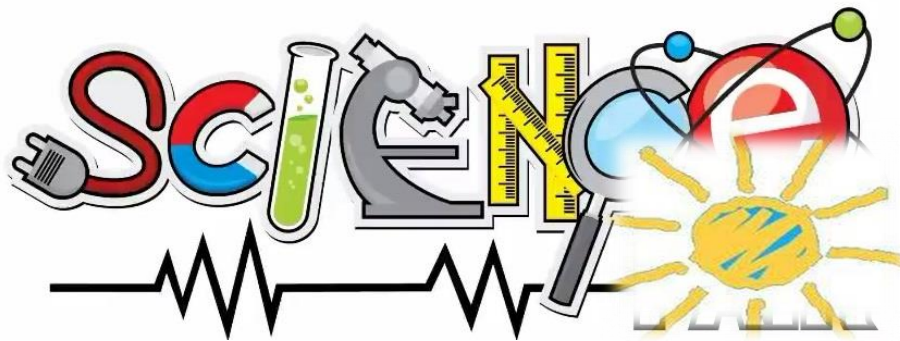




Name _____

4th Grade Science Remote Learning Packet

Week 35



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.

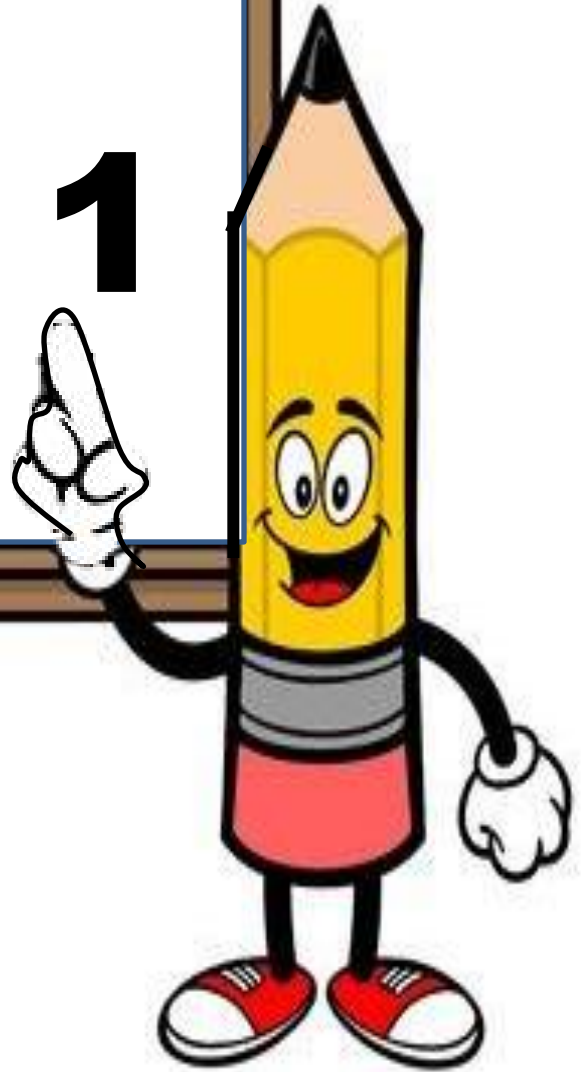
(Parent Signature)

(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 35 Day 1 Date: _____

BCCS-B

Howard

Morehouse

Hampton

Forces and Motion

Question: Answer the following question using complete sentences.

How does energy and matter interact and change motion?

Vocabulary: Fill in the blank with the missing word.

1. **Force:** the _____ or _____ on an object
2. **Gravity:** the _____ of objects _____ each other
3. **Friction:** the act of _____ one thing

Gravity Compilation-Crash Course Kids: Take notes while watching the video.

Notes-

Mystery Science-How can you go faster down a slide?: As you are watching the video, take notes during the exploration portion and answer the discussion question using complete sentences before discussing as a class.

Exploration 1: Notes-

Discussion: You can't make the slide steeper but you want to go down the slide faster. What else could you change? (Think of your favorite slides.)

Exploration 2: Notes-

Discussion: Materials that have low friction are slippery. Can you name some materials with low friction?

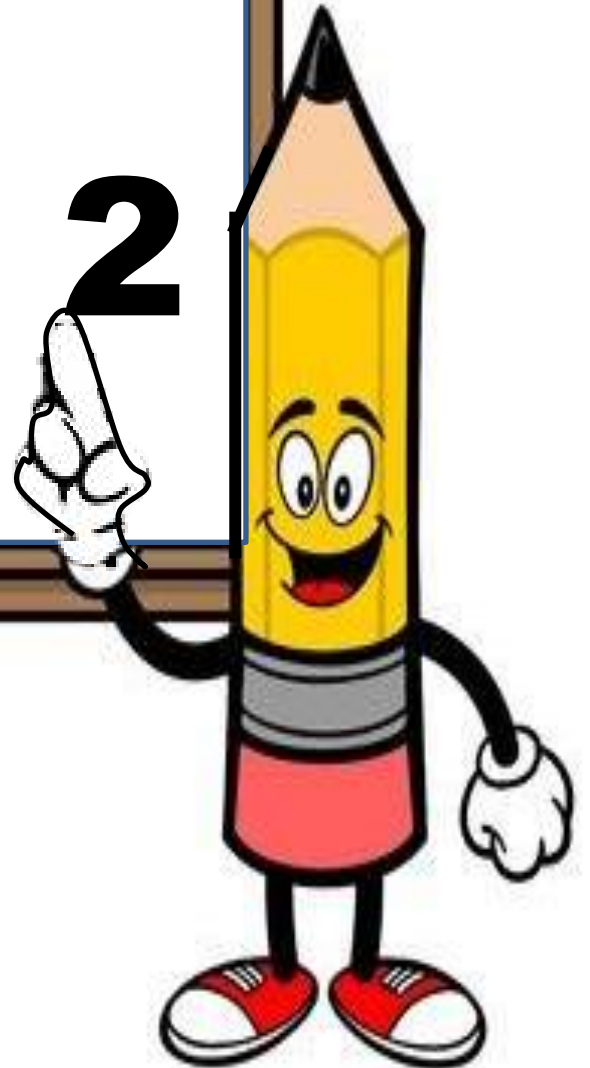
EXIT TICKET: Answer the following 2 questions using complete sentences.

1. What is force?

2. How does force cause objects to move?



Day # 2



Name: _____ Week 35 Day 2 Date: _____

BCCS-B

Howard

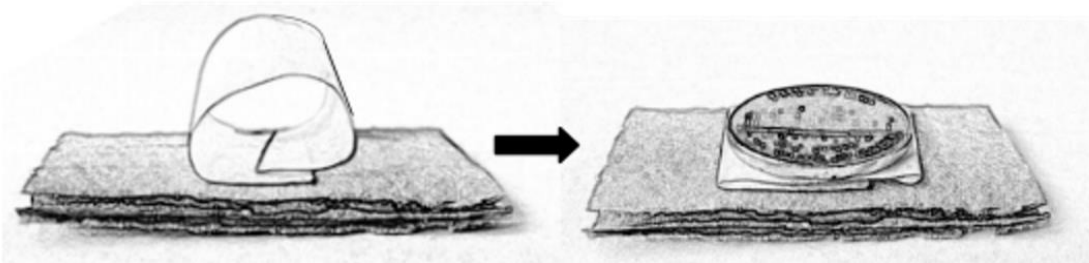
Morehouse

Hampton

Try This!

Make some sliders — Construction Tips

- To get a slider moving, add some weight to the material you're testing. We suggest using pennies. How many pennies you use on each slider is up to you.



You can use a loop of tape to add a penny, like this.



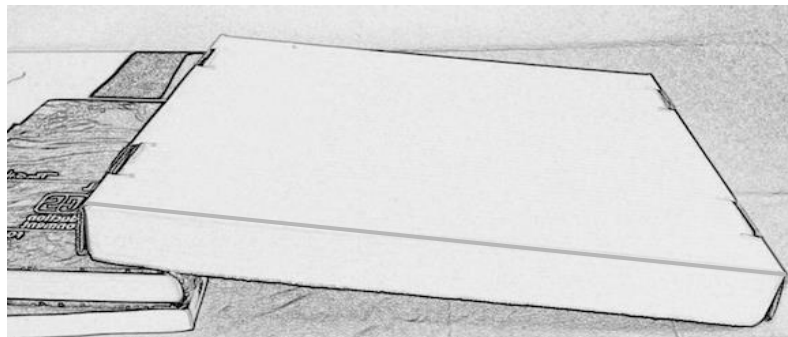
Or you can put a strip of tape over the pennies like this.

- You're testing the material, not the tape you use to hold the weight on. Make sure you don't cover the bottom of the slider with tape.

Make a slide

To make your cardboard into a slide, set one end on a stack of books and the other on the table.

You can change how steep a slide is by adding more books.



Try This!

Experiment with your sliders and write down what you see.

1. What happens if I put all my sliders on the slide when it's flat, and then slowly raise one end of the slide?

Answer: _____

2. What happens if I race a cardboard slider with 5 pennies against a cardboard slider with no pennies at all?

Answer: _____

Come up with at least 3 questions and answers of your own.

3. What happens if I _____

Answer: _____

4. What happens if I _____

Answer: _____

5. What happens if I _____

Answer: _____

(If you have more questions, write on them on the back of this page.)

If you get stuck, think about:

- how many pennies will you put on each slider?
- how you will start the sliders moving? (by setting them on a steep slide? by raising the slide?)
- how steep you will make your slide?
- how many sliders you will test at a time?
- how will you decide which slider has the least friction?

Friction Investigation Worksheet

1. Experiment to find the answer to this question: Which materials have the MOST friction and which materials have the LEAST friction?

2. Method:

We built sliders like this: (draw a picture of a slider)	We set up each trial like this: (draw your slide)

3. Describe what you will do in each trial:

- How will you start your sliders sliding? _____

- How many sliders will you test together? _____
- How will you decide which slider has the least friction? _____

- How will you decide which has the most friction? _____

4. Data Collection:

Complete four trials of your experiment.

Trials	Observations / Measurements
In each box below, write down the materials you tested.	Write down observations or measurements for each trial. For example, " <i>We observed that the cardboard began sliding first..</i> "
Trial 1:	
Trial 2:	
Trial 3:	

Trial 4:	

5. Claims and Evidence

Our claim: We think _____ has the **most** friction.

(material)

Evidence that supports this claim: _____

Our claim: We think _____ has the **least** friction.

(material)

Evidence that supports this claim: _____

Our claim: We think _____ (list materials)
have more friction than _____ (list materials).

Evidence that supports this claim: _____

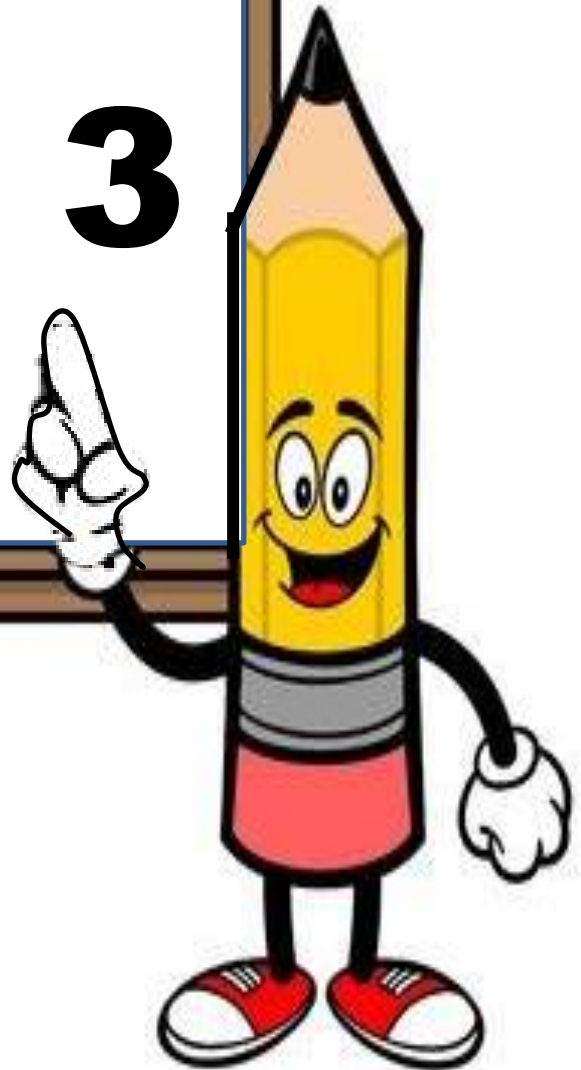
6. Additional Investigation

Next time, we want to try _____

because _____



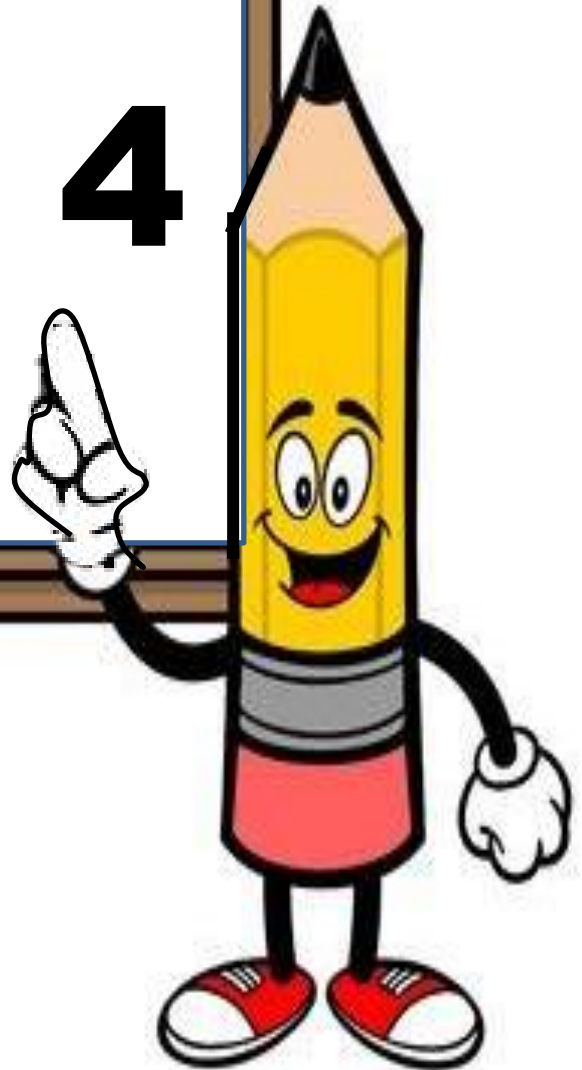
Day # 3



Scholars, please see the assessment attached.



Day # 4



Scholars, please see the assessment attached.