Forces and Magnets

Reception

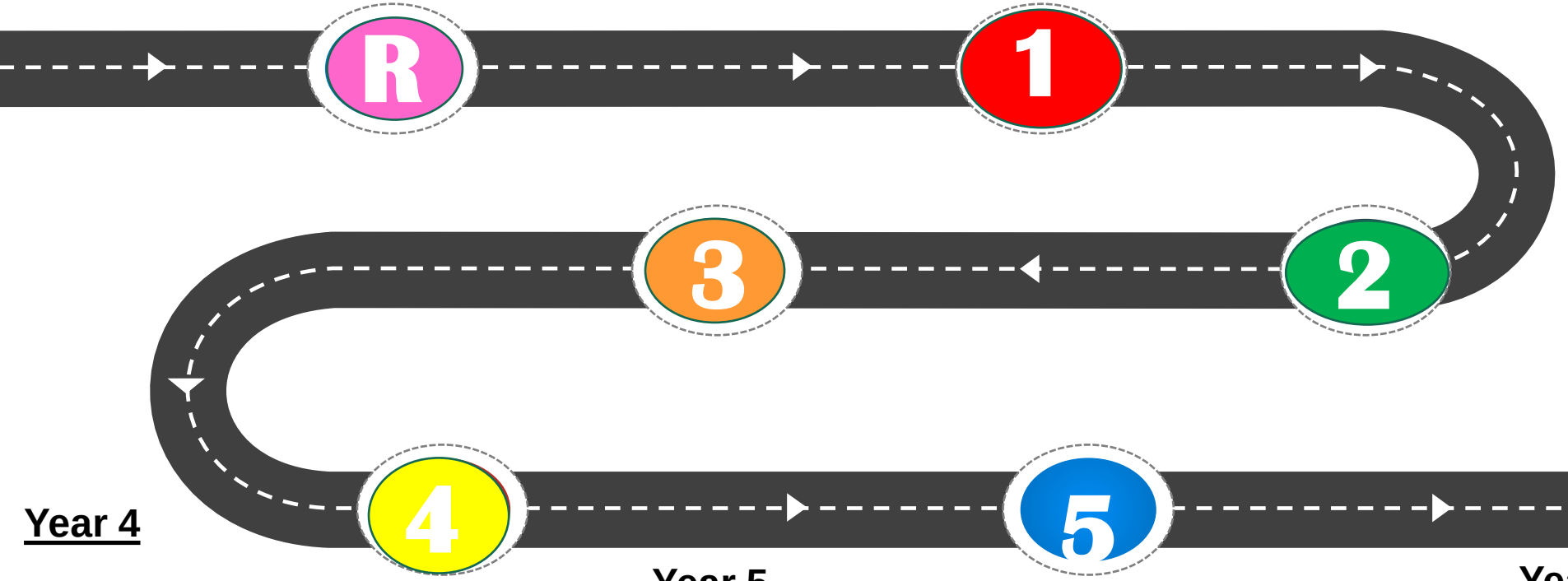
- magnets investigation station for exploring, sort objects that are magnetic and non magnetic, explore the idea of gravity/no gravity in space
- mini pull and go car investigation station.
- **Possible Big Question: How does the car move?**

Year 1

- No explicit focus in this year group, however this can be added in addition to what is already taught.

Year 2

- No explicit focus in this year group, however this can be added in addition to what is already taught.



Year 3

- Compare how things move on different surfaces
- Notice that some forces need contact between two 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 two poles
- Predict whether two magnets will attract or repel each other, depending on which poles are facing

Possible Big Question: How does a compass work?

Year 4

- No explicit focus in this year group, however this can be added in addition to what is already taught.

Year 5

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect

Possible Big Question: How do submarines sink if they are full of air?

Year 6

- No explicit focus in this year group, however this can be added in addition to what is already taught.