

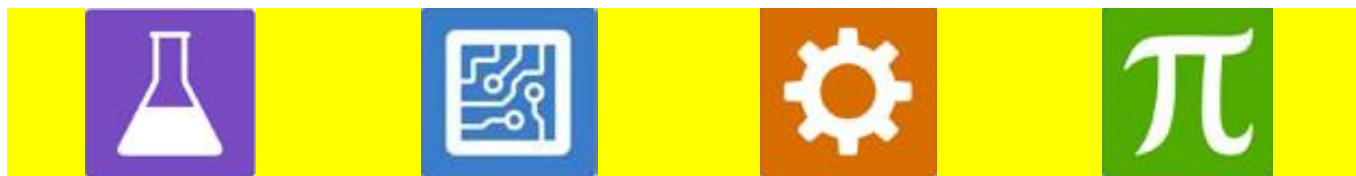
Stem

Student packet



Name _____

Section _____



STEM Vocabulary

Property: The qualities and characteristics of a substance that describe and identify it.

Mass: The amount of matter or substance that makes up an object, generally measured in Kilograms (Kg). **Mass** is different from **weight** – Mass (amount of the substance) is consistent, but **weight** depends on how strong **gravity** is – that's why you **weigh** less on the moon with the **same mass**.

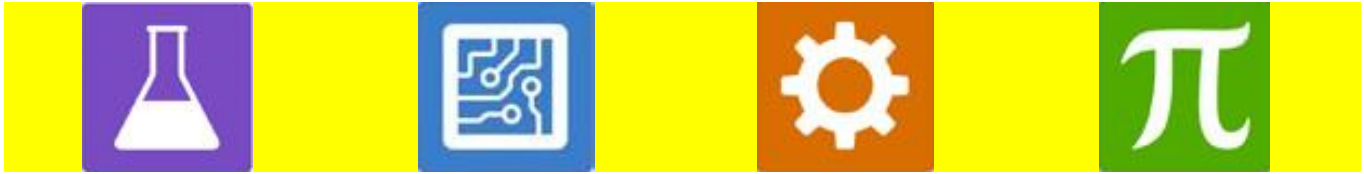
Volume: The amount of space an object takes up.

Color: The wavelengths of light you see when light shines off an object.

Texture: Both the visual appearance and feeling of an object by touch, including how rough, smooth, grainy, bumpy, stickiness, etc., it is.

Temperature: A measure of energy in a substance, which may describe how hot or cold it is.





STEM – MINT MOBILES

Research

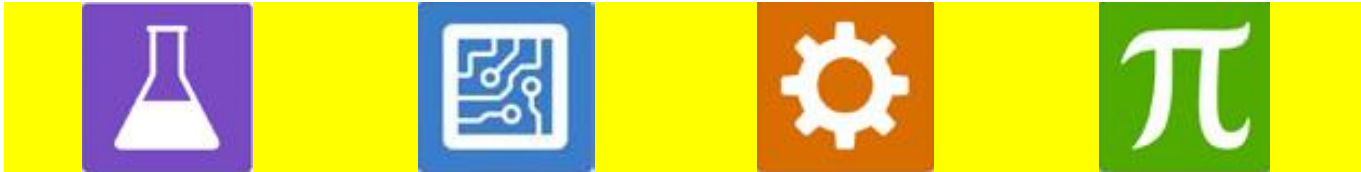
Working Packet

Group # _____ Section: _____
Student Name: _____
Partner's Name: _____

Challenge: Create a miniature mobile cart using the listed materials that can support the weight of **two pink erasers** travel **two meters in distance** after travelling down a ramp for speed.

Research

(Sources: **Science Notebook, Elevate Science Textbook, and/or Discovery Education**. Note the **sources** you used, including **page numbers, titles, and/or links** in the provided space below.)



Group # _____

Section: _____

Student Name: _____

Partner's Name: _____

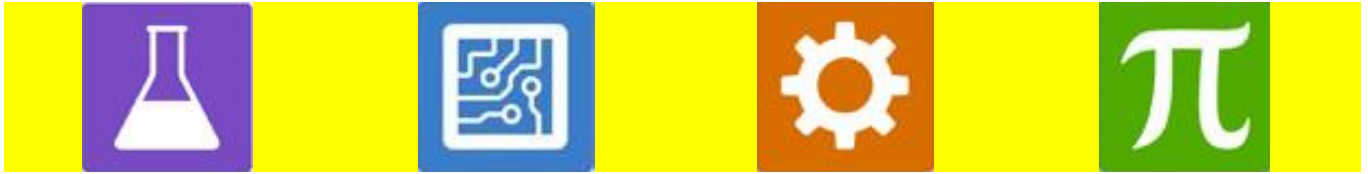
Give your project a title:

Design the Prototype

(Create a labeled diagram of your prototype.)

Materials

--	--

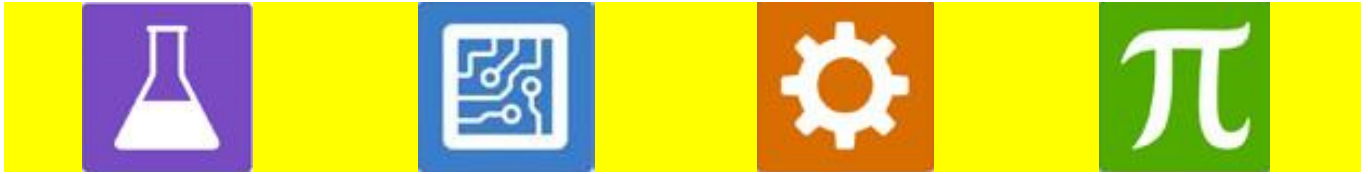


Group # _____ **Section:** _____

Student Name: _____

Partner's Name: _____

Test your Prototype - Collect your Data



Group # _____

Section: _____

Student Name: _____

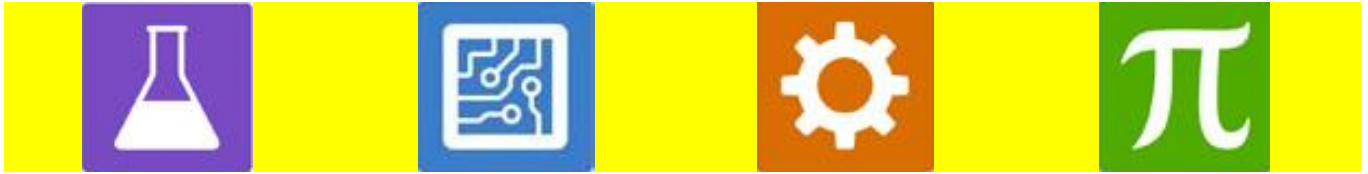
Partner's Name: _____

Improve the Prototype

(Re-design your Prototype. Create a labeled diagram of your improved prototype.)

Materials

--	--



Group # _____	Section: _____
Student Name: _____	
Partner's Name: _____	
Reflection Questions	
1. In what way did you improve your prototype?	
2. Do you expect the improved prototype to pass the challenge? Why?	
3. What did you learn? Discuss your success or lack of success and reasons for it.	



Make a Movie – Use (*iMovie, Keynote, Flip, Canva, etc.*) to create a video/presentation following the instructions below. Share the movie or presentation on **Seesaw**.

Instructions: Record and submit a video of yourself and your team answering the following questions:

1. What was the title of your project?
2. What was your project about?
3. What were your findings during the research?
4. Which materials did you use from the available ones?
5. Did your prototype pass the challenge?
6. Why did your prototype pass or did not pass the challenge?
7. A. If YES to question #5, skip question #7!
B. If NO to question #5, what changes did you make to your prototype? Did it pass the challenge after you improved it?
8. What would you like the next STEM project to be on?
9. Add pictures and video that you recorded during the project in your presentation.