

Computing 24-25

Year 4 – Programming Purple Mash (traffic lights)

Remember when: beebots, scratch, logo	Key vocabulary	
By the end of the unit children must be able to: - when you click go make the car go right -when stop is clicked make the car stop -make the light green when go is pressed and red when stop - add an amber stage when go is pressed -add amber stage when stop is pressed Extension- explore the activity Genie	When clicked Go Right Left Stop Red Amber Green	Variable Count If Algorithm Debug Error Program Programming Input output

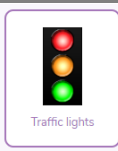
In Year 1: - move the fish right -move the crab left -debug the instruction to make the fish move right or left -make a little program to make the fish move when clicked Explore the bubble activity	In Year 2: -make the snail move forward 1 space - make the snails move forward - make the snails move in a random number -debug why a snail isn't moving -make up their own sequence Extension- explore the vehicles activity	In Year 3: -make the knight move right -make the knight reach the right pillar then change direction -make the knight reach the left pillar then change direction -debug the error for the knight -make your own sequence Extension- explore princess and the frog
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National curriculum:
- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- use sequence, selection and repetition in programs; work with variables and various forms of input and output.
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Software / Hardware



Gibbon level



Title / Focus	Lesson outline
Lesson 1 What is programming? LO- To create a code to make the car move Sticky knowledge- When you click go make the car go right When stop is clicked make the car stop	Discuss what programming is and how it works. Children to work in mixed ability groups. Logging onto purple mash Show children how to access the 2dos and press the traffic lights 2do Purple mash – chimp level follow instructions
Lesson 2 Program a car LO- To use a code to make the car move Sticky knowledge- When you click go make the car go right When stop is clicked make the car stop	Children to work in mixed ability groups - Purple mash. Children to follow instructions to programme the car to go right and stop. (Gibbon level)
Lesson 3 Program traffic lights LO- To use an if statement when coding Sticky knowledge-	Children to work in mixed ability groups – Purple mash. Children to follow instructions to programme the traffic lights (Gibbon level) Children to work in mixed ability groups

<p>Make the light green when go is pressed and red when stop is pressed Add an amber stage when go is pressed Add amber stage when stop is pressed</p>		
<p>Lesson 4 Assessment LO- To complete the genie level Sticky knowledge- I can create codes to complete given activities</p>	<p>Follow instructions (Gibbon level – Genie)</p>	
<p>Working towards</p>	<p>End of Unit Assessment Working at Age related expectations</p>	<p>Working at a greater depth</p>