Create@School module 1 - Science: Year 8
Lesson 3

DD _____ /MM _____ /YY _____

Context & Profile

Title: Applying Create@School to Science Broadcasting and receiving messages	Timescale: 1hr	Year group/age: Yr8	No in group:

| Relevant contextual information on learners: | | | |

How does this lesson fit into the subject curriculum or the wider curriculum?	Prior learning of learners
Science: Pupils can use appropriate language when discussing respiration. **Computing:** To create and plan a sequence of instructions developing coding practices. **Maths:** Algebra, use of co-ordinates.	Pupils have been introduced to the basic functions of Create@School. It is expected that between the first Create@School lessons pupils have worked on creating a lung model in a practical science lesson, or extended their knowledge to begin to understand how the diaphragm works.

The Learning

Groups	Intended progress (Learning Objectives)	How will this progress be demonstrated?	Assessment of progress by…
All	Understand how to use broadcast, adapting a mini-game exploring broadcasting and receiving messages. Applying your understanding of Pocket Paint. To understand how the diaphragm causes the lungs to inflate and deflate.	By the end of the session pupils will have created the Science-based mini-game exploring broadcasting which has some interactivity. This will be shown to their peers and teacher.	Pupils answering closed question through the use of the *Correct or Incorrect* game.

Organisation

Resources: PPT or Screen casting with IWB 1 tablet per pupil Work books & axes and web research. **Support:** Vocabulary on board	Working with others: Learners:

Timings	Content	Cognitive/ Behavioural*	Learning scenario*
To start with…			
15 mins	**Quick starter: Activity: broadcasting cards** Pass round the When I receive broadcasting cards. See – Broadcast cards Explain that broadcasting is transmitting a message that is received by other objects (include simple diagram for explanation see - Broadcast activity) Pupils wait until a message is broadcast to them and follow the instruction given. Definition: An object transmitting a message which is received by other objects. **Download:** Broadcast template (11863) **Model:** Create your first object by drawing or taking a picture of the lung model showing exhalation (breathing '*out*'). Add a look, by drawing or adding a photo pulling out the diaphragm to represent inhalation ('*in*').	C/B	I/FG

*Cognitive/Behavioural Key: C - Cognitive
                        B - Behavioural

*Learning Scenario Key: FG - Full Group
                          SG - Small Group (including parners)
                          I - Individually

Timings	Content		
Main Learning			
25 - 35 mins	Pupils working independently, taking photos/exploring Pocket Paint and adding text where appropriate. Show the scripts for the objects – pointing out elements of the code. (See: *Broadcast: Science* **5370** – to help with this) ([See Broadcast component Science guide](#)) **Support:** programming vocab on board.	C	I/FG
Plenary / extension			
10 mins	**Extension:** Explain in as much information as possible what is happening within this respiration process and with the broadcast function, whilst using the mini-game. Record this explanation onto the program using the **Start sound** brick.	C	I/SG
	Plenary: Download - *Correct or Incorrect – Broadcasting* (**11992**) pupils to answer quick-fire questions. - Use the **broadcasting** method of answering the questions to assess their understanding of broadcasting from the lesson. (see *[starter-plenary game – correct or incorrect](#)* for details)	B	
	Homework: Think about the term 'inventory' and how this is connected to gaming. Give examples.		

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