

Name\_\_\_\_\_

## Engineers and Energy

1. Make a sketch of the roller coaster. Make sure to label the following:
  - a) Starting point, including its height.
  - b) Loops and make sure to say the size of the circle.
  - c) Curves, if you want to have any.
  - d) End of the coaster.

## ROLLER COASTER 1



## What worked in your design? What didn't work?



## What makes the marble move?

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2. Make a new sketch of the roller coaster with the changes you need.

## ROLLER COASTER 2

3. What do you think will happen if you used a metal marble instead of the glass marble?
  - a) Nothing will happen
  - b) Marble will be too slow and fall
  - c) Marble will go faster and crash at the end of the coaster.
4. Test the roller coaster with a metal marble. Was your prediction correct?
5. What do you think will happen if you used a wooden marble instead of the glass marble?
  - a) Nothing will happen
  - b) Marble will be too slow and fall
  - c) Marble will go faster and crash at the end of the coaster.
6. Test your prediction. Was your prediction correct?