



Gravity

Name: _____

Date: _____

Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

1. When an object falls, gravity makes it speed up, or _____.
2. Air pushing back on a falling object is called air _____.
3. The greatest speed a falling object can reach in air is its _____ velocity.
4. At terminal velocity, the falling object stops accelerating because forces are _____.
5. A skydiver reaches a higher terminal velocity when she pulls her arms in to be more _____.
6. On the Moon, there is no atmosphere, so a feather and hammer fall at the _____ rate.
7. The unit scientists use for acceleration is meters per second per _____.
8. Earth's gravitational acceleration is about _____ meters per second squared.
9. When a parachute opens, air resistance grows quickly, so terminal velocity _____.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Acceleration	→ _____	Falling with only gravity acting
Air resistance	→ _____	Frictional force from the atmosphere
Terminal velocity	→ _____	Steady top speed of a falling object
Free fall	→ _____	Rate at which speed changes

Answer Key · Gravity · Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

1. When an object falls, gravity makes it speed up, or accelerate .
2. Air pushing back on a falling object is called air resistance .
3. The greatest speed a falling object can reach in air is its terminal velocity.
4. At terminal velocity, the falling object stops accelerating because forces are balanced .
5. A skydiver reaches a higher terminal velocity when she pulls her arms in to be more streamlined .
6. On the Moon, there is no atmosphere, so a feather and hammer fall at the same rate.
7. The unit scientists use for acceleration is meters per second per second .
8. Earth's gravitational acceleration is about 9.8 meters per second squared.
9. When a parachute opens, air resistance grows quickly, so terminal velocity decreases .

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Acceleration	→ <u>Rate at which speed changes</u>	Falling with only gravity acting
Air resistance	→ <u>Frictional force from the atmosphere</u>	Frictional force from the atmosphere
Terminal velocity	→ <u>Steady top speed of a falling object</u>	Steady top speed of a falling object
Free fall	→ <u>Falling with only gravity acting</u>	Rate at which speed changes