

# Objectives Summer Term 2010

## Science

### Electricity

- that a circuit needs a power source
- that a complete circuit is needed for a device to work
- that circuits powered by batteries can be used for investigation and experiment, appliances connected to the mains must not
- that some materials are better conductors of electricity than others
- how to find out which materials allow electricity to pass through them
- to use results to draw conclusions about which materials conduct electricity
- that a switch can be used to make or break a circuit to turn things on or off (using both batteries or mains)
- to make predictions about the effect of including additional batteries in a circuit
- that care needs to be taken when components in a circuit are changed to ensure bulbs/motors do not burn out
- how to change the brightness of bulbs and speed of a motor in a circuit
- to make suggestions about what can be investigated and predictions about what will happen
- to plan to change one factor and keep others constant
- to make comparisons indicating whether the results support the prediction made

### Habitats – Local and Rainforests

- to identify different types of habitat
- that different animals are found in different habitats
- to make predictions of organisms that will be found in a habitat
- to observe the conditions in a local habitat and make a record of the animals found
- that animals are suited to the environment in which they are found
- to group organisms according to observable features
- to use keys to identify local plants or animals
- to pose questions about organisms and the habitat in which they live and make predictions
- to decide what evidence to collect and to design a fair test
- to make reliable observations of organisms
- to indicate whether their prediction was valid and to explain findings in scientific terms
- to identify the food sources of different animals in different habitats
- to identify the structure of a food chain in a specific habitat
- that animals are suited to the habitat in which they are

### Sex Education

- that humans and other animals can produce offspring and that these offspring grow into adults which in turn produce young
- that human young are dependent on adults for a relatively long period
- that if living things did not reproduce they would eventually die out
- about the main stages of the human life cycle

## **Geography – Improving the Local Environment and contrasting with rainforests**

- to ask and respond to geographical questions
- to recognise patterns
- to collect and record evidence to answer questions
- use geographical fieldwork skills
- to use ICT to present findings
- understand how people affect the environment
- understand how and why people seek to manage and sustain their environment
- to investigate places

## **Design Technology – Creating Burglar or other alarms**

- what alarm systems are used for
- never to use mains electricity in their work
- the ways in which different types of switches can be activated
- that actions can be made to occur as a direct result of other actions
- how different switches work
- about possible output warning devices
- how to use a control program
- how to generate ideas, considering the purposes for which they are designing
- how to explore, develop and communicate aspects of their design by modelling their ideas in a variety of ways
- how to consider reliability when developing proposals
- how electrical circuits can be used to achieve functioning results
- how to control their alarm using a control box/program
- how to evaluate their products carrying out appropriate tests

## **Art – Landscapes and Places**

- to collect visual and other information to help them develop their ideas about the environment
- to explore ideas for different purposes
- to select and record from first-hand observation of the environment
- to compare ideas, methods and approaches in others' work
- about materials and processes and how these can be matched to ideas and intentions
- to reflect on their work in progress and adapt it according to their own ideas
- to use a variety of methods and approaches to communicate observations, ideas and feelings in a painting
- to compare ideas, methods and approaches in their own and others' work and say what they think and feel about them
- to describe how they might develop their work further

## RE

### **Famous Christian figures and how Christians believe they should live**

- that Christians believe that all people are neighbours to be loved as they love themselves
- that stories can be used to teach something beyond their face value
- that we all make decisions about how we will live
- that we make our own choices based upon our beliefs and values
- Understand some ways in which Christians interpret the words of Jesus about loving their neighbour
- that the teaching of Jesus can be applied to different life experiences
- that Christians believe they should treat others as they would want to be treated
- that Jesus taught that people should forgive one another as an example of loving others
- that there are benefits to forgiving others as well as difficulties
- how to use the Bible and explore meanings contained in stories
- That examples from the lives of some Christians can inspire others to live in the same way

### **Hindu belief**

- the meaning of the aum symbol and its significance for Hindus
- about some aspects of Hindu beliefs in God
- about the Hindu idea of God in many forms
- that shrines are special places in Hindu homes
- about some of the ways that Hindus show devotion to God
- what 'puja' means
- that actions in worship often have symbolic meanings
- that some of the activities in worship have parallels in their own lives
- about worship through the elements, rituals and artefacts that are involved in Hindu worship
- that religious beliefs, ideas and feelings can be expressed in a variety of forms

### **Music – Sing Up! Programme**

- about breathing, dynamics and accuracy of pitch
- how to improve tone production and use diction and other vocal techniques, eg legato and staccato
- about pulse, rhythm and metre
- about phrase and other musical structures
- to extend their control and understanding of pitch
- how to make expressive use of elements and techniques and develop their performances

## PSHE

Relationships

Changes

Sex Education

## **PE**

Athletics

Cricket and rounders skills

Street dance

Cross-country