## Chemistry 100

Name:

## Worksheet 1

Complete the following conversions showing all work.
A. One step metric-metric problems

| Work | How many mg in $45.9 \mathrm{~g} ?$ | Answers |
| :---: | :--- | :--- |
| $1 . \quad$ Convert .009987 ml to L. |  |  |
| $2 . \quad 87.90 \mathrm{~g}$ is how many cg? |  |  |
| 3. .035 Kl is equal to how many L? |  |  |
| 5. How many cm is $2345.98 \mathrm{~m} ?$ |  |  |

B. Two step metric-metric problems

| Work | How many mg in $9.26 \mathrm{Kg} ?$ | Answers |
| :---: | :--- | :--- |
| $6 . \quad$ Convert 45.63 ml to cL. |  |  |
| $7 . \quad 6.358 \mathrm{mg}$ is how many cg? |  |  |
| $8 . \quad .035 \mathrm{dl}$ is equal to how many kL? |  |  |
| 9. How many mm is $2345.98 \mathrm{~km} ?$ |  |  |
| 10 |  |  |

C. | Work | English-metric problems |
| :--- | :--- |
| 11. How many Oz. in $45.9 \mathrm{~g} ?$ | Answers |
| 12. Convert .25.3 gal to L. |  |
| 13. 87.90 kg is how many lbs? |  |

| 14. 0.035 l is equal to how many qt.? |  |
| :--- | :--- |
| 15. How many cm is 2345.98 in.? |  |
| D. Temperature conversions | Answers |
| Work 16. How many ${ }^{\circ} \mathrm{C}$. in 45.9 K ? |  |
| 17. Convert 475 K to ${ }^{\circ} \mathrm{C}$. |  |
| 18. How many K is $-255^{\circ} \mathrm{C}$ ? |  |

E. Write down the following measruements

| 19 (a) | 20 (b) | 21 |
| :---: | :---: | :---: |
|  |  |  |
| Write the answer in both cm and mm <br> cm <br> mm | cm mm |  |

E. Density

| 22. What is the density of gold if 24.5 grams of gold has a volume of $1.27 \mathrm{ml} ?$ |  |
| :--- | :--- |
| 23. What is the volume of 245 grams of lead if its density is $11.34 \mathrm{~g} / \mathrm{cc} ?$ |  |
| 24. What is the mass of 45 ml of lead? |  |

