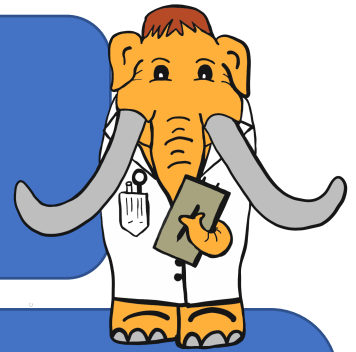


# Science Saturday @ Home

## Center of Gravity



### Gathering Supplies:

String  
Pencil  
Clay  
Plastic Eggs  
Markers and Googly Eyes Optional

Try these two activities to see how to find the center of gravity.

### How To Steps:

#### Part 1: Finding the center of gravity

1. Make a loop in one end of a piece of string, use this to hang the string from your finger, or tusk. Tie the other end of the string around the middle point of a pencil. Let the pencil hang from the string. You may need to gently slide the string along the pencil to find the center of gravity for the pencil. When you have found the pencil's center of gravity it will hang straight. This means the pencil's weight is balanced on either side of the string.
2. Add a piece of clay to one end of the pencil. See how this changes it's center of gravity. Can you adjust the sting's position and find the pencil's new center of gravity?

#### Part 2: Change an egg's center of gravity and make a fun character!

1. Try getting a plastic egg to stand up on one end. As soon as you let go the egg falls to it's side, finding it's own center of gravity.
2. To get the egg to stand up on one end let's change it's center of gravity! Open up the egg and add some clay to the smaller end. Squash the clay in as evenly as possible and snap the top half of the egg back on. Try standing the egg up again. How has the center of gravity for the egg changed with the added weight?  
Tip: If you are having a hard time getting the egg to stand up with just clay, try adding something heavier, like a metal bolt or coins under the clay.
3. Now try putting the egg on it's side. What happens? Does it rock back up on it own? Once the egg stops moving it has found it's own center of gravity.
4. Add a funny face to your wobbly rocking egg!

## Gravity Fun With Max!



Max's new wibbly wobbly egg friends!

## Did You Know?

Your center of gravity is an imaginary point around which your body's weight is evenly distributed. The point varies from person to person depending on height, width, and distribution of body weight. For most people this point is located in the lower torso, slightly below the waist.

Center of gravity is important for stability and balance and is very important in everyday movements. Play a sport? Your center of gravity lets you reach for a ball or bend over without falling. Try standing on one leg and notice how your body shifts to keep it's center of gravity and stop you from falling over.

Body placement, like standing with your legs and back flat against a wall, can cause your center of gravity to stop you from being able to bend over without falling.