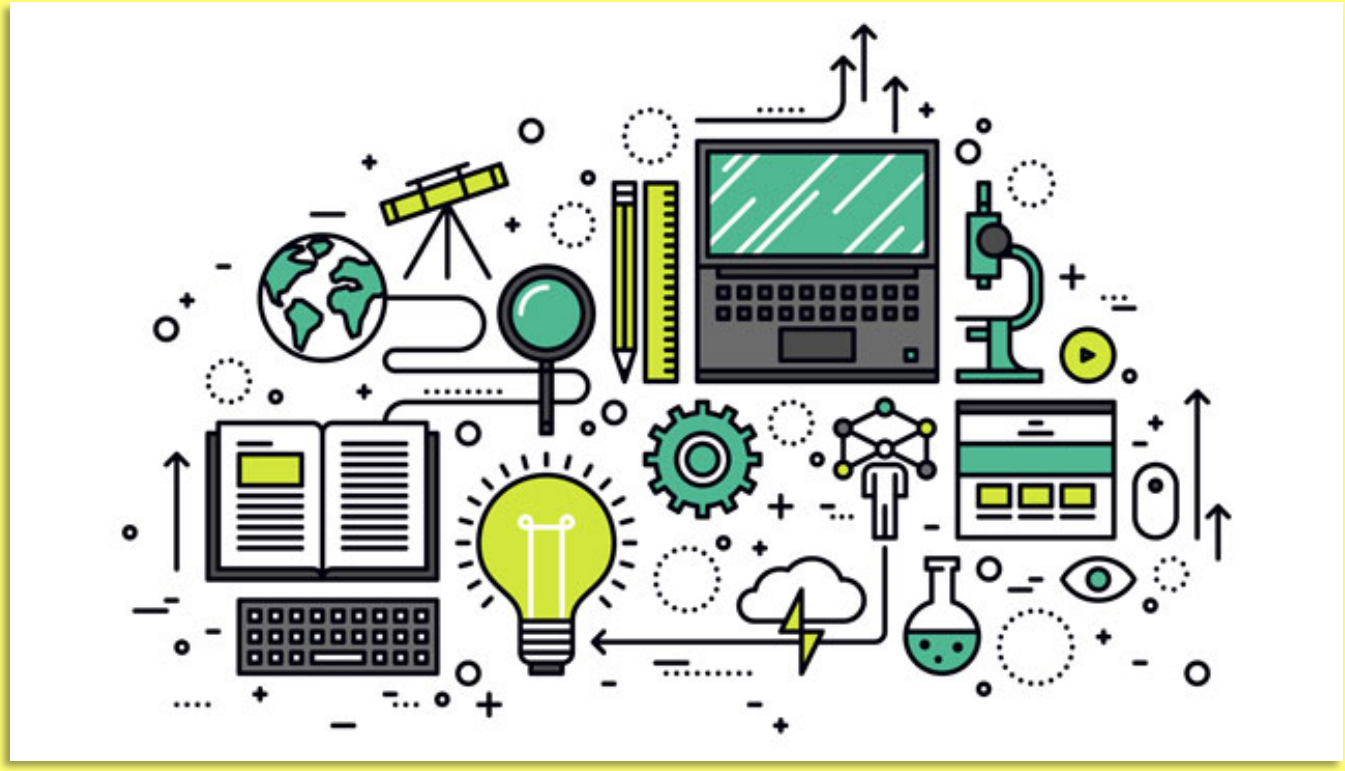
Stem

Student packet



Name _____

Section _____

STEM Vocabulary

- Matter – anything that has mass and takes up space (volume)

- Physical properties of matter – can be observed or measured

- Observable – properties in which you use your five senses to get information about an object (i.e., look, feel, smell, taste)

- Measurable – properties that must be measured with a tool (i.e., ruler , beaker, scale)

- Texture – the visual and tactile quality of a surface

- Strength – describes the material of an object and how much force it can handle

STEM- *Mint* Mobiles

Building Background Knowledge **Working Packet**

Directions: * *Scholars will watch the two videos on Matter and participate in a class discussion about the different properties of matter.*

Respond

1. What is matter?

2. List five examples of physical properties of matter?
   -
   -
   -
   -
   -

3. What properties of matter would be important to consider when building the *Mint* mobile? Why?

STEM- *Mint* Mobiles

Research **Working Packet**

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

Challenge: Design a Mint Mobile using selected materials that:
- can hold two pink school erasers
- travel a **least two meters** when pushed down a ramp

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

Distance Traveled Trial 1:

Distance Traveled Trial 2:

Distance Traveled Trial 3:

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 Table – Use *Pages* to create a table to record your collected data. Share the table on Seesaw.

Instructions: Create a *Pages* Table that includes the following information:

1. The title on the top of the table
2. Two labeled columns with bold font, for each Prototype
3. Three rows, under the 2 columns, to document each trial run and the distance each protype traveled
4. Centered data in each column
5. Data collection must include values with three decimal places