



# St Benedict's Catholic School

*The Catholic Secondary School for West Suffolk*

## SCIENCE CURRICULUM GUIDE 2016

### Year 7 Autumn

Students will start their Key Stage 3 Science course. This is delivered by two teachers who deliver two separate units alongside each other. All the units are assessed at a mid-point and at the end of the unit so that students can get a measure of how they are progressing against the National Curriculum levels. The units are as follows:

#### **Biology 1 Life and living processes**

Using a microscope  
Studying cells  
Cells, tissues and organs  
Fertilisation and conception  
Reproduction in flowering plants  
A balanced diet  
Do I have enough energy?  
Breathing  
A healthy heart  
Measure your pulse do you know if you are fit?

#### **Chemistry 1 particles and materials**

Hazard warning signs  
The Bunsen burner  
Burning  
Acids, alkalis and indicators  
Neutralisation  
Particles  
Our watery world  
Spreading out  
Chemical reactions  
Reactions running backwards  
Separating techniques

#### **Homework**

Students can expect to be set one piece of homework per week by each of their science teachers. The quantity & style of the homework is likely to suit the ability of the science set that they are in.

Activities might include

- a set of questions to improve or check understanding of work covered in class
- an extended research activity on a topic covered in class.
- writing up on an experiment performed in the laboratory
- learning key definitions for a short test

### Year 7 Spring

Students will continue with their Key Stage 3 Science course. This is delivered by two teachers who deliver two separate units alongside each other. All the units are assessed at a mid-point and at the end of the unit so that students can get a measure of how they are progressing against the National Curriculum levels. The units delivered in the Spring term are as follows:

## **Biology 2 Interdependence**

How do we classify

The five Kingdoms

Plants

Are leaves bigger in the shade?

What conditions do animals prefer?

Food Chains and webs

Food chains and DDT

Predators

Population models

Recycling by rotter's

Populations

## **Physics 1 Energy**

Types of energy

Energy changes

Fuels

Conductors and insulators

Circuits

Power Stations

Renewable energy

Heat.

## **Homework**

Students can expect to be set one homework per week by each of their science teachers. The quantity and style of the homework is likely to suit the ability of the science set that they are in.

Activities might include

- a set of questions to improve or check understanding of work covered in class.
- an extended research activity on an application of a topic covered in class writing up an experiment performed in the laboratory
- learning key definitions for a short test

## **Year 7 Summer**

Students will continue with their Key Stage 3 Science course. This is delivered by two teachers who deliver two separate units alongside each other. All the units are assessed at a mid-point and at the end of the unit so that students can get a measure of how they are progressing against the National Curriculum levels.

The units delivered in the Summer term are as follows:

### **C2 Geology**

Looking at Rocks

Using rocks

Weathering rocks

Rocks and Heat

Fossil past

How fossil fuels are made

Finding fossil fuels

Studying sedimentary rocks

More about sediments

Theories about the earth

Mountains and folds

Metamorphic rocks

Crystals in igneous rocks

The rock cycle

## **P2 Forces**

Forces

Speed

Friction and Air resistance

Magnetism

Electromagnetism

Day, night and the seasons

Solar System.

## **Homework**

Students can expect to be set one homework per week by each of their science teachers. The quantity and style of the homework is likely to suit the ability of the science set that they are in.

Activities might include

- a set of questions to improve or check understanding of work covered in class.
- an extended research activity on an application of a topic covered in class writing up an experiment performed in the laboratory
- learning key definitions for a short test