

Name:

Date:

Period:

Measurement #2

1. Complete the following unit conversions.

(a) $2500\ \mu\text{m} = ?\ \text{m}$

(c) $4.8\ \text{m} = ?\ \text{mm}$

(b) $326\ 000\ \text{mg} = ?\ \text{kg}$

(d) $2.1\ \text{s} = ?\ \text{ms}$

2. Express each of these measurements in MKS units:

(a) $9.1\ \text{km}$

(c) $320\ \text{g}$

(b) $53\ \text{cm}$

(d) $1.2\ \text{h}$

3. You perform an experiment to measure the density of aluminum. After performing five trials, you get the following results:

Trial	Result (g/mL)
1	2.5
2	3.2
3	2.9
4	3.0
5	2.6

(a) Are your measurements precise? Explain.

(b) The widely accepted value for the density of aluminum is $2.7\ \text{g/mL}$. Are your measurements accurate? Explain.

(c) Calculate the percent error based upon your average measurement. Is your percent error reasonable? Explain.