Talk about Forces

To identify forces acting on objects.

Read the story together. Highlight or underline examples of forces in the story. Then, in the second column, briefly explain the forces that are being applied in each example. The first one has been done for you.

The magician reached inside her magic box and lifted up a gigantic magic wand high into the air.	The magician's force is lifting it up and gravity is pulling it down to Earth.
She pushed her very heavy magic box along the wooden floor so that it was by the side of the stage.	
Next, she juggled with silk handkerchiefs. After she threw them into the air, they fell gently downwards for her to catch.	
After, she lifted a robot penguin out of the box. She held it high in the air.	
There was a screen behind the magician and she pushed the screen to one side. Behind the screen was a paddling pool. The magician placed the penguin into the water and it started to swim a length of the pool.	
The children laughed and cheered, although they weren't sure what was magical about the robot swimming in the pool! The magician ended her show by popping a big party popper. The popper shot long strips of colourful paper into the air, which then fell softly to the ground.	



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The magician reached inside her magic box and lifted up a gigantic magic wand high into the air.	The magician's force is lifting it up and gravity is pulling it down to Earth.
She <u>pushed her very heavy magic box along</u> <u>the wooden floor</u> so that it was by the side of the stage.	The magician's force is pushing the magic box and friction is pushing against the box where the floor and the box make contact, slowing down the movement.
Next, she juggled with silk handkerchiefs. After she <u>threw them into the air, they fell</u> <u>gently downwards</u> for her to catch.	The magician's force is throwing them into the air. Gravity is pulling the silk scarves down and air resistance is pushing them upwards and slowing them down.
After, <u>she lifted a robot penguin out of the</u> <u>box. She held it high in the air</u> .	The magician's force is lifting it up and gravity is pulling it down to Earth.
There was a screen behind the magician and <u>she pushed the screen to one side</u> . Behind the screen was a paddling pool. The magician placed the penguin into the water and <u>it</u> <u>started to swim a length of the pool</u> .	The magician's force is pushing the screen and friction is pushing against the screen where the floor and the screen make contact, slowing down the movement.
	The penguin's force is pushing it forwards and water resistance is pushing against it.
The children laughed and cheered, although they weren't sure what was magical about the robot swimming in the pool! The magician ended her show by <u>popping a big</u> <u>party popper. The popper shot long strips of</u> <u>colourful paper into the air, which then fell</u> <u>softly to the ground</u> .	The force of the party popper shoots the pieces of paper into the air and then gravity pulls them down. They go down slowly because air resistance pushes up against them.

