

## Science 10

### More Significant Digits and Scientific Notation Worksheet

Part A: Solve the following mathematical problems so that the answers have the correct number of significant digits.

1)  $334.54 \text{ km} + 198 \text{ km} =$  \_\_\_\_\_

2)  $34.1 \text{ km} / 1.1 \text{ h} =$  \_\_\_\_\_

3)  $2.11 \text{ m} / 34 \text{ s} =$  \_\_\_\_\_

4)  $0.0010 \text{ m} - 0.11 \text{ m} =$  \_\_\_\_\_

5)  $349 \text{ cm} + 1.10 \text{ cm} + 100 \text{ cm} =$  \_\_\_\_\_

6)  $450 \text{ m} / 114 \text{ s} =$  \_\_\_\_\_

7)  $298.01 \text{ km} + 34.112 \text{ km} =$  \_\_\_\_\_

8)  $84 \text{ m/s} \times 31.221 \text{ s} =$  \_\_\_\_\_

9)  $22.4 \text{ m} \times 0.1 \text{ m} =$  \_\_\_\_\_

10)  $465 \text{ km} / 5.21 \text{ h} =$  \_\_\_\_\_

Part B: Convert the following numbers into scientific notation:

1) 3,400 \_\_\_\_\_

5) 45.01 \_\_\_\_\_

2) 0.000023 \_\_\_\_\_

6) 1,000,000 \_\_\_\_\_

3) 101,000 \_\_\_\_\_

7) 0.00671 \_\_\_\_\_

4) 0.010 \_\_\_\_\_

8) 4.50 \_\_\_\_\_

Part C: Rearrange each of the following to solve for the variable in brackets:

1)  $v = d/t$  (d)

6)  $v_2 = v_1 + at$  ( $v_1$ )

2)  $v = d/t$  (t)

7)  $v_1 = v_2 - at$  ( $v_2$ )

3)  $a = v/t$  (t)

8)  $y = x + 3$  (x)

4)  $a = v/t$  (v)

9)  $y = 3x + 7$  (x)

5)  $a = \frac{v_2 - v_1}{t}$  ( $v_1$ )

10)  $2x = y - 10$  (y)

Part D: Convert each of the following to the units stated:

1) 30 s , convert to min \_\_\_\_\_

2) 0.510km, convert to meters \_\_\_\_\_

3) 102km/h , convert to m/s \_\_\_\_\_

4) 34min, convert to hours \_\_\_\_\_

5) 3.5 h , convert to min \_\_\_\_\_

6) 650 m, convert to km \_\_\_\_\_

7) 0.0300 h, convert to s \_\_\_\_\_

8) 5 km/h , convert to m/s \_\_\_\_\_

9) 45 m/s , convert to km/h \_\_\_\_\_

10) 3600s, convert to hours \_\_\_\_\_