



STEM STUDENT PACKET



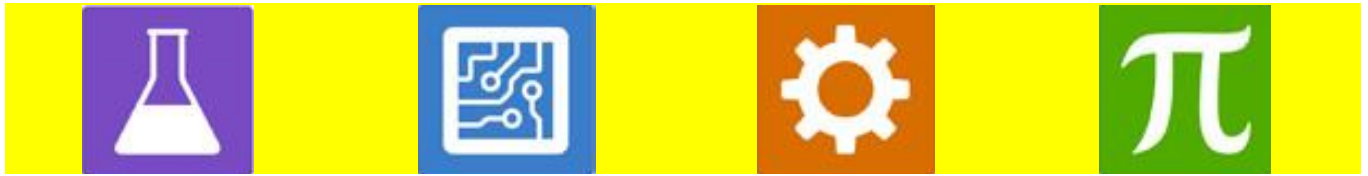
NAME _____

SECTION _____



STEM Vocabulary

**Add key vocabulary and images here*



STEM- **project title*

Building Background Knowledge

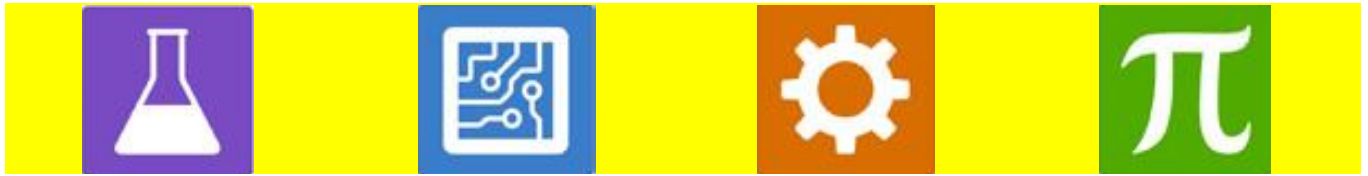
Working Packet

Directions: Watch the videos and find answers to the following.

Respond

1. Important features of Roller Coasters

2. Forces at work in Roller Coasters



STEM- **project title*

Research

Working Packet

Group # _____

Section: _____

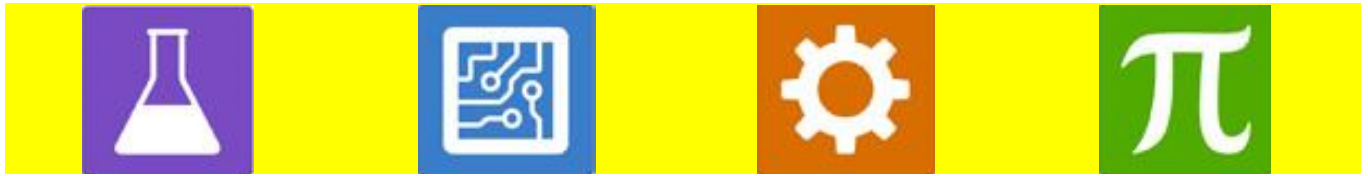
Student Name: _____

Partner's Name: _____

Challenge: Build a Rollercoaster that will carry a marble from top to bottom without falling off the track with an average speed of 10cm/s.

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.)

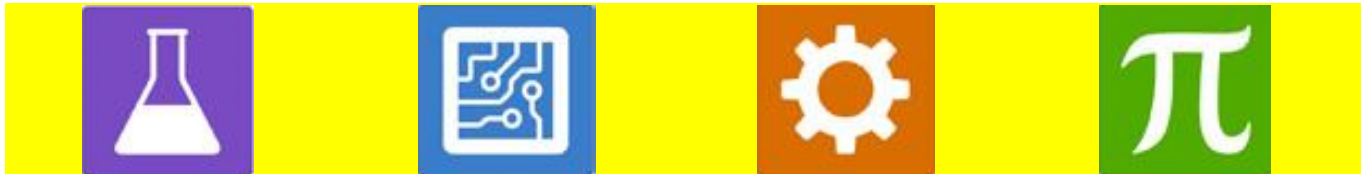
Materials

| | |
|--|--|
| | |
|--|--|



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

Test your Prototype - Collect your Data



Group # _____

Section: _____

Student Name: _____

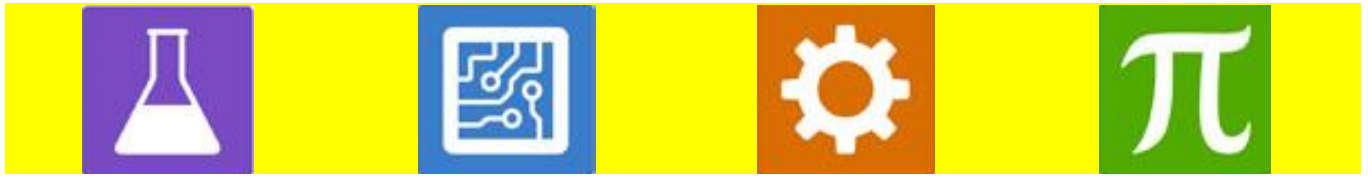
Partner's Name: _____

Improve the Prototype

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

Materials

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

Reflection Questions

1. In what way did you improve your prototype?

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2. Do you expect the improved prototype to pass the challenge? Why?

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3. What did you learn? Discuss your success or lack of success and reasons for it.

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