## Planet Holloway websheet 1.1

## Physics Chapter 1

You may print this out and write on it or work on your own paper.

## Metric Conversions.

1. 
$$43.2 \text{ dg} =$$
\_\_\_\_kg

4. 
$$56 \text{ s} = \underline{\hspace{1cm}} \text{ ns}$$

7. 
$$23 \text{ mg} = _{\underline{\text{Gg}}}$$

9. 
$$47 \text{ ns} = \frac{\text{ms}}{10.40,000 \text{ L}} = \frac{\text{kL}}{10.40,000 \text{ kL}}$$

## **Significant Figures**

How many significant figures does each number have?

- 11. 20,000
- 12. 2.0
- 13. 7.012
- 14. 503
- 15. 0.00000756

Give the correct answer using significant figures.

$$18. \ 0.04 \ \text{x} \ 211 =$$

$$19.19 + 23.675 + 0.0004593 =$$

$$20.321.4 + 0.0089 + 672 + 1.0823 + 0.003 =$$

# Trigonometry

#### Solve.

- 21. A 5 ft ladder leans against a wall with the top of the ladder 4 ft above the ground. How far is the ladder from the wall?
- 22. An 8 in pencil is held at an angle so that is casts a 3 in shadow on the table from a directly overhead light. What angle is the pencil making with the table?
- 23. A woman walks forward 22 meters, then turns 90 degrees to the right and walks 64 meters. How far is the woman from her starting point?
- 24. A right triangle measures 40 cm across one side and 17 cm across another side. What is the length of the third side?
- 25. A 1.2 meter pendulum is held at 35 degrees right of center. How far is the bob (the end of the pendulum) vertically from its original position?