Year 3 Forces and magnets Physics (Autumn 1)

Key Knowledge

Magnets have north and south poles. When two magnets are close, they create **pushing or pulling forces** on one another.

* **Same poles repel**
* **Different poles attract**

Magnetic poles

What is a ‘force’?

A force is a ‘push’ or a ‘pull’. Some forces need to come into contact whereas other do not (like magnets). Forces can make things move, change shape or change direction. For example, kicking a ball is a push force.







Some surfaces are easier to slide over than others. The force that stops the sliding is called friction. **Smooth surfaces are easier to slide over than rougher surfaces**.

Friction

Key Vocabulary

|  |  |
| --- | --- |
| force | **A force** is a push or pull on an object.  |
| friction | **Friction** is a force between two surfaces that are sliding, or trying to slide, across each other. |
| magnet | A magnet is an object (usually metal) that is made of materials that has magnetism.  |
| magnetism | **Magnetism** is a force experienced by certain metals. It can make the metal repel or attract.  |
| attract and repel | When magnets attract they pull together; when they repel, they push away from each other.  |