

Rationale behind the Perform, Plan, Program Pi Guides

Introduction

- For teachers to plan and teach from (not to give to students)
- PERFORM the process; then PLAN it out; finally PROGRAM the code.
- Linked to Computing Programme of Study
- Linked to Progression Pathways
- Main Computer Science concepts highlighted
- They are not step by step instructions
- Provide some questions you could ask students
- Provide some extension activities for students

Perform

- Kinaesthetic
- Gets concepts over
- Computational Thinking

Plan

- Create flow diagram and/or pseudocode
- Language independent
- Highlights potential issues

Hardware Setup

- Details equipment needed
- Outlines a method
- Provides a diagram

Program

- Sample code for Scratch 1.4 using Scratch GPIO
- Sample code for Python 3
- Code is shown for teachers use don't show students let them work it out

Extension Tasks

- Questions and tasks which could extend student's learning

Links

- [Computing Programmes of Study](#)
- [Computing At School \(CAS\) Progression Pathways](#)
- [Computer Science Jargon explanations](#)
 - [Junior Computer Science](#)
 - [Barefoot Computing](#)
 - [Computing ITT & CPD](#)
- [Raspberry Pi : Raspbian distro](#)
- [Scratch 1.4 : Scratch GPIO installation \(installed in latest Raspbian image\)](#)
- [Python 3 : GPIO installation \(installed in latest Raspbian image\)](#)