

TREASURE HUNTING

We will learn about how instructions can be given and used for different purposes.

We learn how to use Bee Bots and learn how to correct mistakes. This unit lays the foundations for the basics of programming.

Year 1
Autumn Term
COMPUTING

Background information

Are your children excited by the prospect of hunting for buried treasure? Do they enjoy reading adventure stories? In this unit, the children will instruct a programmable toy (a Bee Bot) to move around a map to find buried treasure. They will start by inputting instructions one at a time and progress to programming short sequences of instructions. This unit will also embed the mathematics skills of position and direction.

Knowledge and Understanding

In this unit pupils will learn...

- To understand that a programmable toy can be controlled by inputting a sequence of instructions
- To develop and record step-by-step instructions and sequences of instructions to control a programmable toy
- To understand that sequences of instructions have a predictable outcome
- To recognise that household objects are controlled by instructions
- About e-safety and the hazards of working with electrically powered appliances

Enquiry skills and Key concepts

- Ask questions about how things work and suggest ways in which things work
- Follow a set of instructions – oral and written
- Invent a set of instructions and communicate them in different ways
- Predict, plan and make choices about how to make things happen and explain how they did it.
- Suggest alternative ways in which instructions can be given to get to the same outcome.

Key Vocabulary:

Electric - an important form of energy that can be used to power things

Battery - A battery is a sort of container that stores energy until it is needed.

Charge - to put electricity into a battery so that a machine or device will run.

Robot – a machine that is programmed by humans to follow instructions to carry out tasks

Bee bot - an exciting robot designed specifically for use by young children.

This colourful, easy-to-operate – a perfect tool for teaching children sequencing, estimation, problem-solving, and just having fun!

Instruction - a direction or order.

Program - a series of instructions to control the operation of a computer, robot or other machine.

Route - a way or pathway taken in getting from a starting point to a destination or finishing point

Direction - a pathway along which someone or something moves

Turn - move in a circular direction wholly or partly round a point