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PLEASE SUBMIT YOUR WORK THROUGH GOOGLE CLASSROOM

OPTION 1: print this page, fill in your answers by hand, take a picture or scan, upload, and attach

OPTION 2: create and attach a google document with your answers (no need to copy the assignment itself)

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1. **Imagine you can stack atoms on top of each other one by one, like a tower of blocks. How many atoms will it take to make a tower as tall as a human?**

**(In other words, *a human is how many atoms tall?* 😊)**

Hint: start with writing the height of a human – you can google the average height or measure your own height – just make sure to use metric units; then recall the size of a single atom (Lecture #5, slide 5); now calculate!

2. **Match the words from the word bank to their meaning. You may need to review Lecture #5.**

- A. \_\_\_\_\_ is the amount of 3D space that a substance or shape occupies or contains.
- B. \_\_\_\_\_ is the amount of material in an object.
- C. \_\_\_\_\_ is anything that takes up space and has mass.
- D. \_\_\_\_\_ is how much matter (atoms!) is contained in a unit of volume.

**WORD BANK: matter, volume, density, mass**