Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_

**Metric Conversions, Measure Sig Figs, Count Sig Figs, & Round Sig Figs HW**

1. Convert each of the following quantities to the required unit.
	1. 5.2 cm of magnesium to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mm of magnesium
	2. 0.049 kg of sulfur to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g of sulfur
	3. 1.60 mL of ethanol to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ µL of ethanol
	4. 0.020 kg of tin to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mg of tin
	5. 3 kL of saline solution to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ L of saline solution
2. A chemistry teacher needs to determine what quantity of sodium hydroxide to order. If each student will use 130 g and there are 150 students, how many kilograms of sodium hydroxide should the teacher order?



1. Measure the following:







Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_

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1. Measure the following:







1. Determine the number of significant figures in the following measurements.
	1. 640 cm3
	2. 200.0 mL
	3. 0.5200 g
	4. 1.005 kg
	5. 10 000 L
	6. 20.900 cm
	7. 0.000 000 56 g/L
	8. 0.040 02 kg/m3
	9. 790 001 cm2
	10. 665.000 kg•m/s2
2. Round the following quantities to the specified number of significant figures.
	1. 5 487 129 m to three significant figures
	2. 0.013 479 265 mL to six significant figures
	3. 31 947.972 cm2 to four significant figures
	4. 192.6739 m2 to five significant figures
	5. 786.9164 cm to two significant figures
	6. 389 277 600 J to six significant figures
	7. 225 834.762 cm3 to seven significant figures
3. Determine the number of significant figures in the following measurements.
	1. 640 cm3
	2. 200.0 mL
	3. 0.5200 g
	4. 1.005 kg
	5. 10 000 L
	6. 20.900 cm
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	8. 0.040 02 kg/m3
	9. 790 001 cm2
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4. Round the following quantities to the specified number of significant figures.
	1. 5 487 129 m to three significant figures
	2. 0.013 479 265 mL to six significant figures
	3. 31 947.972 cm2 to four significant figures
	4. 192.6739 m2 to five significant figures
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