

These guided activities would be good preparation for learning free code: Gorilla – [Turtle Road Crossing](#), [Send the Rocket to Space](#), [Catching Game](#)
 This lesson is planned as a 40 minute lesson with a 10 minute homework activity. Please adapt it to your school's requirements.

School:	Class: Year 6	Lesson: 1 of 5	Subject: Computing	Date:
Lesson Overview	Objective, LOs & SCs			Free Code Activity
In this lesson pupils will design their own game using 3 OBJECTS using their programming knowledge in FREE CODE GORILLA .	<p>NC Objective: Design and write a program that accomplishes specific goals e.g. making a character move.</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> • I can create a program using a CHARACTER, a VEHICLE and a NUMBER object. • I can create a simple game using OBJECTS and EVENTS in my program. <p>Success Criteria:</p> <ul style="list-style-type: none"> • I can explain what steps I went through to create my game. • I can explain how I created a game using my programming knowledge. 			Free Code Gorilla http://www.purplemash.com/app/code/openended/freecodegorilla

New Vocabulary	Link/s to other subjects	Differentiation	Assessment Opportunities	Resources Needed
Action Algorithm Command Control Events Input Number Object Objects Output Tabs	Literacy – descriptive language when writing up what they did and how it worked.	Include students to be aware of and notes for support staff. SEN: can use free code chimp with support from staff. LA: can use free code chimp/gibbon . HA: can begin to edit their program by changing the code or adding in other elements. Extension Activities: could create a more developed program.	<ul style="list-style-type: none"> • Programs – how children have used their knowledge • Writing up of programs • Observing how ch work together • Peer assessment 	<ul style="list-style-type: none"> • Offline 2Code resource • Flash cards – teacher, student • Computer/iPad per child • Purple Mash login per child • IWB

Introduction (5-10mins)	Activities (25mins)	Plenary (5-10mins)	Homework (10mins)
<p>In this lesson the children (ch) will be reviewing programming terms and creating their own simple game using FREE CODE GORILLA. <i>(Design, write program that accomplishes specific goals)</i></p> <p>Start with reviewing programming terms. On interactive whiteboard (IWB) show terms using flashcards from Offline Resource pack: OBJECT, ACTION, OUTPUT, INPUT, CONTROL, EVENT and ALGORITHM (randomise these when you put them on the board). Ask ch to look at flashcards on their tables (one set per group/pair). Ch should try and use prior knowledge to sort out what order words should go in for the program they are going to be creating. Run through meaning of each of the words as a class. Children can also review vocab using online games (link 1, link 2).</p> <p>Review order needed to create programs with OBJECTS: 1-Event, 2-Object, 3-Output, 4-Object, 5-Action. Think about Literacy: in a sentence, we need a subject and then an object – it is the same in coding.</p>	<p>Show example game on board (link). We will be designing our own simple games like this. We will need 3 objects, a CHARACTER to move around, a VEHICLE (the football) and a NUMBER OBJECT to keep score.</p> <p>Put Free Code Gorilla on board. Review where to find OBJECTS to use in our program (DESIGN MODE). Tell ch they will need to choose one CHARACTER and one VEHICLE to use. They can change the character and vehicle to look like other ones but remind them that they will retain the properties of the original CHARACTER and VEHICLE. We will be adding a NUMBER object as well to keep track of our points in the game so drag in a NUMBER OBJECT from the left hand side as well.</p> <p>Go into CODE MODE and drag in the NUMBER OBJECT and show ch that to keep track of points, they should set it to add 1 each time the CHARACTER collides with the VEHICLE.</p> <p>Most ch can go to work on their devices. Ch must use at least 3 OBJECTS. <i>(Design & write a program)</i></p> <p>Ch to spend 5 mins writing in their 2Code workbooks why they chose the commands they did and why they put them in that specific order.</p>	<p>Ch walk round tables looking at others' programs, explaining what others did and taking notes. Each child says one positive thing about someone else's program.</p> <p>Ch to review terminology using flashcards and quiz.</p>	<p>No specific set homework.</p>

