

- 1 Describe the position of the Candy Shop in relation to the Playground.

The Candy Shop is 400 m west of the Playground.

- 2 Describe the position of the House in relation to the School.

The House is 1000 m east of the School.

- 3 If you were to walk from the school to the Candy Shop, what direction would you have to go?

I would be walking east.

# Answers

1

...Speed is a measure of the distance an object moves in...  
...a given amount of time.....

2

Complete the following table in which data from a swimming race were recorded.

Swimmer	Distance (d) m	Time (t) sec	Speed (d/t) m/min
Swimmer (1)	500	80	6.25 m/min
Swimmer (2)	460	40	11.5 m/min
Swimmer (3)	300	50	6 m/min
Swimmer (4)	200	25	8 m/min

3

Which swimmer won the race?

Swimmer (2).....



push

pull



push

pull



push

pull



push

pull



push

pull

2

Is it easier to pull or push something with a rope?

It is easier to pull something with a rope.

# Answers

1

Friction is a force that two surfaces exert on each other...  
when they rub against each other.

2

Define motion.

Motion is the change in an object's position.

3

Write (T) for true statements and (F) for false statements.

a- The reference point is the starting point we choose to describe the location (position) of an object.

b- To describe an object's motion you don't have to know where the object is.

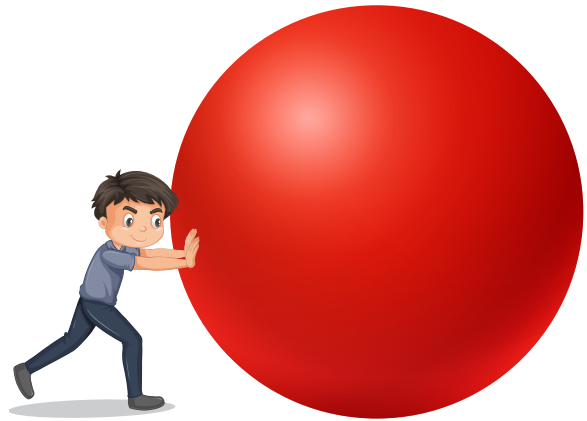
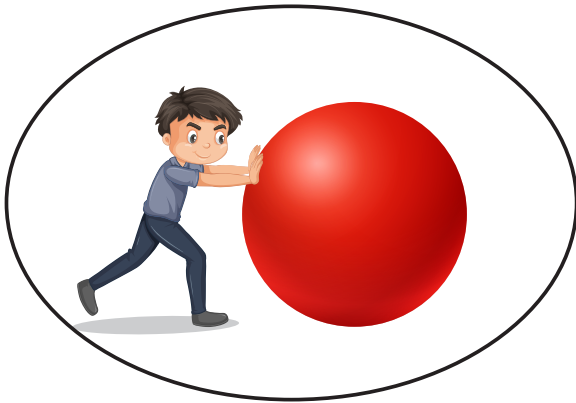
c- We always use the same unit to measure speed.

d- A force is a pull or push.

e- The strength of a force is measured in a unit called "Newton" (N).

f- We use the spring scale to measure force.

g- The smoother the surface, the faster an object would move across it.



Is it easier to push or pull a ball uphill? Why?

It is easier to push a ball downhill because gravity helps.....  
pull objects downwards.....

# Answers

1

Matter is anything that has mass and takes up space.

2

Define mass.

Mass is the amount of matter in an object.

3

Define weight.

Weight is the measure of the pull of gravity on an object.

4

Answer true or false.

a- All objects are attracted toward the center of the planet by the force of the earth's gravity.

T

b- Weight is measured by a summer scale.

F

c- Weight is measured in a unit called Newton (N).

T

d- If you have measured the mass and the volume of an object, you can calculate its density.

T

**1- A snack mixture of raisins, walnuts, and peanuts cannot be separated.**

a- True

☒ b- False

**2**

Which of the following are mixtures?

☒ a- Fruit salad

c- Salt

b- Flour

d- wood

**3**

Which of the following is not a mixture?

a- Flour and sugar

c- Atmosphere

b- Iron filings and charcoal

☒ d- Salt

**4**

How can we separate a mixture of iron filings and sand?

a- Sifting

c- Filtering

☒ b- Magnet

d- Burning

**5**

Select two options that are true about mixtures.

☒ a- Two or more substances mixed together but not chemically combined.

b- Most substance will explode when mixed.

c- Substances in a mixture maintain their own properties.

d- Only liquids can be combined to form mixtures.

# Answers

- 1 Butter melting.
- 2 A glass cracking when heated.
- 3 Water exposed to extreme cold becomes ice.
- 4 Melting a lead bar.
- 5 Burning sugar for caramel.
- 6 Dissolving sugar in water.
- 7 Tearing a piece of paper.
- 8 A metal spoon rusting.
- 9 Frying fish.

P

P

P

P

C

P

P

C

C

- 
- 10 What are chemical and physical changes?

**Physical** change is a change in which no new substances are formed.

**Chemical** change is a change where new substances are produced with properties different from those of the original substances.