

SECTION GRAVITY IS A FORCE EXERTED BY MASSES.

3.1 Reading Study Guide B**BIG IDEA** Newton's laws apply to all forces.**KEY CONCEPT** Gravity is a force exerted by masses.**Review**

Every action force has an equal and opposite reaction force.

Take Notes**I. Masses attract each other. (p. 77)**

1. Fill in the four-square diagram for
- gravity*
- .

Definition	Characteristics
Examples	Non-examples

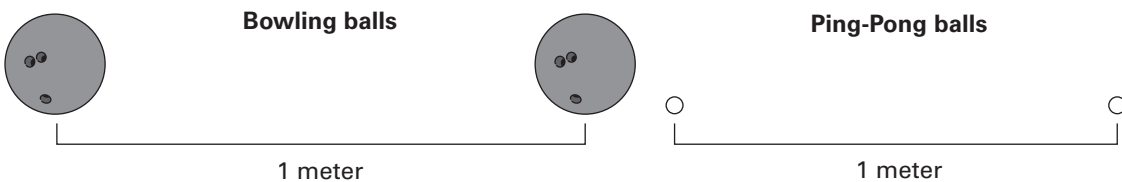
GRAVITY

A. The Force of Gravity (p. 78)

2. Fill in the main-idea chart with details and examples about the force of gravity.

The Force of Gravity	
→	
→	
→	

3. Circle the two objects below that have the strongest gravitational force between them. How do you know?



B. Gravity on Earth (p. 78)

4. How does Newton's third law apply to gravitational force?

5. How can you calculate the force of gravity that Earth exerts on an object at its surface?

C. Weight and Mass (p. 79)

6. Fill in the four-square diagram for weight.

Definition	Characteristics
Examples	Non-examples

7. Name three properties of mass.

II. Gravity keeps objects in orbit. (p. 80)

8. What is an orbit?

A. Spacecraft in Orbit (p. 82)

9. Fill in the main-idea chart with details describing how spacecrafts reach and stay in orbit.

Spacecraft in Orbit Around Earth

B. People in Orbit (p. 82)

10. What is a microgravity environment? How might such an environment be created?
