

Exam 2 Review Sheet

Name _____ Date _____ Mod _____

Complete the work on loose-leaf to help you prepare for the exam. Be sure to show work where you can!

- **Convert the following:**

- | | |
|----------------------|-------------------------------|
| 1. 46.8 mg to grams | 4. 113.79 das to milliseconds |
| 2. 9.73 hL to liters | 5. 0.086 kg to dg |
| 3. 32.59 cm to km | 6. 21.3 mL to liters |

- **Convert the following into or out of scientific notation:**

- | | | |
|-----------------------------|------------|-------------------------------|
| 1. 7800000 m | 5. 21 s | 8. 0.4 mL |
| 2. 0.000056 s | 6. 6590 L | 9. 9.99×10^4 K |
| 3. 1.25×10^3 cg | 7. 0.001 g | 10. 4.00×10^{-7} dag |
| 4. 3.79×10^{-5} mm | | |

- **Count the number of sig figs in the following:**

- | | | |
|---------------|----------------------------|--------------------------|
| 1. 78.931 s | 4. 63.1000 J | 7. 2.00×10^3 cm |
| 2. 100.004 mg | 5. 35600 m | 8. 150 g |
| 3. 0.00731 L | 6. 4.38×10^{18} L | |

- **Do the following operations and round to the correct number of sig figs:**

- | | |
|---|--|
| 1. $45.8 \text{ m} + 12 \text{ m} + 1.0005 \text{ m}$ | 5. $45.9 \text{ g} \div 9 \text{ cm}^3$ |
| 2. $93.258 \text{ g} - 21.1 \text{ g}$ | 6. $406.1 \text{ cm} + 2 \times 10^2 \text{ cm}$ |
| 3. $0.123 \text{ m} + 54 \text{ cm} + 3.64 \text{ m}$ | 7. $100.0 \text{ m} \times 20.00 \text{ m} \times 3.000 \text{ m}$ |
| 4. $(7.31 \text{ kg}) \times (12.2 \text{ s})$ | 8. $547.3 \text{ g} \div 7.2 \text{ m}$ |

- **Complete the following problems:**

1. You are measuring the floor for new carpeting. The floor is 10.00 m long and 8.50 m wide. How much carpeting will you need to buy?
2. A piece of paper measures 21.65 cm wide and 27.48 cm long. What is the area of the piece of paper?
3. In art class you made a gorgeous painting. You decide to hang it in your bedroom. The painting is 96.57 cm wide and 74.12 cm long. How much area will the painting occupy on your wall?
4. The map hanging on my wall in class is 2.79 m wide and covers an area of 5.394 m^2 . What is the height of the map?
5. A fish tank is 50.80 cm long, 25.40 cm wide and 30.48 cm deep. What is the volume of this fish tank?
6. A rectangular container is filled with liquid. How much liquid is in the container if it is 11.11 cm wide, 9.99 cm deep and 10.10 cm long?
7. The world's largest aquarium is in Georgia. The biggest tank holds $2.4 \times 10^4 \text{ m}^3$ of water. The tank is 86.56 m long and 38.40 m wide at it's widest. How deep is the tank?
8. An object is found to have a mass of 57.6 g. Find the object's density, given that its volume is 40.25 cm^3 .
9. The density of gold is 19.3 g/cm^3 . What is the volume, in cm^3 , of a sample of gold with a mass of 0.715 kg?