

In today's activity, you will measure a variety of classroom items and convert the measurements into equivalent units.

**Materials:**

- classroom items
- ruler/meter stick
- triple beam balance

**Part I:**

Find the length of each of the following items in centimeters (measure to the closest tenth of a cm).

Item	Length (cm)
Pencil	
Notebook	
Desk Height	
Classroom Height	
Length of a Classroom Wall	

Convert the length of each of the items above from centimeters into inches (1 in = 2.54 cm).

Pencil:

Classroom Height:

Notebook:

Length of a Classroom Wall:

Desk Height:

Using the inches ruler, confirm your conversions (to the closest eighth of an inch).

Item	Length (in)
Pencil	
Notebook	
Desk Height	
Classroom Height	
Length of a Classroom Wall	

**Questions to consider:**

1. Were your conversions correct? If not, what are some possible reasons why?

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2. Which set of units was easiest to use when making measurements, especially for values that were not whole inches or centimeters?

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**Part II:**

Find the mass of each of the following items in grams (measure to the closest tenth of a gram).

Item	Mass (g)
Pencil	
Notebook	
Ruler	
Paperclip	
Calculator	

Convert the mass of each of the above items from grams into kilograms (1 kg = 1,000 g).

Pencil:

Paperclip:

Notebook:

Calculator:

Ruler:

**Questions to consider:**

1. The SI unit for mass is the kilogram. Why do you think the kilogram is a better unit for mass than the gram?

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