



Year 1: Computational Thinking with Cubetto
Unit 1: Lesson 3: Cubetto's Trade

- 6 Cubettos and 6 boards
- 6 Ancient Egypt maps
- 6 sets of blocks (4 of each colour)

Cross-curricula area:
Humanities

NC Objectives	Outcomes	Computational thinking		Resources provided	Resources needed
		Concept	Approach		
To understand that programmes execute by precise instructions	<ul style="list-style-type: none"> • I can say what each block does • I can work with a partner to trade 	Logic	Persevering	<ul style="list-style-type: none"> • Direction cards 	<ul style="list-style-type: none"> • Drum beats (e.g. military)
<p>Preparation needed</p> <ul style="list-style-type: none"> • Check batteries. • Check sound. • Pin the Egypt map on the wall at the front of the class. • Copy and print direction cards. • Book use of the hall/playground. 	<p>Teacher-led introduction</p> <ol style="list-style-type: none"> 1. Ask: <u>Does anyone know how to remember which is their left and right hand? e.g. make an 'L' with your left forefinger and thumb.</u> 2. Ask children to stand up and start the drum beat music. 3. Model marching on the spot and ask the children to join in. 4. Announce, "Turn left!" and model turning to the children's left. Repeat with right/left quarter turns, always coming back to the centre. 5. Ask for a volunteer who feels confident with their left and right to stand at the front, facing in the same direction as the rest of the class. 6. Class follows the volunteer's instructions while the drums play. 7. Show the Egypt map on the wall and the direction card. Ask: <u>If I am facing forward at the sphinx, which direction do I need to turn to face the dune buggy?</u> 8. Repeat for other squares on the grid, prompting children to refer to the direction card if they are unsure. 				
<p>Key vocabulary</p> <p>Left Right Quarter turn Direction</p>	<p>Independent activity [begin without the blue block]</p> <ol style="list-style-type: none"> 1. In small groups, look at all the coloured blocks. 2. <u>What do you think the green one does?</u> Try putting the green block in the board and press the Action button. 3. <u>What do you think the yellow one does?</u> Try it out, then try out the red block too. 4. <u>Do all the green blocks do the same thing? What about the yellow and red blocks?</u> 5. Try another group's blocks. <u>Does the red do the same?</u> 6. Try to memorise what each block does. <u>Can you think of a way to remember that left is yellow and red is right?</u> 				
<p>Challenge</p> <p>Can you make Cubetto turn around?</p>	<p>Guided activity [in the hall/playground, after the independent activity]</p> <ol style="list-style-type: none"> 1. Put the class into mixed ability pairs. 2. Explain that the class is going to play a trading game. Trading means giving something you have and getting something you want. 3. Explain that the Ancient Egyptians used to trade with other people by sailing along the River Nile. They would give gold, papyrus, cloth and grain and in exchange they would receive things like wood, metal and oils that they didn't have. 4. Introduce the aim of the game: to end up with only three blocks, one left, one right and one forward. When they achieve this, they can stand to the side of the game and watch the others. 5. Model showing your two left and one right blocks, then find and ask a pair for their forward block in exchange for one left. 6. Explain that the children won't get all three blocks after the first turn, they will have to ask different pairs and keep trying again. 7. Hand out one, two, three or four coloured blocks to each pair, at random, making sure no pair has all three colours. 8. Begin the trading! After 5 minutes, stop the group and ask: <u>Who has managed to trade a block? How did you do it?</u> 9. If necessary, support pairs who are struggling to find trade deals by trading with spare blocks yourself. 				
<p>Creative play</p> <p>Role play trading in a marketplace with gold, animals and plants.</p>	<p>Plenary and assessment</p> <ol style="list-style-type: none"> 1. Ask pupils to stand up and show them the yellow block. Ask: <u>Which direction would Cubetto turn if we used this block? Children turn left.</u> 2. Repeat for other blocks and ask volunteers to come to the front to do the same, picking a block at random for the class to model. 3. Explain that each block of the same colour tells Cubetto to do one particular thing. All yellow blocks turn left and all red blocks turn right. 				