

Leintwardine Endowed CE Primary School Learning Journey Itinerary

‘Letting Our Light Shine’

SUBJECT : Computing

YEAR : B

TERM : Spring 2

YEAR GROUPS : 1/2

Key Question 1: How can computers help us to create and use pictograms?

Key Question 2: How can we use a computer to guide a turtle through a maze?

Previous Knowledge – We would expect children to already be able to:

Have used iPads before.

Log onto Purplemash

Know that it is important to stay safe online (Internet safety days)

Know that computers follow instructions (Lego builders unit)

Have experienced pictograms in maths (Y2)

Used a computer generated pictogram (Questioning Unit)

END OF UNIT OBJECTIVES

Some children will not yet have met what is expected and will show that they are **emerging** because they can:

With support, organise a limited set of data into a physical pictogram and a virtual pictogram

With support, use this data to answer given questions.

Working as a group, create, store, retrieve and share their pictograms

Most children will show that they have reached the **expected** level because they can:

Collate and organise class data into a physical pictogram and a virtual pictogram
Interrogate this data to answer given questions.
Create, store, retrieve and share their own pictograms

Save their pictograms, using a memorable file name, to their own personal space on Purple Mash and understand that this can be retrieved later

Represent simple collected data in an appropriate pictogram by using 2Count Use 2Count to group collated data into pictorial representations

Some children will have gone beyond the expected level and will show that they are **exceeding** because they can:

Collate and organise class data into a physical pictogram and a virtual pictogram
Interrogate this data to present statements about the data e.g. ‘The second most popular form of transport was...’.

Independently, create, store, retrieve and share their own pictograms

Use the buttons to move their character purposefully. Move one step at a time towards the goal rather than anticipating several steps.

Start to be able to work out why their program doesn’t work as they expect and know that it is due to the instructions which they are inputting rather than a fault with the computer understanding the instructions.

Explain the possible ways to make their turtle move with support.

‘Read’ the code one line at a time but might not be able to envisage the bigger picture of the overall effect of the program.

Use the buttons to move their character purposefully.

Plan their moves several steps at a time towards the goal rather than one step at a time.

Make logical attempts to try to fix code rather than attributing it to a fault with the computer understanding the instructions.

Explain the possible ways to make their turtle move in the different levels of 2Go.

‘Read’ the code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program.

Demonstrate an ability to successfully use diagonal direction keys combined with number pad to refine their solution for solving a problem

Use the ‘list’ feature in 2Go to generate an algorithm to solve a given problem.

Test their instructions until they finally make an algorithm which works Use alternative algorithms to achieve the same outcomes,

beginning to understand refinement of instruction

Plan their moves several steps at a time towards the goal even reaching the goal in one ‘run’ of the program Challenge themselves by creating their own complex challenges. Intuitively debug their code knowing that any unexpected outcome is down to the code and not the computer’s understanding.

Explain the possible ways to make their turtle move in the different levels of 2Go.

‘Read’ the code and envision the bigger picture of the overall effect of the program.

ASSESSMENT OPPORTUNITIES

Observations of children at work, printed work, saved work

ENRICHMENT OPPORTUNITIES

Helping children to remember more using ipads across the curriculum

SUBJECT SPECIFIC VOCABULARY

Data
Pictogram
Visual
Title
Data collection
Recording Results
Compare
Totals

Turtle
Direction
Forwards
Backwards
Left
Right
Route
Challenge

Command
Instruction
Algorithm
Undo
Delete
Unit
Background

CROSS-CURRICULAR LINKS

Links that we can make to help children make sense of what we want them to know and be able to do.

Maths – Statistics

Computing – Coding

Maths – position and direction