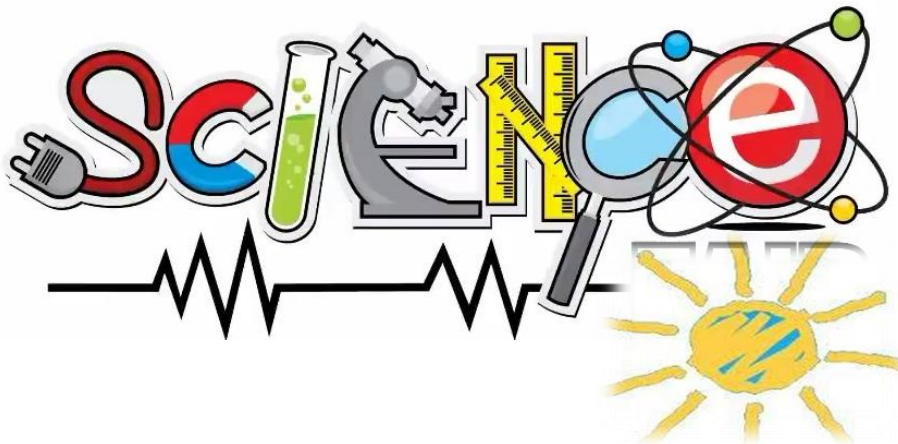




Name _____

5th Grade Science Remote Learning Packet

Week 19



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.

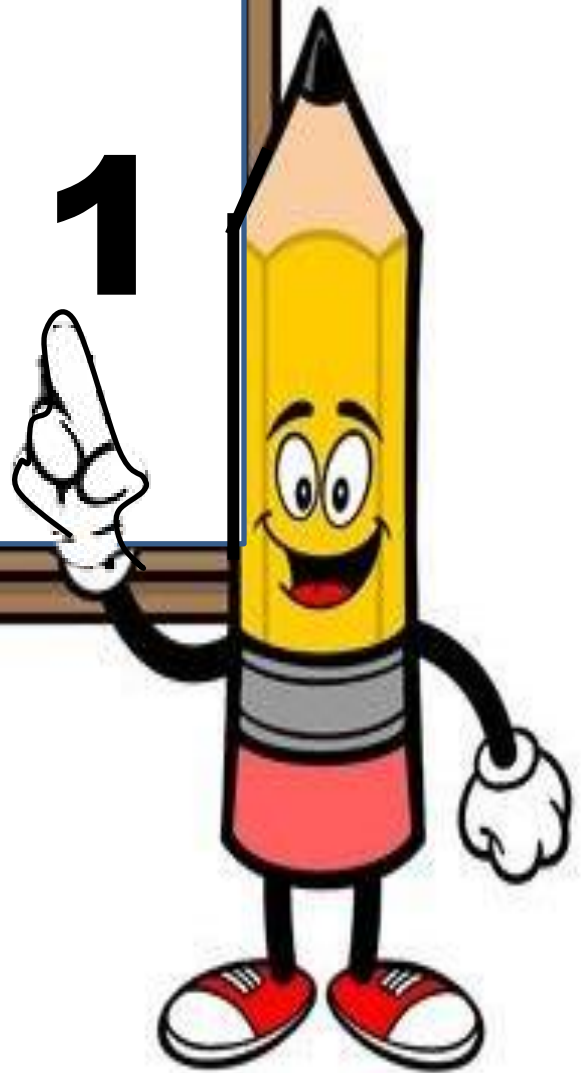
(Parent Signature)

(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.



Day # 1



Name: _____ Week 19 Day 1 Date: _____

BCCS-B

Stanford MIT

End of Mystery Assessment

1. How can you make a dull penny shiny again?
 - a. Leave it in salt water.
 - b. Wash it with soapy water.
 - c. Dip it in vinegar and salt.
 - d. Leave it in vinegar.

2. Why did we dip only one half of each penny into the different liquids in our experiment?
 - a. It's better to only put half of the penny in the different liquids.
 - b. To test and see which liquid make the penny shiny.
 - c. Only half of the penny can fit in the liquid at a time.
 - d. There was only enough liquid for the penny to go half way while still holding it.

3. Three friends are talking about what they think causes shiny pennies to turn dull.

Deandre says, "I think they turn dull because they become oxidized."

Jamie says, "I think they turn dull because they get dirt on them from being dropped on the ground."

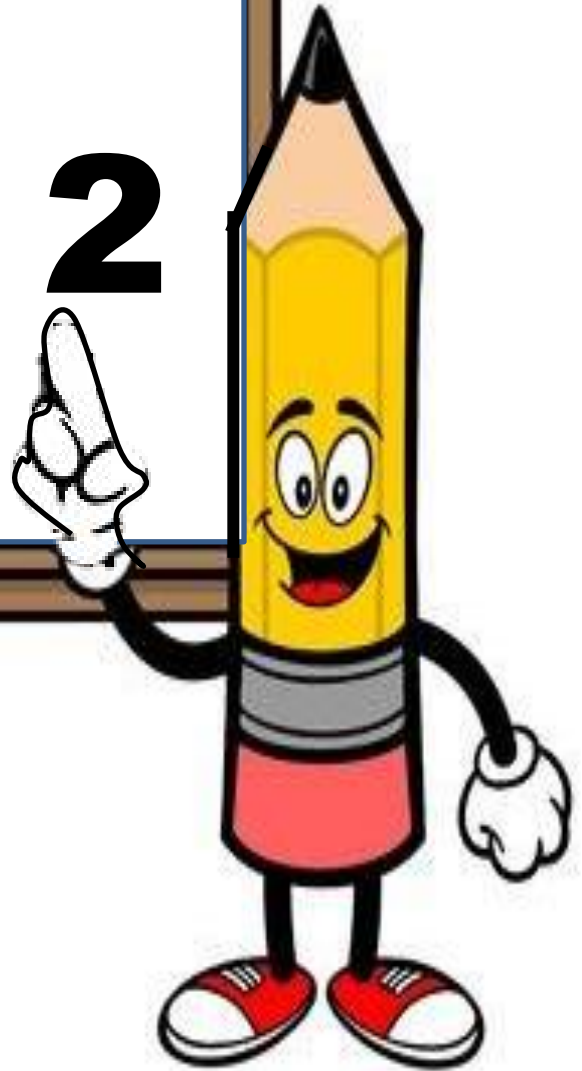
Selina says, "I think there is dull metal inside the penny the entire time."

Who do you agree with most and why?

4. In your own words, who were the alchemists? What do you know about them and their work so far?



Day # 2



Name: _____ Week 19 Day 2 Date: _____

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Chemical Magic Guided Notes & Exit Tickets

Mystery 2: Could you transform something worthless into gold?

The Question: Answer the question in a complete sentence.

Could you transform something worthless into gold? _____

Day 1:

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 or The Alchemists Potion Part 2 sheet on page 1 of this packet.

Discuss: What do you think will happen in the bag? _____

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- Can you think of any tests you could do that would help you figure out which idea is true...brown layer was removed, nothing was removed, or it just changed? _____

Exploration 3: Discuss- Suppose we give you a scale, a tool that measures weight. Using a scale, is there a test you could do to figure out which idea is true? _____

Exploration 4: *Discuss*-If the vinegar and salt REMOVED the dull copper, then what should we find out when we weigh the penny before and after?

Exploration 5: *Notes*-_____

Discuss: Do you observe any changes within the bag? (It's ok if you don't yet. It takes time.) How would you describe what you see? _____

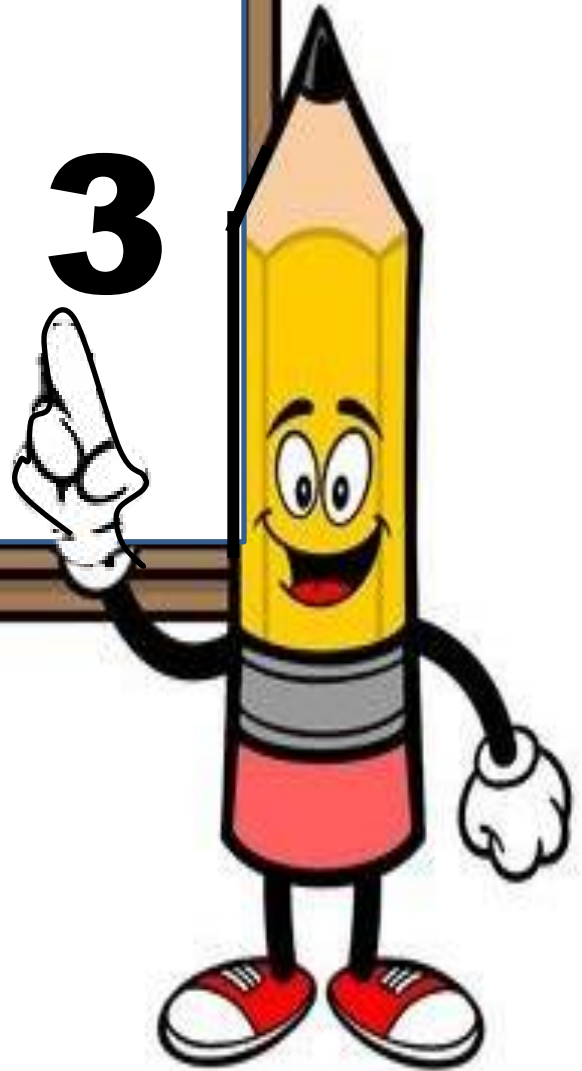
Draw: If you notice something happening in the bag, draw a picture in the box below and write the time.

Time: _____

EXIT TICKET: What do you think the steel nail will look like when we look at it tomorrow, after it has set in the salt and vinegar solution overnight? _____



Day # 3



Name: _____ Week 19 Day 3 Date: _____

BCCS-B

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Day 2:

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 two or more _____ are _____ and result in a _____
4. **Property:** any _____ of a substance, such as its solidness, its color, how it feels, and so on
5. **Oxidation:** to become _____
6. **Steel:** a _____ made of iron and carbon
7. **Copper:** a _____ that allows heat and electricity to pass through it easily

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.

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 or The Alchemists Potion Part 2 sheet on page 1 of this packet.

Exploration 6: Notes- _____

Exploration 7: Discuss- Why do you think the alchemist left, never to be heard from again? Was there something he didn't want the king to figure out? _____

STEP 1: Discuss- Do you observe any changes in the bag from yesterday? How would you describe what you see? _____

STEP 2: How do the different group's bags compare to your bag? _____

STEP 4: Answer questions 4a and 4b found on page 1 of this packet.

STEP 5: *Discuss*-Where do you think the copper on the nail came from? Why do you think that? What evidence would you use to convince someone? Think back to what you saw from the exploration videos.

STEP 6: *Discuss*-Is the copper all the way through the nail—or just a layer? What evidence do you have? How could you figure out if the nail is copper all the way through? _____

Exploration 8: *Notes*- _____

Exploration 9: *Discuss*-Why do you think we couldn't see little bits of copper in the liquid? _____

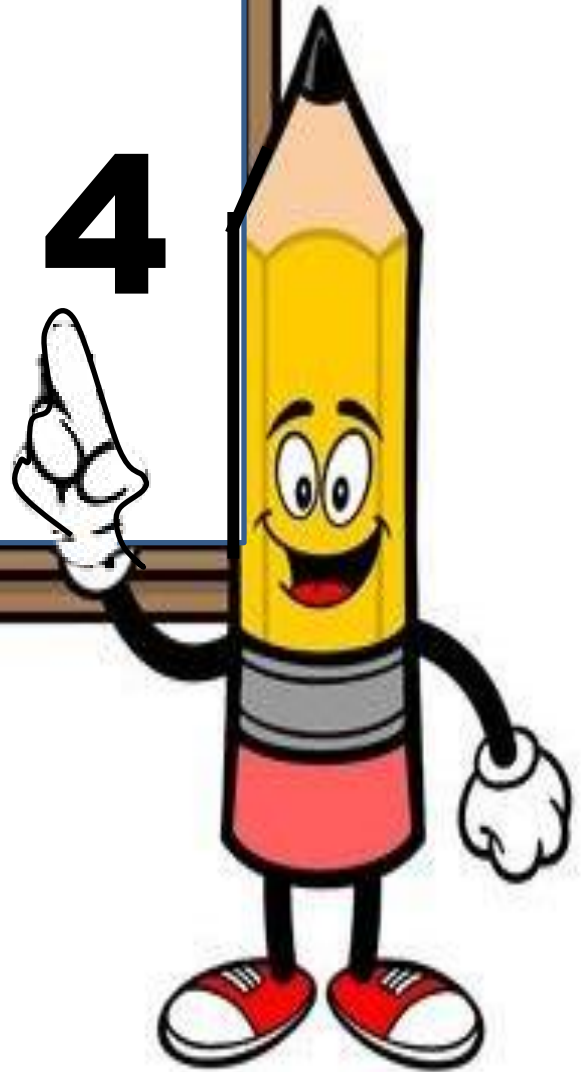
Exploration 10: *Discuss*-Have you ever put a spoonful of sugar into tea or lemonade before? What happens? Does this give you any ideas about the copper potion? _____

Notes- _____

EXIT TICKET: Can you change ordinary metal into something of value like gold? Why or why not?



Day # 4



Name: _____ Week 19 Day 4 Date: _____

BCCS-B

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End of mystery assessment

1. When you left the steel nail and copper pennies in a bag of vinegar and salt, the nail turned copper-colored. What happened?
 - a. The nail was transformed from steel into copper
 - b. The nail was covered with a thin layer of copper
 - c. A steel layer was removed from the nail, showing copper underneath

2. The alchemists claimed that “ordinary metals can be transformed into gold.” Do you agree with this claim? Why or why not?
 - a. Yes, I agree that ordinary metals can be transformed into gold because when we did our king’s sword experiment, the steel nail changed to copper.
 - b. No, I do not agree that ordinary metals can be transformed into gold because when we did our king’s sword experiment, the steel nail did not change into copper. It only gained a layer of copper on the outside.

3. How did the experiment with the steel nail help you understand the story of the alchemist who changed the king’s sword to copper?
