## Forces and Magnets: Pushes and Pulls

Aim: To notice that some forces need contact between two objects by identifying the different types of forces acting on objects.  I can identify the forces acting on objects.	Success Criteria: I can name different types of force. I can say when there is a push or a pull acting on an object.	Resources: Lesson Pack
	Key/New Words: Force, push, pull.	Preparation: Forces and Magnets Mind Map - 1 per child
		Pushing and Pulling Activity Sheet - 1 per child
		Forces Cards
		Forces Bingo Sheet - 1 per child

Prior Learning: It will be useful if children have learnt about changing materials by force.

## **Learning Sequence**

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٠٠٥	What Do You Know about Forces? Introduce the unit using the Lesson Presentation. Ask the children to complete the Forces and Magnets Mind Map. Look for children who have a good prior knowledge to inform future planning.		
Whole Class	What Is a Force? Explain forces using the Lesson Presentation, then watch the clip. While watching, ask children to identify examples of pushing or pulling and record. Play the clip again if necessary.		
	Pushes and Pulls: Discuss the examples of pushing and pulling seen in the clip using the information on the Lesson Presentation.		
00	<b>Forces in Action:</b> Ask the children to work in pairs to create a freeze frame of an action to show a pushing or pulling force. They should show their freeze frames to the class, who should try to identify whether their action showed a pushing or pulling force.		
(i)	<b>Identifying Forces:</b> children to complete their <b>Pushing and Pulling Activity Sheet</b> by identifying the forces acting on the objects in the pictures. Look for children who can correctly identify pushing and pulling forces. Some children may need to act out the actions to decide if they are pushes or pulls.		
whole class	<b>Forces Bingo:</b> Give each child a blank <b>Forces Bingo Sheet</b> and play 'Forces Bingo' as described on the <b>Lesson Presentation.</b> The 'Sawing wood' card should prompt some discussion as it is an example of both a pushing and a pulling force.		

## **Task**it

Exploreit: Identify the actions that you carry out throughout the day as pushes or pulls. Perhaps keep a forces diary.

Makeit: Make a Push and Pull Pairs game! Cut out 16 playing card sized cards. On 8, draw pictures of actions. On the other 8,

write 'Push' or 'Pull', making sure they match with one of the pictures. Jumble up the cards and place them face down on

the table. Take turns trying to match a picture with the correct type of force.

Displayit: Take photos of each other acting out an action. Print the photo and add a caption to explain whether the action is an

example of a pushing or a pulling force. Use the photos and captions to create a Forces display.

