

Sept. 7 / 12

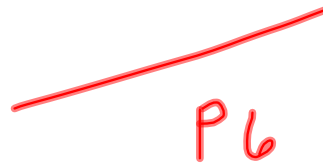
# Pre-Assessment #1

1. What is an observation?

- information that you get through your five senses
- senses: sight, hearing, touch, taste, smell

2. What is an example of a qualitative observation?

- observations that cannot be measured
  - color of a rose
  - fragrance of a flower
  - sharpness of thorns

P6

3. What is an example of a quantitative observation?

- observations that are based on measurements or counting
  - length of a rose's stem
  - the number of petals

  
13

4. The SI system of measurement is used by scientists. What are the seven base units of the SI system?

5. Name five SI prefixes.

6. How many significant digits do the following measurements have?

a) 0.67 kg

b) 1.05 m

c) 3.781 s

d) 19.0 K

e)  $2.010 \times 10^3$  mol

7. Rearrange the equations for the variable in the bracket.

a)  $d = vt$  [v]

b)  $m = \frac{p}{v}$  [p]

c)  $v_f = v_i + at$  [ $v_i$ ]

d)  $v_f = v_i + at$  [a]

e)  $d = v_i t + \frac{1}{2}at^2$  [ $v_i$ ]

f)  $d = v_i t + \frac{1}{2}at^2$  [a]

g)  $d = v_i t + \frac{1}{2}at^2$  [t]



8. Define accuracy.



9. How do you calculate percentage error?