Name: _____
Date: _____

Unit Assessment

Multiple Choice

1. Why is it hard to win a tug-of-war against a group of teachers?
   a. Teachers try really hard.
   b. Teachers have more legs than students.
   c. Teachers have a lot of friction.
   d. Teachers can push really hard.

2. The last rubber band caused the watermelon to burst because _____.
   a. it was stronger than the other rubber bands.
   b. it was thicker than the other rubber bands.
   c. it was the last rubber band in the bag.
   d. it created a force that was greater than the force of the watermelon rind.

3. Why was a suspension bridge a good design for the Golden Gate Bridge in San Francisco?
   a. Ships had to pass underneath the bridge.
   b. It has a lot of pillars underneath to support it.
   c. The distance the bridge had to cross wasn't very long.
   d. The water under the bridge was very shallow.

4. A trapeze won't swing forever because _____.
   a. a trapeze is too heavy to keep swinging.
   b. friction and air resistance slow the trapeze down.
   c. a trapeze isn't heavy enough to keep swinging.
   d. the ropes of the trapeze aren't long enough.

5. Magnets attract _____.
   a. objects that contain iron.
   b. only other magnets.
   c. anything made of metal.
   d. things that are not too heavy.

Short Response

1. Why do hoppers hop off the table?

_____

_____

_____

_____

2. Why are pillar bridges and arch bridges stronger than board bridges?



pillar bridge



arch bridge

board bridge

_____

_____

_____

_____

3. Imagine a trapeze artist wants to make their trapeze swing more slowly. How should they do this? Should they have a second trapeze artist join them, so that there is more weight? Or should they make the ropes shorter or longer? On the lines below, explain how you know which change to make.

I think they should _____.

I think this because _____

_____

_____

4. Are paper clips magnets? Explain.

_____

_____

_____

_____