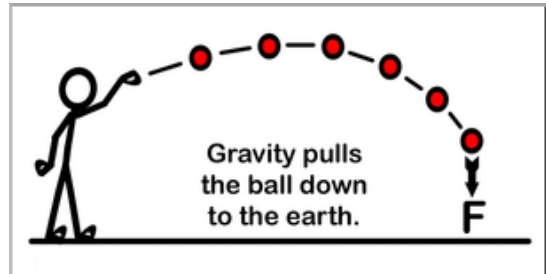


FORCE: Gravity and Motion (3-5)

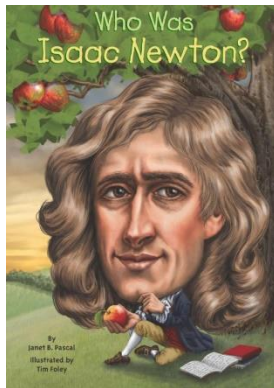
The SCIENCE of FORCE:

- **Force** is a push or pull on an object.
- **Gravity** is a force which pulls objects toward each other. The more massive an object is, the stronger its gravitational pull. Earth's gravity is what keeps you on the ground and what causes objects to fall.
- **Inertia** is the tendency of an object at rest to not move.



LITERACY CONNECTION:

[Who was Isaac Newton?](#) by Janet Pascal introduces kids to one of our greatest scientists. Don't have this book at home? There are lots of books you can find about [Newton's Laws of Motion](#) online.



ACTIVITY: EGG DROP

Materials: 1 egg, water, 1 empty toilet paper tube, 1 pie tin, 1 large glass

1. Fill the glass $\frac{3}{4}$ with water
2. Place a pie tin right side up on top of the glass
3. Balance a toilet paper tube up in the middle of the pan
4. Place the egg on top of the tube on its side
5. "Karate chop" the pie tin away and watch the egg fall into the glass of water!

NOTE – make room for the tin to fly away safely. Sometimes the egg might break. Use a plastic egg or ping pong ball if you are concerned.

What is happening? According to Newton's First Law of Motion, the egg is not moving and it won't move without a force. When you knock the pie tin away, the egg stays in the air until gravity pulls it down into the water.

EXPLORE: Try using an empty paper towel tube instead. Does it still work? Why or why not?

For step-by-step instructions, watch the video at: [Egg Drop STEM](#)



This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org