Forces in Action!

What's force?
Force is the push or pull on an object that causes it to move or change direction. Forces come in pairs. For every action force, there is an equal and opposite reaction force. When you jump, you exert action force on the ground, and the ground exerts an equal reaction force on you!

Question 1: Draw an arrow in the direction of the force on the object or person. Hint: The arrows go inside the box!

Think like a scientist!
Name two other action and reaction pairs. When something moves, what is moving and what makes that move?
Bottle Rockets

What are the forces on the bottle rockets?
Recall that force is a fancy term for pushing or pulling. In this experiment, there are 3 forces acting on the bottle rocket.

**Thrust** is the force from the air being released and pushing the rocket upwards.

**Air resistance** is the force from the air outside pushing against the direction of the rocket.

**Gravity** is the force that makes objects fall. It is always pointed towards the Earth’s center.

**Question 2:** Draw arrows inside the boxes to show the direction of the three forces: thrust, air resistance, and gravity.