Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**DA Homework C**

**Dimensional Analysis & Rate Conversion Word Problems**

*Show all work, round appropriately, include units and box final answers. Explanations do not need to be in complete sentences, but should be thorough.*

1. One cereal bar has a mass of 37 g. What is the mass of 6 cereal bars? Is that more than or less than 1kg? Explain.
2. Wanda needs to move 110 kg of rocks. She can carry 10 hg each trip. How many trips must she make? Explain.
3. Dr. O is playing in her garden again. She needs 1 kg of potting soil for her plants. She has 750 g. How much more does she need?
4. ![MC900295057[1]]()Weather satellites orbit Earth at an altitude of 1,400,000 meters. What is this altitude in kilometers?
5. A dollar bill is 15.6 cm long. If 200 dollar bills were laid end to end, how many meters long would the line be?

![MC900352353[1]]()

1. The ceiling in Jan’s living room is 2.5 m high. She has a hanging lamp that hangs down 41 cm. Her husband is exactly 2 m tall. Will he hit his head on the hanging lamp? Why or why not?
2. You are late for school. Your parents can either drive 70 mi/hr or 1.1 cm/min. What speed should they drive to get you to school on time?