

### Lesson 3 Pre/Post-Test: Spring Scales

Name:

Date:

1. True/False? A spring scale uses a spring to help determine an amount of force.

2. True/False? The stretching of a spring can be used to measure force.

3. Which two springs have the same spring constant? Circle two answers.

- a.) 2 cm/10 g
- b.) 2 cm/20 g
- c.) 1 cm/5 g
- d.) 1 cm/20 g

4. Explain how a spring scale works.

5. If a spring stretches 1 cm for each 5 g of force, how much will it stretch for 25 g of force?

6. What is the spring constant for a spring if 5 grams stretch it 5 cm?

7. The spring constant shows

- a.) the amount of a force.
- b.) the amount that a spring stretches per unit of force.
- c.) the flexibility of a spring.
- d.) the number of coils in a spring.

8. If a force of 5 grams stretches a spring 2 cm, how much will a 10 gram force stretch it?

- a.) 2 cm
- b.) 4 cm
- c.) 6 cm
- d.) 8 cm

9. True/False? All springs have the same spring constant.

10. What does it mean if a spring has a spring constant of 2 cm/1 g?