



# Coleman Primary School

## Year 3 Spring 2 Knowledge Organiser

### Science—Forces and Magnets

#### You already know...

- about some forces for example squash, bend, twist, stretch (Y2)
- what a magnet is if you have seen one at home

#### What you will know..

- \*To know that some forces need contact, but magnets don't.
- \*To know that like poles attract and unlike poles repel each other.
- \*To know which materials are magnetic.
- \*To know that magnets have two poles.
- \*To know the difference between pushes and pulls

### Magnetic and non-magnetic



#### Magnetic

These objects contain iron, nickel or cobalt. Remember, not all metals are magnetic!



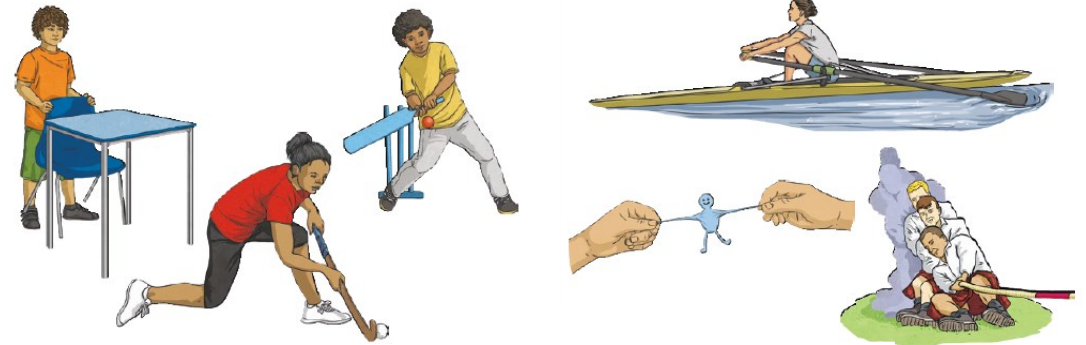
#### Non-magnetic

These objects do not contain iron, nickel or cobalt.

### Scientific Vocabulary: Forces and Magnets

<b>attract:</b> a force which pulls towards	<b>magnetic:</b> an object which is attracted to a magnet
<b>compass:</b> a device that aids navigation by pointing to Earth's North and South poles	<b>magnetic North:</b> the direction of the Earth's magnetic North pole
<b>contact force:</b> a force involving touching eg kicking a ball	<b>non-contact force:</b> a force that does not need to touch eg magnetism
<b>force:</b> a push, pull, twist or turn	<b>non-magnetic:</b> an object which is not attracted to a magnet
<b>iron:</b> a metal that can be made into a magnet	<b>poles:</b> the areas of a magnet where the magnetic force is strongest, called North and South poles
<b>magnet:</b> an object or device that attracts iron or another magnetic material	<b>repel:</b> a force which pushes away

### Pushes and Pulls



**Forces** will change the motion of an object. They will make it start to move, speed up, slow down or stop.

**Pushes and pulls** are forces. Which pictures above are pushes and which are pulls?

### Scientific Skill Progression

In Year 2 you were... Observing closely, using simple equipment; using observations/ideas to suggest answers to questions; gathering/recording data to answer questions

In Year 3 you will be... Making careful observations (taking measurements using standard units); recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables; learning to use straightforward scientific evidence to answer questions or to support findings



## Coleman Primary School Year 3 Summer 1 Knowledge Organiser Science—Forces and Magnets

You already know...

- about some forces for example squash, bend, twist, stretch (Y2)
- what a magnet is if you have seen one at home

You will learn...

- how things move on different surfaces
- how magnets can attract and repel each other
- that magnets attract some materials and not others

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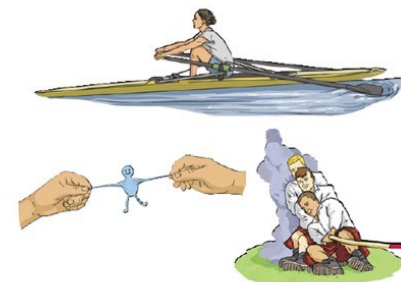
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