

# Read About Gravity

## WHAT IS GRAVITY?

Gravity is the invisible force that pulls everything down to the ground (Earth's surface). Everything on Earth is affected by gravity: people, plants, animals and objects. Without gravity you wouldn't be able to go down a slide, play basketball, or skydive.

*To better understand how gravity works...*

## LET'S BREAK IT DOWN!

### A watermelon is pulled down by gravity

A watermelon stays on a table because gravity pulls it down. If you drop a watermelon from a roof like we did in the video, it will fall down to the ground.



### Gravity is what keeps everything in place.

Without gravity people could just float away into space. If there was no gravity you wouldn't be able to run on the ground, lay in your bed or play games like basketball.

---

## Light things are pulled down by gravity, too.

Feather and ping pong balls dropped off a roof also fall down to the ground. No matter how heavy or light an object is, gravity still pulls it back down to the ground.



---

## Isaac Newton is a scientist that studied gravity.

For hundreds of years people didn't think about gravity. Then legend has it that a scientist named Isaac Newton saw an apple fall off a tree and started thinking about why it fell. He came up with the idea that a force was pulling things to the ground.

---

## Even if you throw something up, gravity still pulls it down.

We can throw something like an egg up into the air, but no matter how high you throw the egg, gravity will slow it down and then pull it back down to the ground. The force of gravity brings things down no matter what direction you throw it.



## GRAVITY VOCABULARY

**Force** A push or a pull that makes objects (things) move; it can be strong or weak.

---

**Gravity** An invisible force that pulls everything down to Earth's surface.

---

**Weight** How heavy something is on Earth.

---

**Pull** Using a force to move things closer.

---

**Push** Using a force to move things away.

---

**Fall** To go in a direction towards the ground.

---

## QUESTIONS ABOUT GRAVITY

### **What is gravity?**

Gravity is an invisible force that pulls everything down.

---

### **What would happen without gravity?**

People (and everything else on Earth) could just float away into space.

---

### **Who can name examples of objects that fall down if you drop them off a roof?**

Heavy things like watermelons, bricks, jugs of juice, as well as light things like ping pong balls fall down to the ground when dropped off a roof.

---

### **What happens if you throw an egg up into the air?**

Gravity causes it to slow down and then fall back down towards the ground.

---

### **How does gravity affect things that are thrown in different directions?**

Gravity pulls things down no matter what direction they are traveling.

---

### **Name some examples of things people could not do without the force of gravity.**

People could not skydive, go down a slide, or play basketball without the force of gravity.

---