



The Mall School

Curriculum Guide

Computing – Autumn Term

Year 6

Teachers: Ms Susan Warrington
Lessons: 1 x 60 min
Homework: N/A

Introduction:

*National Curriculum Program of Study
Sequencing and control using flowol.*

Pupils will learn to create simple flow diagrams to control simple output devices. They will learn more about the terms output/input and to use flow diagrams for example to show correct sequence of traffic lights. To introduce students to physical computing; To give students the skills and knowledge to use computers to affect the physical world and to sense the physical world and to give opportunities for students to use these skills and knowledge in practical computing projects.

Mimic Traffic Lights using Flowol

To know term output/input and to use flow diagrams for example to show correct sequence of traffic lights; use the Flowol interface to mimic the physical world. Use the three main shapes to create data flow diagrams and what they mean (action **Parallelogram**, delay **rectangle** and decision **diamond**)

Introduction to the Raspberry Pi

Physical Computing with Raspberry Pi

How to identify GPIO pins on a Raspberry Pi, and what the GPIO pins are used for; basic knowledge of different types of components; difference between inputs and outputs; connecting an LED with and without a breadboard; connecting a switch with and without a breadboard; controlling an LED in ScratchGPIO; controlling a switch in ScratchGPIO.