

## Water Rocket

Water rockets use water and air as fuel.

Consider the following questions:

- 1. How does the rocket move?
- 2. What will cause the water rocket to move?
- 3. Before the rocket is to be launched, how will you hold the rocket in place?



## Answer

- 1. Rocket works on Newton's third law of motion. It moves away from the surface of the Earth.
- 2. The bottle is filled with water and then the air is pressurized into it. While pressuring the bottle, we do not let air escape. Once enough pressure is created inside the bottle, we release the lock around the bottle to allow the water and air to escape. This creates a force in the opposite direction that of the escape of air and water. Due to this the bottle moves in the opposite direction to the release of air and water.
- 3. We will need to make a launcher with a mechanism to lock and hold the bottle in place.