

# Create@School module 1 - Science: Year 8

## Lesson 5

DD \_\_\_\_/MM \_\_\_\_/YY \_\_\_\_

Context & Profile			
Title: Applying Create@School to Science Using a simple timer	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	
<b>Science:</b> Pupils can use appropriate language when discussing respiration. <b>Computing:</b> To create and plan a sequence of instructions developing coding practices. <b>Maths:</b> Algebra, use of co-ordinates.		Pupils have been introduced to the basic functions of Create@School. They have begun to understand and apply their knowledge with basic components of game design.	
The Learning			
Groups	Intended progress (Learning Objectives)	How will this progress be demonstrated?	Assessment of progress by...
All	Understand and explain how a timer can be used, and use this in a mini-game.  To demonstrate understanding on what happens to breathing rate when we exercise.  Demonstrate your understanding by correctly labelling areas of the diffusion process.	By the end of the session pupils will have explored a countdown timer, list key words from the respiratory system and label part of the diffusion process.  They will then use this in practical subject-based activities.  This will be shown to their peers and teacher.	Pupils answering specific questions in a timed activity
Organisation			
<b>Resources:</b> PPT or Screen casting with IWB 1 tablet per pupil Work books, web research <b>Support:</b> Vocabulary on board		Working with others:  Learners:	

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## Create@School module 1 - Science: Year 8 Lesson 5 *continued*

Timings	Content	Cognitive/ Behavioural*	Learning scenario*
<b>To start with...</b>			
15 mins	<p><b>Quick starter:</b> Respiration Bingo - These are suggested keywords, if you wish you can edit the looks and adapt to your own theme. (<a href="#">See – Bingo game guide</a>)</p> <p><b>Download:</b> Bingo – <i>Respiration card (12914)</i> Pupils can use Create@School whilst playing bingo. Explain why these words are linked to Respiratory system and what they mean.</p> <p><b>Download (Teacher only):</b> Bingo – <i>Respiration Caller (12915)</i> For the teacher to use via screen casting on the whiteboard. Allow time for pupils to describe the related key words.</p> <p><b>Download:</b> Creating a basic timer (<b>5404</b>)</p> <p><b>Model:</b> Using the basic timer program show the script for the timer: Can any pupils explain what is happening within it. (<a href="#">see – Create a basic timer guide</a>)</p> <p><b>Partner work:</b> Using the basic timer, begin by measuring the rested pulse and breathing rate of each other. Restart, and time 60 seconds of exercise (star jumps etc), whilst exercising, call out keywords from the respiratory system (your partner may ask for descriptions of these, if required). Again, measure pulse and breathing rate immediately after.</p> <p><b>Discuss:</b> What happened to your pulse/breathing rate after exercise?</p>	C/B	I/SG/FG
<b>Main Learning</b>			
25 - 35 mins	<p><b>Download:</b> <i>Diffusion (5419)</i></p> <p>- Allow pupils to briefly play the game Ask:</p> <ul style="list-style-type: none"> <li>• What colour are deoxygenated blood cells?</li> <li>• What happens to the blood cells when passing the alveoli? What colour are they now?</li> <li>• In terms of game design, what does this program have? (<i>include the countdown timer</i>)</li> </ul>	B	I/FG
	<p>Link this to a diagram showing the process of diffusion.</p> <p><b>Model:</b> Taking a photo of the alveoli/diffusion process from an activity book or IWB and through editing the look in Pocket Paint begin to label.</p> <p>Pupils work independently to label their photo using the text tool.</p>	C	I
<b>Plenary / extension</b>			
10 mins	<p><b>Extension:</b> Note down the process of diffusion – discuss this with a partner.</p>	C	I
	<p><b>Plenary:</b> Play <i>Diffusion (5419)</i> in partners – who has the highest score? Discuss questions that would link to the diffusion process.</p>	B	
	<p><b>Homework:</b> Note down questions based on the respiratory system to add to your quiz</p>		