

Name _____

Date _____

**Science Test on Force, Motion, Surface Texture
and Friction**

Match the definition to the correct word

- a) A push or pull that can change the way an object moves, stop it, or hold it in place
- b) A force that resists motion: it happens when two surfaces come in contact with each other
- c) The way an object feels, for example, smooth, rough or slippery
- d) A sloped surface a surface on an angle
- e) The weight of an object that is being moved
- f) Two forces of equal strength that are acting in opposite directions on an object
- g) Two forces of unequal strength that are acting in opposite directions on an object
- h) The state when the forces acting on an object are balanced
- i) The result of using force to make something move
- j) A bumpy surface

- 1) _____ equilibrium
- 2) _____ balanced forces
- 3) _____ force
- 4) _____ ramp
- 5) _____ friction
- 6) _____ unbalanced forces
- 7) _____ load
- 8) _____ surface texture

Short answer questions

1) Think about skiing or snowboarding. Choose your favourite of the two sports and describe in words or pictures, how force is used to:

a) Start and stop moving

b) Change direction

2) Name three things that can happen when two surfaces come together:

a) _____

b) _____

c) _____

3) Draw three pictures that show how slope, load and surface texture affect the amount of force needed to move. Stickmen are allowed, just make your images clear

Slope	Load	Surface Texture

4) The students of division 17 are having an arm wrestling competition. Explain using the words equilibrium, balanced forces and unbalance forces how one match ends in a tie (no winner) and one match ends in a victory.

Tie _____

Victory _____

5) In our 2 labs this term we needed to control variables to make sure our experiment was focused on one variable alone. In both labs the variable we were testing was the distance our vehicles travelled in cm.

Pick one of the two labs by circling your choice, then describe the variables we needed to control to make our experiment fair.

Skylab

Surface Texture Lab

1 We needed to _____

2 We needed to _____

3 We needed to _____
