Saint Elizabeth's Knowledge Mat

Year: Three	Subject: SCIENCE	Topic: Forces and Magnets.

1. What I should already know:

Rec – Talks about why things happen and how things work.

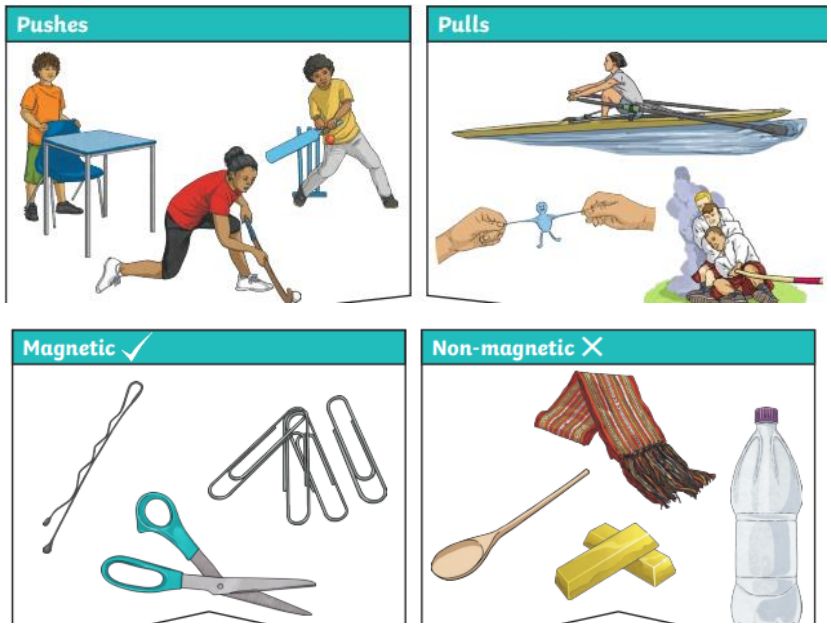
-Looks closely at similarities, differences, patterns, and change.

-To know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another.

2. What I am going to learn:

- To compare how things move on different surfaces.
- Some forces need contact between 2 objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials.
- Describe magnets as having 2 poles.
- Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.

3. Diagram / picture / quotation:



4. Important vocabulary and facts:

Key Vocabulary	
forces	Pushes or pulls.
friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.
surface	The top layer of something.

magnet	An object which produces a magnetic force that pulls certain objects towards it.
magnetic	Objects which are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt metals are magnetic.

magnetic field	The area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.
poles	North and south poles are found at different ends of a magnet.
repel	Repulsion is a force that pushes objects away. For example, when a north pole is placed near the north pole of another magnet, the two poles repel (push away from each other).
attract	Attraction is a force that pulls objects together. For example, when a north pole is placed near the south pole of another magnet, the two poles attract (pull together).

5. Resources and skills to help me learn.

Have a look around your home. Can you see materials which you think are magnetic and those which are not? What forces do you use to open a cupboard or close the fridge?