not have anything to eat. They will need to find another food source or they will not survive.
b. If there aren't any oak trees, the robins will not have anything to eat. They will need to find another food source or they will not survive.
c. If there aren't any oak trees, the hawks may not have anything to eat because the squirrels and robins may not survive.

5. Amir released some pet frogs into the forest ecosystem shown above. These frogs eat earthworms and crickets. Hawks, robins, and squirrels do NOT eat these frogs. What will happen to this ecosystem if the frogs start living here? Choose all correct answers.

a. The dead leaves will pile up because the frogs will eat all the decomposers. The decomposers will not be there to eat the leaves.
b. The squirrels will not have anything to eat. They will need to find another food source or they will not survive.
c. The robins will not have anything to eat. They will need to find another food source or they will not survive.
d. The hawks will not have anything to eat. They will need to find another food source or they will not survive.

6. Ana wants to open a plant store, but she's worried that it will cost too much money. Ana thinks that as plants grow, they use the material from the soil to get bigger. Potting soil costs a lot of money. Ana is worried she will need to buy a lot of soil to feed her plants. She decides to set up an experiment. Ana grows one plant in a pot for 3 weeks. She weighs the plant and the soil at the start and end of the experiment.



	START	END
PLANT	300 grams	800 grams
SOIL	800 grams	800 grams

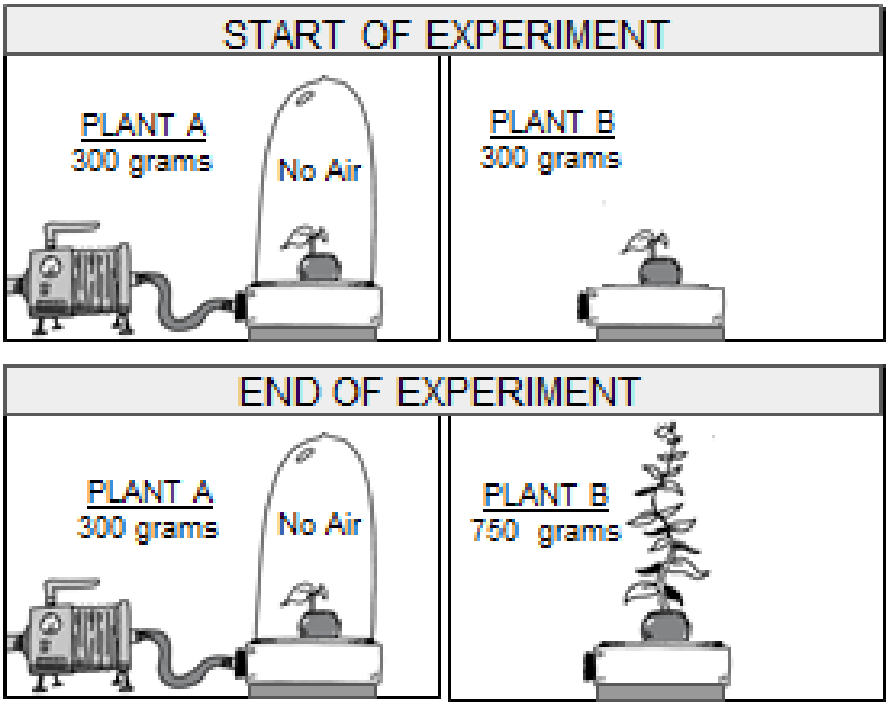
The results of Ana's experiment are shown to the right. What did Ana find out with her experiment? Circle TRUE or FALSE for each of the sentences below.

TRUE FALSE The plant weighed the same at the start and end of the experiment.

TRUE FALSE The plant weighed more at the end of the experiment.

TRUE FALSE The soil weighed the same at the start and end of the experiment.

TRUE FALSE The soil weighed less at the end of the experiment.



Ana decides to do another experiment. She starts with two plants, Plant A and Plant B. Each plant weighs 300 grams. She attaches Plant A to a vacuum. The vacuum pumps all of the air out of the container around Plant A. Plant B is not attached to a vacuum, so it has air around it. Ana gives Plant A and Plant B the same exact amount of water. She runs the experiment for 3 weeks and then weighs the plants at the end of the experiment.

7. Looking at Ana's experiments, what is a claim that you can make about plants and their growth?

a. Plants mostly use materials from the soil for their growth.
b. Plants mostly use materials from water for their growth.
c. Plants mostly use materials from sunlight for their growth.
d. Plants mostly use materials from the air for their growth.

8. What evidence do you have to support your claim from the question above? Provide an argument using evidence from Ana's experiments to support your claim.

_____

_____

_____

_____

_____

Scholars, today we will be watching a Wild Kratts episode.

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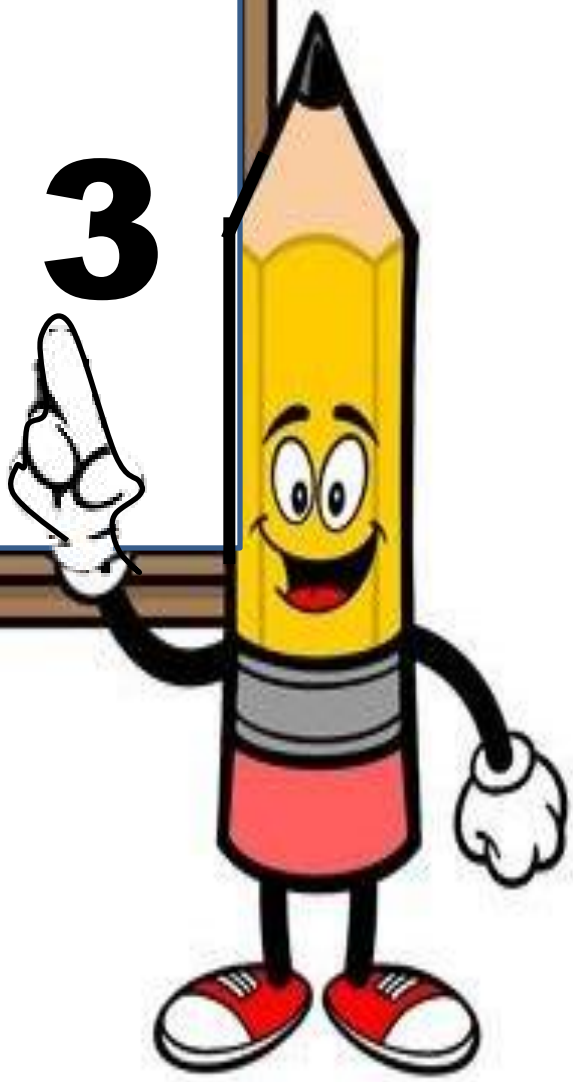
Day # 3



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Chemical Magic Guided Notes & Exit Tickets
Mystery 1: Are magic potions real?

The Question: *Answer the question in a complete sentence.*

Are magic potions real? _____
_____
_____

Day 1:

Vocabulary: *Fill in the blanks with the colored word from the PowerPoint presentation.*

1. **Alchemist:** a _____ of a historical group of people who _____ together different substances, with the hope of becoming rich (such as creating gold)
2. **Chemical:** any _____ that can _____ with some other substance
3. **Chemical reaction:** occurs when _____ together and result in a new substance
4. **Property:** any _____ of a substance, such as its solidness its color, how it feels, and so on
5. **Oxidation:** to become _____

Video: *During the video, take notes. When asked to discuss, first think about your response and then write it down. When asked to discuss, either raise a silent scholar hand to respond whole-group or discuss with your partner, taking turns.*

Exploration 1: *Notes-*_____
_____
_____

Exploration 2: *Discuss*-Do you think there could really be a potion that does something amazing or valuable? (Do you think there are really liquids or mixtures that can transform things?) Why or why not?
_____
_____
_____
_____
_____

Exploration 3: *Discuss*-If you could make a potion, what would you want it to do? _____

_____

_____

Exploration 4: *Notes*-_____

_____

_____

Exploration 5: *Discuss*-Suppose you wanted to make this dull, brown penny bright and shiny. Can you think of any liquids in your house that might do that? Why do you think those liquids might work?

_____

_____

_____

_____

Activity: *Ensure that you are following all directions. Unless you are asked to discuss, there should be no talking. Your job is following directions and observing. You will have a chance to discuss later. Answer questions here on this sheet.*

STEP 3: *Discuss*-Do you think any of these liquids will make a dull penny shiny? _____

_____

_____

STEP 7: *Compare*-What happened to the penny after you put it in the solutions?

Soapy Water: _____

_____

Vinegar: _____

_____

Salt and Vinegar: _____

_____

Salty Water: _____

_____

STEP 10: Answer question 1a and 1b on your worksheet—found on page 5.

EXIT TICKET:

What did you draw on your worksheet? _____

_____

What do you think happened to the penny? _____

_____

_____

_____


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Day # 4

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Day 2:

Video: *During the video, take notes. When asked to discuss, first think about your response and then write it down. When asked to discuss, either raise a silent scholar hand to respond whole-group or discuss with your partner, taking turns.*

Exploration 6: *Notes-*_____
_____
_____

Exploration 7: *Discuss*-Do you think oxygen turns the penny dark brown all the way through, or just on the surface? How could you figure it out? _____
_____
_____

Exploration 8: *Notes-*_____
_____
_____

Exploration 9: *Discuss*-How could you figure out which of these three ideas is true? Write down your thoughts for each.
Dull layer removed? _____
_____
Shiny layer added? _____
_____
Changed in place? _____
_____

Exploration 10: *Notes-*_____
_____
_____

Activity: *Ensure that you are following all directions. Unless you are asked to discuss, there should be no talking. Your job is following directions and observing. You will have a chance to discuss later. Answer questions here on this sheet.*

STEP 1: *Discuss*-If the dull layer was REMOVED, then little bits of dull copper should be visible in the vinegar and salt solution, no? Why or why not? _____
_____
_____

STEP 2: Answer questions 2a and 2b on your worksheet to revise your model, found on page 5.

EXIT TICKET:

What do you think will happen to all the pennies now that we have dumped them all in the salt and vinegar solution? _____
_____
_____
_____
What do you think the solution will look like tomorrow when we look at it?_____
_____
_____
_____