

# School Curriculum Subject Guide

## Science

(last updated in June 2016)

The guide has taken into consideration the requirements and components of the National Curriculum, National Skills Profile, Equals Access Curriculum, Foundation Stage Curriculum along with the accreditation schemes in use at St. Piers.

The National Curriculum identifies a number of key areas and strands that need to be developed with regard to Science. These are:

- Scientific enquiry/working scientifically
- Life Process and Living Things/animals including humans
- Materials and their Properties/everyday materials/use of everyday materials
- Physical Processes/seasonal changes

These underpin the development of Science at Young Epilepsy.

The National Curriculum also places a great deal of emphasis on the ability of the students to apply their knowledge, skills and understanding to a range of different experiences, focussing on practical tasks, real life situations and investigations.

The nature and individual needs of the students at Young Epilepsy mean the development and application of science to real life situations feature highly in the teaching of Science.

### Aims

- To engage pupils in purposeful awareness and observation of the world around them
- To help the students to understand the world in which they live and their place in it
- To develop an understanding of the present living world, it's past and future
- To explore and investigate the natural and man-made world (this may be experienced through a wide spectrum of activities)
- To join in practical tasks involving the skills of doing and thinking
- To develop an understanding of the concept of cause and effect
- To increase the breadth and depth of their experience, knowledge and understanding
- Develop the skills for scientific enquiry

## Identified outcomes

All students will:

- Build on experiences, explorations and investigations
- Develop their understanding of the world by using their senses, observing, exploring, taking part in investigations
- Gain a greater awareness of the world around them
- Acquire concepts through as many experiences as possible involving sensory, verbal, written and practical tasks

Most students will:

- Develop further skills, knowledge and understanding in most aspects of the subject
- Become familiar with and use some scientific language
- Be aware that their actions have consequences
- Collect evidence for themselves and show a willingness to work with others, becoming familiar with some resources
- Record their results and communicate what they have done using individual student-appropriate techniques
- Link their knowledge to their everyday lives
- Reason logically and use skills to investigate similarities and differences, patterns and change
- Ask questions about why things happen and how things work

Some students will:

- Record, evaluate and communicate evidence using individual student-appropriate techniques
- Answer scientific questions using scientific vocabulary
- Test and investigate independently
- Draw charts and diagrams to communicate their ideas
- Draw conclusions from their data
- Consider whether their tests are fair or unfair
- Compare and recognise significant differences
- Interpret their results and communicate their findings
- Select their resources and apply their knowledge
- Decide, quantify and measure resources precisely
- Work on abstract understanding