

UNIT 5 TEST

FORCES

Name: _____ Date: _____

1. Choose A or B for each.

a) A boy kicks the ball with his foot.

A Contact force

B Non contact force

b) An apple falls from a tree.

A Contact force

B Non contact force

c) A girl slows the dog down by holding to the rope.

A Balanced force

B Unbalanced force

d) A woman uses a shopping cart in the supermarket.

A Push

B Pull

e) A man uses a lawnmower to cut the grass.

A Push

B Pull

2. Weight is a force measured in...

kilograms pounds newtons

3. Choose the correct sentence.

Gravity...

a) only acts through air.

b) acts towards the centre of the Earth.

c) doesn't act on a flying aeroplane.

4. Choose the correct sentence.

When an object isn't moving it means...

- a) the forces acting on it are balanced.
- b) there are no forces acting on it.
- c) gravity is making it still.

5. Where is your mass more?

- a) On the Moon.
- b) On Earth.
- c) It's the same.

6. What is the formula for calculating weight?

- a) mass + gravity
- b) mass x gravity
- c) mass x 1.6

7. Choose the objects a magnet will attract.

a steel paperclip an iron nail a wooden pencil

the same pole of another magnet the opposite pole of another magnet

8. Fill in the blanks with the correct word from the box.

man made without mineral towards non contact
moves shapes magnet natural pull force steel
magnetic field attract

Magnets have a _____ called magnetism. This can be a push or a _____ force. Magnetism is a _____ force because a magnet _____ an object _____ touching it. Some magnets are _____. For example, the _____ magnetite is a natural _____. Most magnets are _____. They are made from iron and _____ and can be different _____. Magnets create a _____ around them. We cannot see these forces but they _____ objects made of iron and steel. We can see the objects moving _____ the magnet.

9. Read about gravity and choose true or false

The Earth has gravity. The Moon and Sun also have gravity. In fact, every object with mass has gravity - even you! So why do we feel the effects of the Earth's gravity, but we don't feel the effects of our own gravity? Well, that's because the Earth is so big. The bigger an object is, the greater its gravitational force. So an object as big as a planet attracts much smaller objects, such as trees, buildings and people. The gravity of these much smaller objects isn't noticeable because the gravity of the planet is so much bigger.

- a) All objects have gravity. True / false
- b) The gravity of the Earth is the same as the gravity of the Moon. True / false
- c) The gravity of small objects is easy to notice. True / false