

The following sentences are all examples of Newton's Third Law that states, "For every action, there is an equal and opposite reaction."

- When you jump, you exert a force on the ground, and the ground exerts a force on you which causes you to move upwards.
- When you walk or run across the floor, you push on the floor and the floor pushes back on you.
- When you swim, you push on the water and the water pushes back on you allowing you to move through the water.
- The wings of a bird push air downwards and the air pushes back on the bird upwards. This allows a bird to fly.

For this activity, imagine that you have a friend who does not believe in Newton's Third Law and asks you to prove it. Design an experiment that will show your friend that forces act in pairs, and how Newton's Third Law is true. Since you will not be actually conducting the experiment, you can use any materials in your experiment that will demonstrate the law.

Materials you will use:	 	<del> </del>
Procedure you will follow:	 	

Draw a diagram of your experiment below:	
Conclusion:	•
How did your experiment demonstrate Newton's Third Law of Motion? Use the words force, exemples opposite, equal, and mass in your explanation.	ts,
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Your friend finally agrees that <i>part</i> of Newton's Third Law is true, but he is still slightly confused. He states that forces do act in opposite directions, but the forces must not be equal because whe we push off the Earth, and the Earth pushes back on us, and we move. This means the Earth mush be exerting <i>more</i> force on us, than we are on it. How would you correct your friend's belief?	
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