

PROBLEMS:

1. You are on a planet whose mass is much larger than the Earth's. How will this affect your weight?

Why?

2. You are on a planet whose mass is much smaller than the Earth's. How will this affect your mass?

Why?

3. Would there be a difference in your weight if you first weighed yourself in Death Valley and then on Mt. Everest?

Explain.

4. What is the volume of a cup of water with a mass of 350 grams?

(a) (b) (c)

5. What is the volume of a 4500 g liquid with a density of 7.5 g/mL?

(a) (b) (c)

6. What is the volume of a 500 gram sample of water?

(a) (b) (c)

7. Calculate the density of an irregular object with a mass of 16 g and a volume of 25 mL.

(a) (b) (c)

8. Calculate the density of a regular object with a mass of 450 g and a volume of 150 cm³.

(a) (b) (c)

9. Calculate the density of a regular object with a mass of 1500 g and a volume of 359 cm³.

(a) (b) (c)

10. Calculate the density of an irregular object with a mass of 950 g and a volume of 50 mL.

(a) (b) (c)