How forces can be exerted by one object on another...

identify how forces can be exerted by one object on another and investigate the effect of frictional, gravitational and magnetic forces on the motion of objects

Learning intention

- identify how forces can be exerted by one object on another and investigate the effect of frictional, gravitational and magnetic forces on the motion of objects

Teach and model

- exploring the effect of magnets on other magnets and how magnetic forces can pull objects from a distance
- exploring the positive and negative effects of friction on their everyday experiences, such as how friction causes objects to slow down and stop
- recognising that gravity is the force that pulls all objects to towards the centre of Earth and that gravitational force acts on an object regardless of whether it is moving or...

Check understanding

- Explain the main idea in how forces can be exerted by one object on another... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.