



Force & Motion

Name _____



Observations of Newton's Third Law

Background Information:

Newton's 3rd Law of Motion states that for every action there is an equal but opposite reaction.

These actions are forces, so you can remember this law as being every force has an equal and opposite force. Remember that these are two separate forces

Either force in an interaction can be the "action" force or the "reaction" force.

Equal means two things:

- Both forces are exactly the same size. They are **equal in strength**.
- Both forces exist at exactly the same time. They both start at exactly the same instant, and they both stop at exactly the same instant. They are **equal in time**.

Opposite means that the two forces always act in **opposite directions**.

What to do:

1. Blow up a balloon.
2. Hold the opening downward and release the balloon.
3. Repeat this several times, and observe what happens.
4. Describe what happened using Newton's third law of motion:



