

**WorksheetCloud: WORKSHEET**

**Grade 9**

**Subject: Natural Sciences**

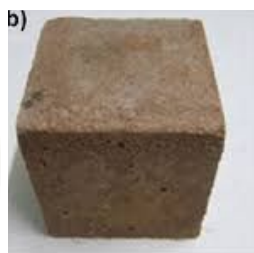
**Topic: Introduction to Density: Enquiry into the equation**

1. Explain the reasoning behind which is heavier: wood or steel



2. Which has a greater mass and volume? A kilogram of steel or a kilogram of feathers?

3. Complete: *I see ... I think ... I wonder ...* for the following images.



4 Define volume.

5. Define mass.

6 Define density.

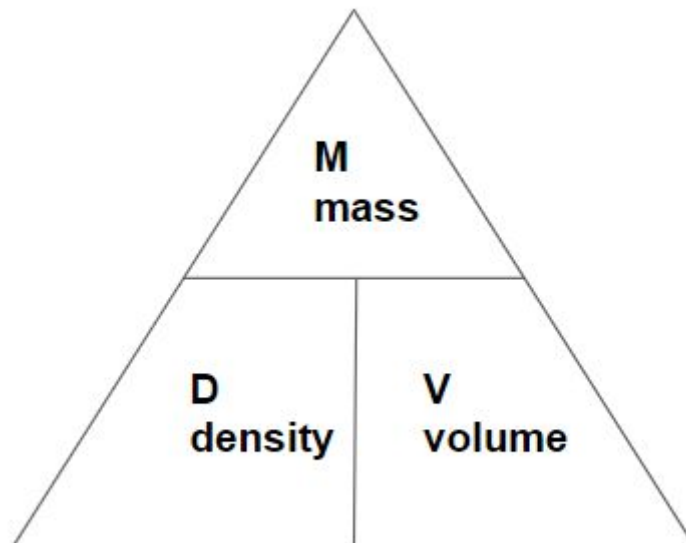
7. What are the symbols for: density, mass and volume?

8. How do you calculate the volume of a cube?

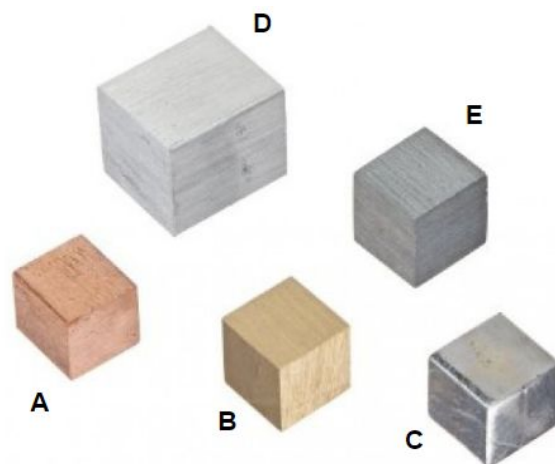
9. What scientific laboratory equipment do we use to measure the mass of a substance?

10. What are the units for density?

11. Explain your understanding of “the magic triangle” below.



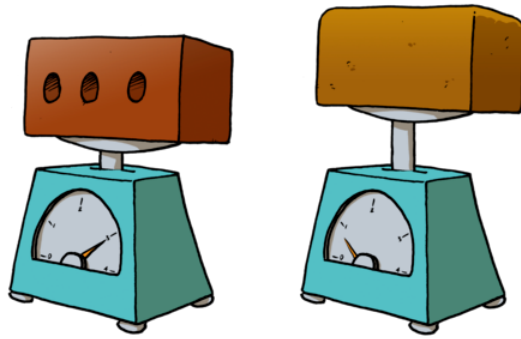
12. Study the images below and answer the following questions



a) What are the similarities and differences between blocks A, B and C?

b) What will the density be of the three different size aluminium blocks (C, D and E) be?

13. Study the image below and answer the following questions.



- a. Imagine a brick and a loaf of bread that are the same size. Would the brick or the bread have a greater volume?
- b. Which one, the brick or the bread, has more mass?
- c. Which one, the brick or the bread, would have the greater density? Explain your answer.