

## PRACTICE TEST ON MEASUREMENTS

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

Part 1. Complete the table of quantities below with correct SI Units and symbol.

|   | Quantities   | SI unit | Symbol of Unit |
|---|--------------|---------|----------------|
| 1 | Mass         |         |                |
| 2 | Density      |         |                |
| 3 | Momentum     |         |                |
| 4 | Speed        |         |                |
| 5 | Acceleration |         |                |

Part 2. Write the alternative unit of the following quantities to complete the table below.

|   | Quantities | SI unit | Alternative SI unit |
|---|------------|---------|---------------------|
| 1 | Power      | Watts   |                     |
| 2 | Pressure   | Pascal  |                     |
| 3 | Force      | Newton  |                     |

Part 3. Branches of Physics.

|  |   |  |
|--|---|--|
|  | 1 | It deals with aircraft design and operations.                          |
|  | 2 | It concerns on properties of electric current and magnetism.           |
|  | 3 | It studies relationship between heat energy and other forms of energy. |
|  | 4 | It studies light.  |
|  | 5 | It studies motion without regard on its cause.                         |

Part 4. Calculations. Write the answer on the box provided

1. A man needs 767cm length of rope. What is its measurement in meter?

2. John is 6 feet 4 inches tall. What is his height in inches?

3. A bag of sugar is 8.67 lbs. What is the mass in kilogram?

Part 5. Classify the following quantities into vector and scalar.

Write **upper case S** for scalar and **upper case V** for vector.

|                      |             |                      |                 |                      |             |
|----------------------|-------------|----------------------|-----------------|----------------------|-------------|
| <input type="text"/> | 1. velocity | <input type="text"/> | 3. acceleration | <input type="text"/> | 5. pressure |
| <input type="text"/> | 2. density  | <input type="text"/> | 4. speed        | <input type="text"/> | 6. momentum |

Part 6. Formula Transformation.

1. The formula for distance is  $d = s t$ . Which of the following formula you will use to solve for time?

|                   |                   |           |
|-------------------|-------------------|-----------|
| $t = \frac{d}{s}$ | $t = \frac{s}{d}$ | $t = s d$ |
| A                 | B                 | C         |

Answer

2. Using the formula Force = **mass x acceleration**, calculate the value of mass.

|                   |                   |           |
|-------------------|-------------------|-----------|
| $m = \frac{a}{m}$ | $m = \frac{F}{a}$ | $m = F a$ |
| A                 | B                 | C         |

Answer

Part 7. Understanding graph.

1. You are going to plot a distance vs. time graph. What will you write on the y-axis?

2. When plotting Force against distance, what will you write on the x-axis?