

Unit 2: Heat and Energy in the Earth's Systems

L5: How Dense is This?

9/25/2017

Guiding Question: How can we determine and model the density of an object?

- Do Now:
 - What would hurt more, being hit with 5kg of bricks or 5kg of feathers? Justify your answer.

Notes

- Density is a measure of how much mass there is in a given volume

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$

or, in short form:

$$d = \frac{m}{V}$$



- The units for density are usually g/mL or g/cm³. 1 mL = 1 cm³ so the two are the same.
- Density is an *intensive property*

Notes

- Intensive properties are properties that do not depend on the size or the amount of matter.
 - Examples: density, melting point, and hardness
- Extensive properties are properties that change when the amount of matter changes
 - Examples: mass, volume, length, and shape

Closure

- Homework #6 Due Friday 9/29
- Achieve 3000: These Lights are Too Cool! Due Friday 10/6 at 11:59pm