Computing 22-23

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	Variable
- when you click go make the car go right			clicked Go	Count if
-when stop is clicked make the car stop			Right	
-make the light green when go is pressed and red when stop - add an amber stage when go is pressed			Left Stop Red Amber	
-add amber stage when stop is pressed				
Extension- explore the activity Genie			Green	
In Year 1:	In Year 2:	In Year 3:		
 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 	 -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 	-make then ch -make then ch -debug -make	-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	

National curriculum:

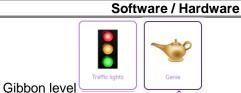
- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

- 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.









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	Children to work in mixed ability groups - Purple mash.
LO- To use a code to make the car move	Children to follow instructions to programme the car to go right and stop. (Gibbon level)
Sticky knowledge- When you click go make the car go right When stop is clicked make the car stop	
Lesson 3 Program traffic lights	Children to work in mixed ability groups – Purple mash.
LO- To use an if statement when coding Sticky knowledge-	Children to follow instructions to programme the traffic lights (Gibbon level)
	Children to work in mixed ability groups

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				
Lesson 4 Assessment	Follow instructions (Gibbon level – Genie)			
LO- To complete the genie level				
Sticky knowledge- I can create codes to complete given activities				
Working towards	End of Unit Assessment Working at Age related expectations	Working at a greater depth		