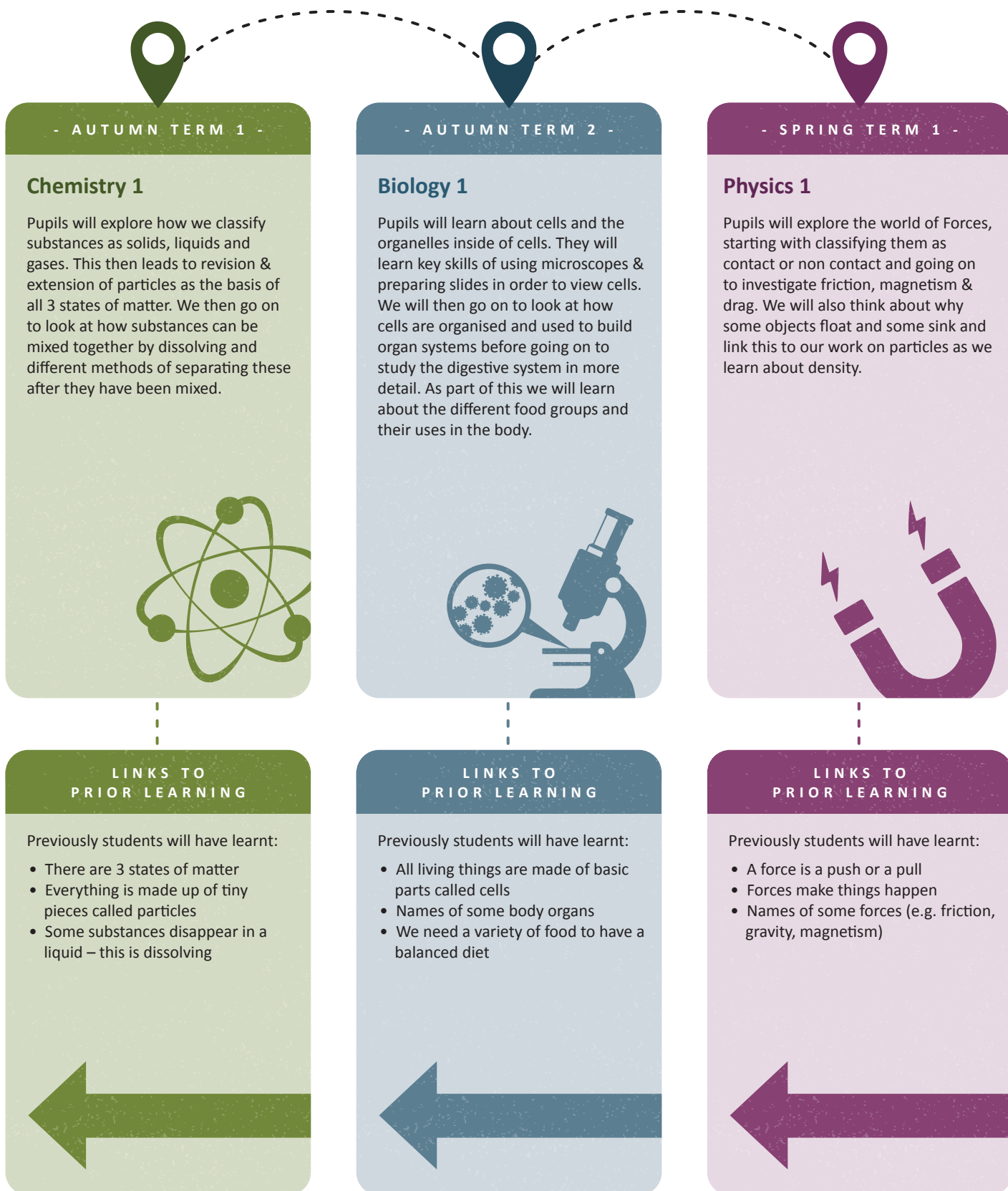




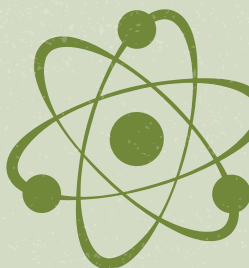
The Hive: Science Learning Map



- AUTUMN TERM 1 -

Chemistry 1

Pupils will explore how we classify substances as solids, liquids and gases. This then leads to revision & extension of particles as the basis of all 3 states of matter. We then go on to look at how substances can be mixed together by dissolving and different methods of separating these after they have been mixed.



LINKS TO PRIOR LEARNING

Previously students will have learnt:

- There are 3 states of matter
- Everything is made up of tiny pieces called particles
- Some substances disappear in a liquid – this is dissolving



- AUTUMN TERM 2 -

Biology 1

Pupils will learn about cells and the organelles inside of cells. They will learn key skills of using microscopes & preparing slides in order to view cells. We will then go on to look at how cells are organised and used to build organ systems before going on to study the digestive system in more detail. As part of this we will learn about the different food groups and their uses in the body.



LINKS TO PRIOR LEARNING

Previously students will have learnt:

- All living things are made of basic parts called cells
- Names of some body organs
- We need a variety of food to have a balanced diet



- SPRING TERM 1 -

Physics 1

Pupils will explore the world of Forces, starting with classifying them as contact or non contact and going on to investigate friction, magnetism & drag. We will also think about why some objects float and some sink and link this to our work on particles as we learn about density.



LINKS TO PRIOR LEARNING

Previously students will have learnt:

- A force is a push or a pull
- Forces make things happen
- Names of some forces (e.g. friction, gravity, magnetism)





The Hive: Science Learning Map



- SPRING TERM 2 -

Chemistry 2

Pupils will investigate acids & alkalis and how knowing about them can apply to our everyday life. They will learn about some elements of the periodic table and discover the differences between metals & non-metals.



- SUMMER TERM 1 -

Physics 2

Pupils will learn about the 8 stores of Energy and how it can be transferred from one store to another. They will do an investigation into where energy is lost and will look at how we can use a variety of different stores of energy to create electricity. This will then lead to pupils learning about electrical circuits.



- SUMMER TERM 2 -

Biology 2

Pupils will learn about Habitats, food chains & webs and how different organisms are adapted to life in different places. As part of this we are hoping to investigate a number of animals further, linking with some of the animals that are at Twycross Zoo.



LINKS TO PRIOR LEARNING

Previously students will have learnt:

- Everything is made of atoms
- Metals & non-metals are used for different purposes



LINKS TO PRIOR LEARNING

Previously students will have learnt:

- Basic electrical circuits
- How electricity can be generated



LINKS TO PRIOR LEARNING

Previously students will have learnt:

- Food chains show what eats what in a habitat
- Animals have special features to help them survive where they live

