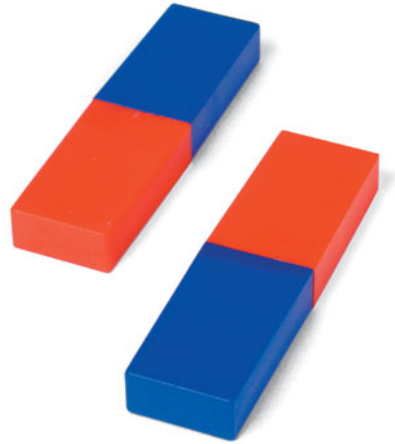
Forces and Magnets



Term 6 Week 1

This week we are revising a topic that you did at the start of Year 3.

First try the quiz then complete a variety of other activities.

Quiz
(18 Questions)

- You will need paper to write your answers on.
- It is multiple choice.

On each slide there is a question and some possible answers. Each answer has a letter. Choose the letter that is above the right answer and write it on a piece of paper.

Some are quite easy, others are a bit harder. If you're not sure, give it your best guess.

1. A force can make something …

A
Start moving

B
Stop moving

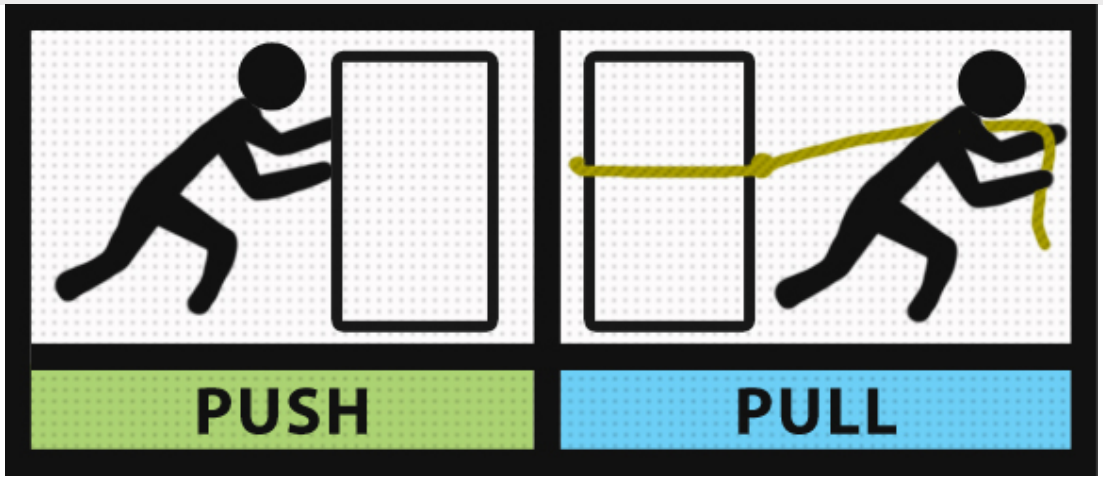
C
Light up

D
Change direction

E
Speed up or slow down

All the answers are true except for one.
Pick the one answer that is false.

2. Most Forces can be described as either pushes or pulls. A good thing to remember is that you



A
Pull towards you and push away

B
Can only pull something that has a rope on it

C
Can hurt people if you push

3. Which picture shows a push?

A

B

C

4. Which picture shows a pull?

A

B

C

5. When you twist or turn something you are

A
Pushing on one side and pulling on the other

B
Working different muscles to usual

C
Trying to spin it off

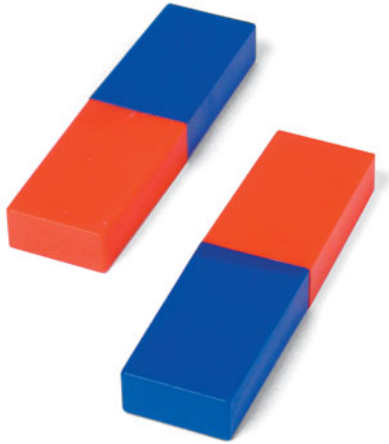
6. It takes force to make a toy car move. Which of these cars would need the most force to start moving?

A
The car on the floor tiles

B
The car on the stones

C
They both need the same amount of force

7. Magnetism is …



A

A force that can only work when it is touching something

B

A force that can work at a distance (without touching)

C

Not a force

8. Some children want to find the strongest magnet by seeing how many paperclips it can hold. They can make it a fair test by …

A

Making sure everyone in the group has a turn

B

Writing down their results carefully

C

Using the same size paperclips for each magnet

9. Which of these items would be attracted to a magnet?

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10. Which one of these items would not be attracted to a magnet?

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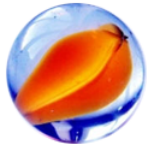
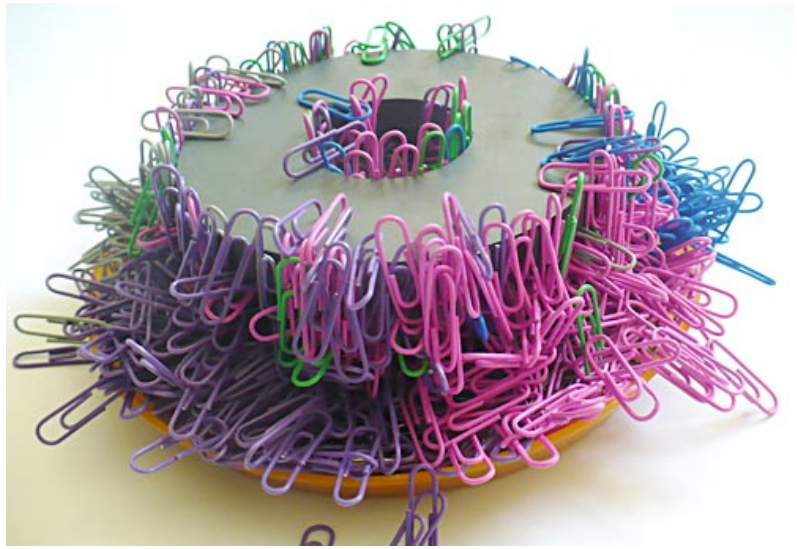


E

11. Magnetic force can …



A
Only work through air

B
Work through air and water

C
Work through solid things as well as air and water

12. Materials that are attracted to magnets are called

A
Attractive materials

B
Magnetic materials

C
Non-magnetic materials

13. Which statement is true?

A
All metals are magnetic

B
Not all metals are magnetic

C
All metals and some other materials are magnetic

14. Which statement is true?

A

All copper coloured coins are magnetic

B

All silver coloured coins are magnetic

C

Some copper and silver coloured coins are magnetic but others are not

15. Magnetic items usually contain …

A
Iron or steel (which is made from iron)

B
Gold or silver

C
Copper or tin

16. Magnets have two sides or ends which are known as …

A
Flags

B
Canes

C
Poles

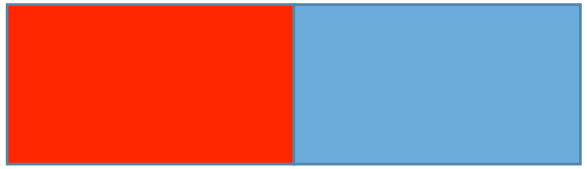
17. Opposite poles …

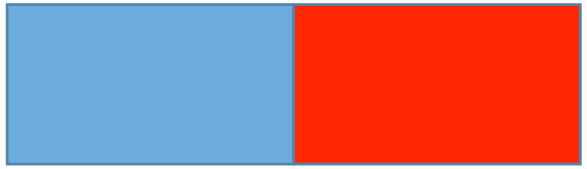
A
Attract

B
Repel

C
Neither attract nor repel

18. Poles that are the same…





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Quiz Answers

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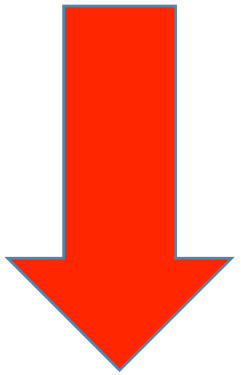

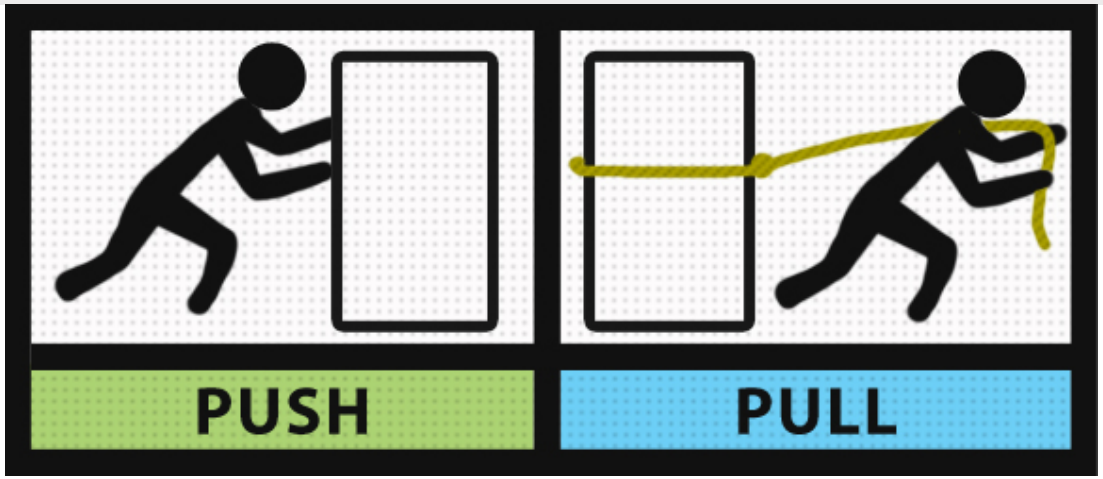

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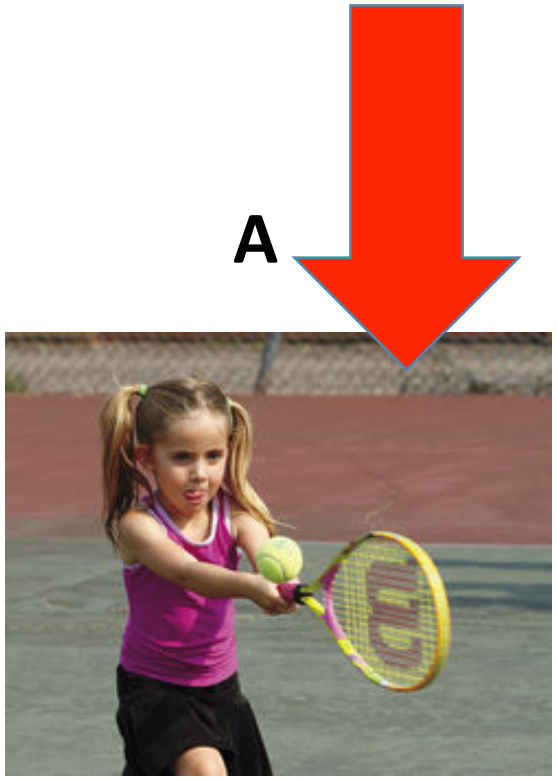

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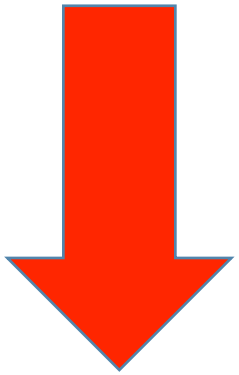

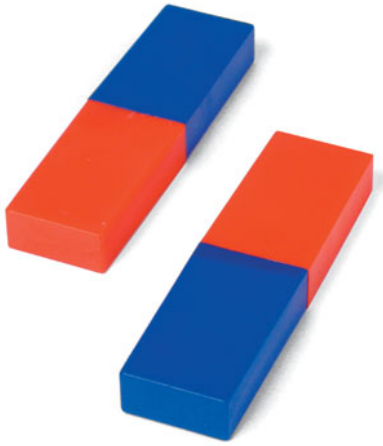

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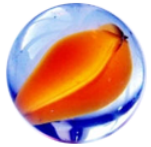

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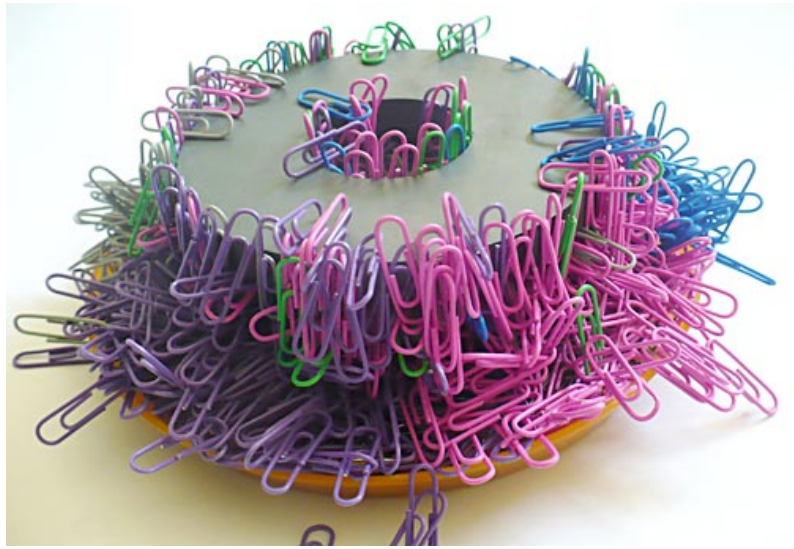

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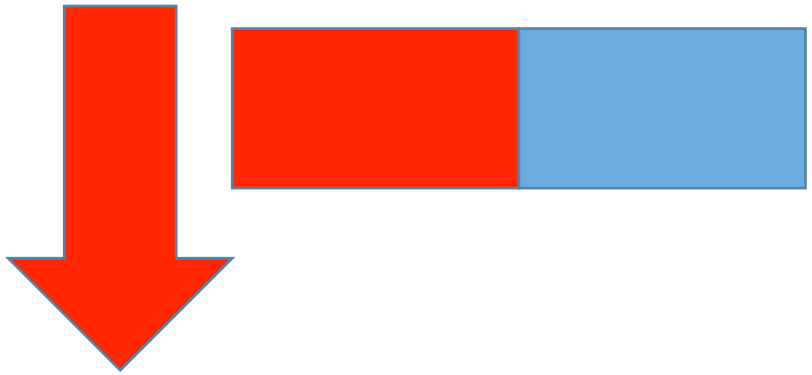

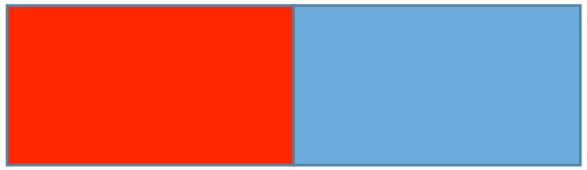

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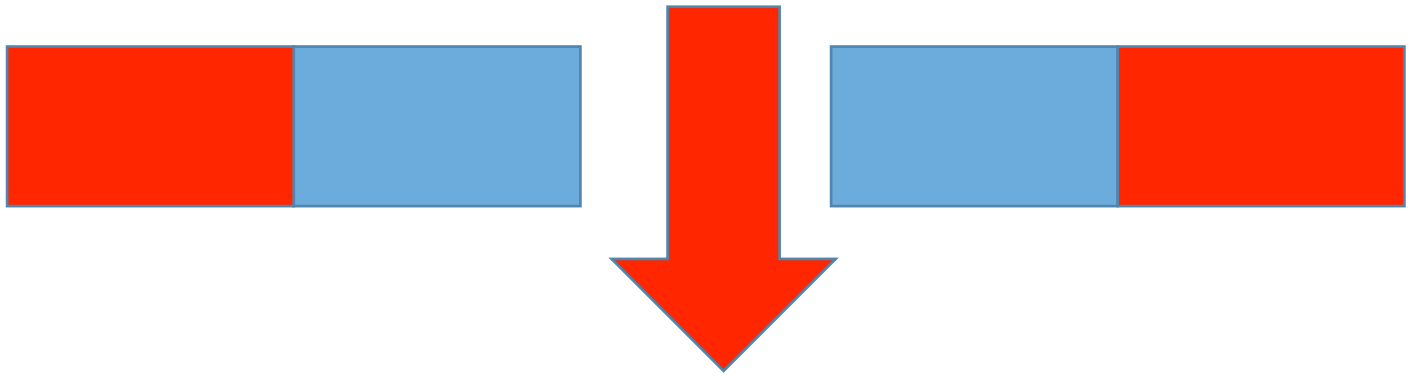

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How did you get on?....

If you need a bit of revision look at these clips from BBC bitesize:

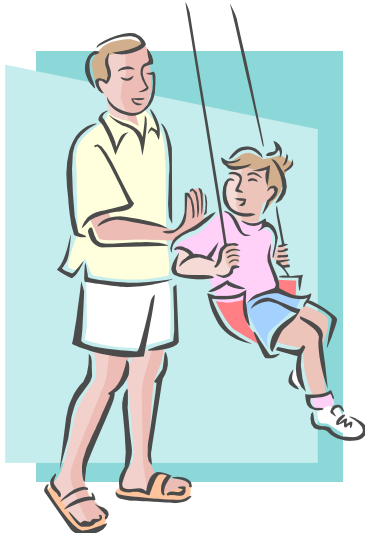
Forces :

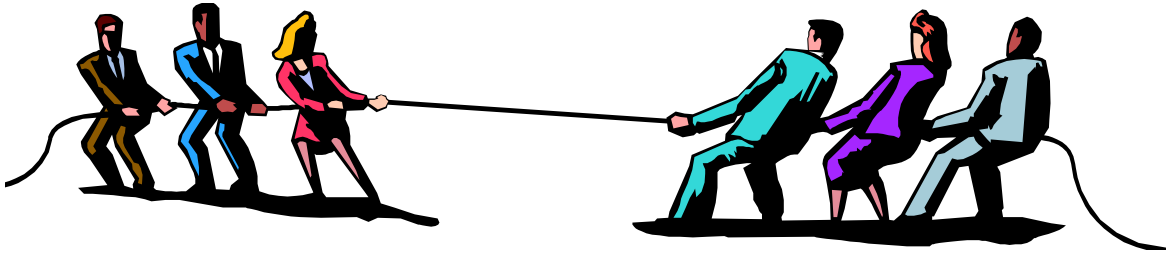
www.bbc.co.uk/bitesize/clips/zch4wxs

Magnets:

www.bbc.co.uk/bitesize/clips/zk9rkqt

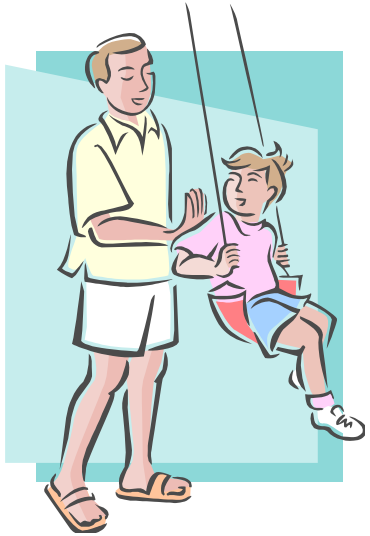
Can you recognise which of these pictures show pulls, pushes or twists?





Answers

twist

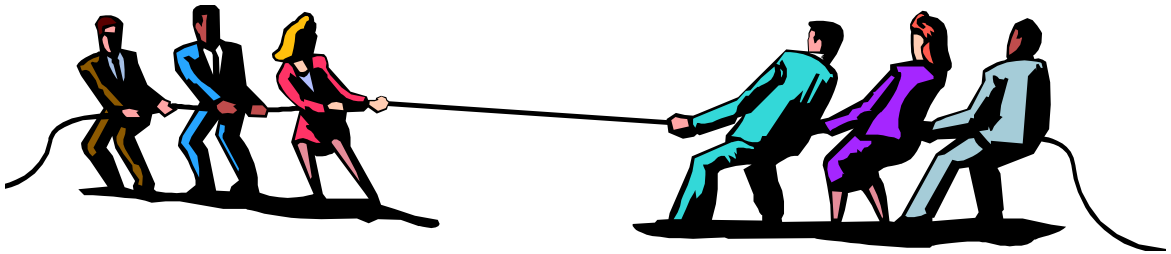


push

pull

push

pull



pull

twist

Final task (you will need paper to draw and write on)

Can you find some objects at home that you can push, pull or twist?

Draw and label some of them.

Extra activity

If you have a magnet at home (maybe a fridge magnet) can you investigate which things in your house are magnetic?....

Can you explain why they are magnetic?...