



## **Part 1: Science**

**Question 1:** What is the formula to calculate speed?

**Question 2:** Describe the difference between speed and velocity.

**Question 3:** Explain why oil and water don't mix.

**Question 4:** What is the difference between an element and a compound?

**Question 5:** How does photosynthesis benefit plants?

## **Part 2: Math**

**Question 6:** Calculate the perimeter of a rectangle with length 8 cm and width 5 cm.

**Question 7:**

**Question 8:** What is the area of a triangle with base 6 units and height 9 units?

**Question 10:** If a car travels at a constant speed of 60 km/h, how far will it travel in 2.5 hours?

**Question 12:** Find the circumference of a circle with a radius of 7 cm. (Use  $\pi = 3.14$ )

**Question 13:** A recipe calls for  $\frac{2}{3}$  cup of sugar. If you want to make half the recipe, how much sugar do you need?

**Question 15:** What is the volume of a cube with side length 4 cm?



### Part 3: Word Problems

**Question 16:** John runs 5 miles every day for a week. How many total miles does he run in a week?

**Question 17:** A store is having a sale where everything is 25% off. If a shirt originally costs \$20, how much will it cost during the sale?

**Question 18:** Mary buys 3 packs of pencils, each containing 12 pencils. How many pencils does she have in total?

**Question 19:** If a rectangle has a length of 12 units and a width of 8 units, what is its area?

**Question 20:** A car travels 240 miles in 4 hours. What is its average speed?