

### 8.1 Force

#### 1. Identify the types of force.

a) The force that makes things fall to the ground

b) The force that acts on objects due to gravity

c) The force that acts on the surface of an object when it moves against the surface of another object

d) The force produced by stretching elastic materials

e) The force produced when an object is in contact with a surface

f) The upthrust force that acts on an object floating in a fluid

g) Ski sliding against snow



h) Boat floats in the water

i) A glass falls to the floor

j) Bouncy motion after the initial jump in bungee jumping



**2. State whether the statements below are TRUE or FALSE.**

a) A force is a push or a pull that is applied on an object.

b) A force has magnitude and direction.

c) Our Earth is influenced by the gravitational force of the Sun

d) A vase that is put on a table remains there because it experienced gravitational force and buoyant force in an opposite direction.

e) The weight of an object is the gravitational force on the object.

f) An object that has a mass of 1300 g has a weight of 13N.

**3. Fill in the blanks with the correct answers.**

a) The weight of an item that has a mass of 10 kg is \_\_\_\_\_.

b) A car has a mass of 900 kg. Its weight is \_\_\_\_\_.

c) On Earth, when a scale shows a weight of 360 N, the mass of the item is \_\_\_\_\_.

d) A swimmer who is floating in the water is experiencing a \_\_\_\_\_

force known as \_\_\_\_\_. A \_\_\_\_\_

force will also act on the swimmer from an opposite direction.

e) A force can be measured using \_\_\_\_\_.