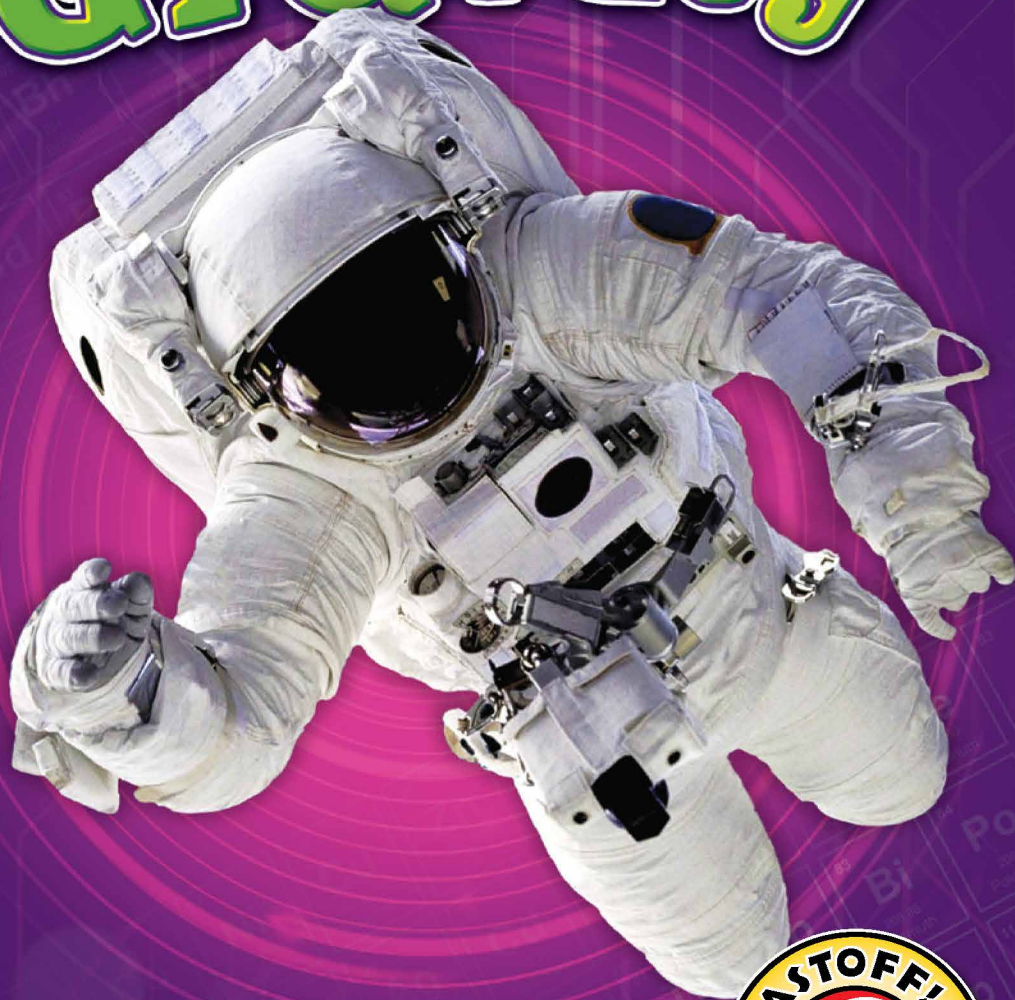


SCIENCE STARTERS

# Gravity

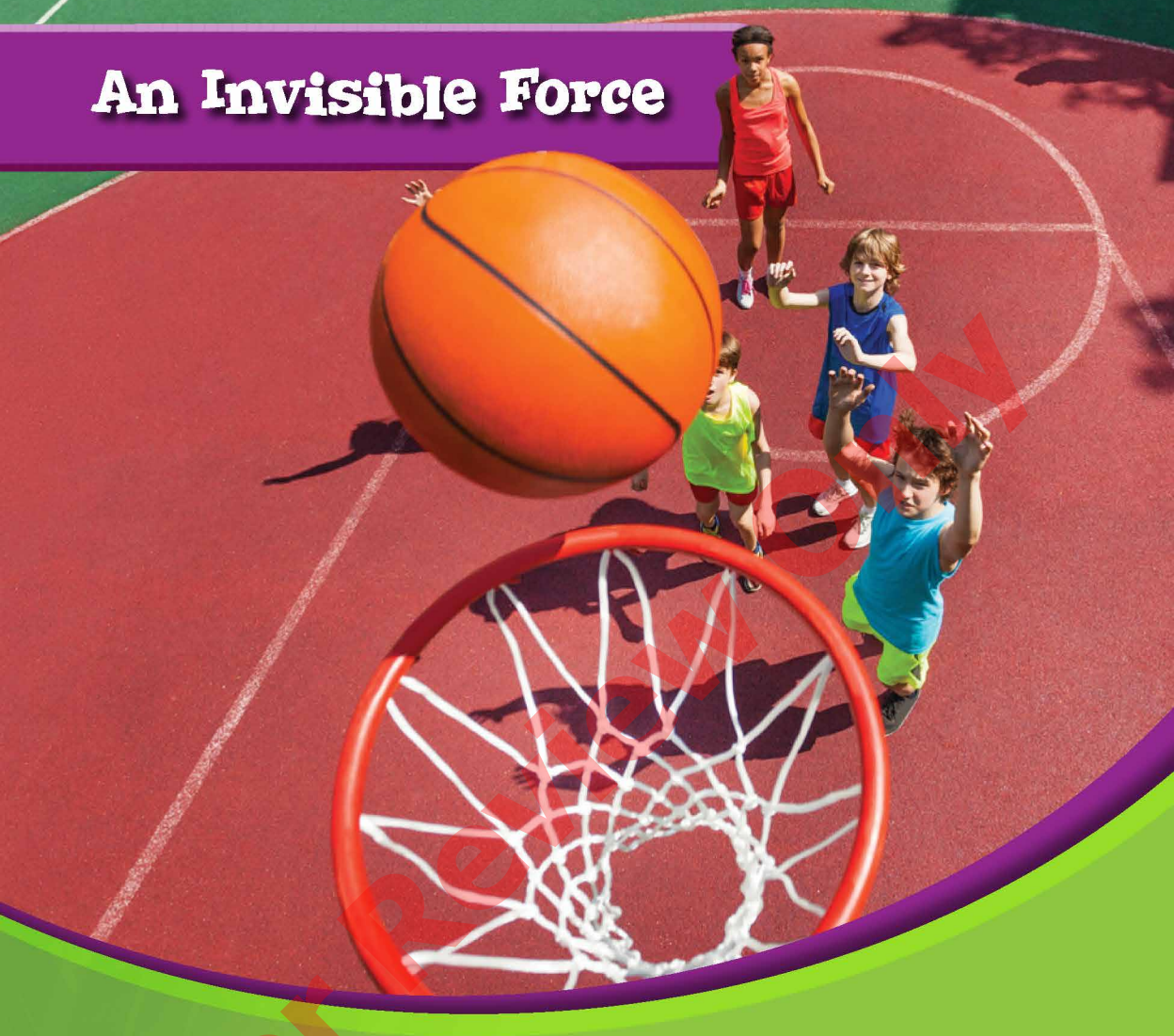




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# An Invisible Force



Throw a ball into the air and it falls to Earth. What makes it fall? Gravity.



You cannot see gravity,  
but it is important. It  
keeps you from flying  
off the Earth!



# What Is Gravity?



Gravity is a **force** that pulls on everything in the **universe**. It exists between any two objects that have **mass**.





Even people have gravity! It is hard to notice. The gravity we have is overpowered by Earth's gravity.





Gravity is affected by mass.  
The more mass objects have,  
the harder gravity pulls.



If a person's mass doubles,  
gravity will pull on that  
person twice as hard.

FOR REVIEW ONLY





# Cup Drop

You can see gravity in action for yourself! Try this activity outside or over a sink.

## What you will need:

- a paper cup
- water

1. Poke a hole close to the bottom of the cup. Cover it with your finger.
2. Fill the cup with water.
3. Take your finger away from the hole. The water spills out.
4. Fill the cup again. Cover the hole with your finger.
5. Drop the cup to the ground.

## What happened?

The cup and water drop at the same speed. The water is not forced out of the hole.

## What happened?

Gravity pulls on the cup and the water. Because you are holding the cup, only the water can move freely.

