



<p>Year 1: Computational Thinking with Cubetto Unit 1: Lesson 8: Cubetto's Tourist</p>	<ul style="list-style-type: none"> • 6 Cubettos and 6 Boards • 6 City Maps • 6 Sets of Blocks (with 19 blocks in each) 	<p>Cross-curricular area: Maths</p>
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NC Objectives	Outcomes	Computational Thinking	Resources Provided	Resources Needed
<p>To create and debug an algorithm</p>	<ul style="list-style-type: none"> • I can order the days of the week • I can program and debug Cubetto 	<p>Concept Algorithms</p> <p>Approach Creating</p>		<ul style="list-style-type: none"> • Laminated map pictures • Postcard template
<p>Preparation Needed</p> <ul style="list-style-type: none"> • Check batteries. • Copy postcard template. 	<p>Teacher-led introduction</p> <ol style="list-style-type: none"> 1. Sing days of the week to Addams family theme tune: "Days of the week [clap clap] x5; There's Monday and there's Tuesday, there's Wednesday and there's Thursday, there's Friday and there's Saturday, and then there's Suuuunday!" - https://goo.gl/NfcRqd 2. Ask: <u>What day comes after Tuesday?</u> Repeat for other days of the week. <u>What day is it today?</u> <u>What day will it be tomorrow?</u> 3. Explain that Cubetto has a friend coming to stay and he wants to show them the urban sights in the City. Ask: <u>What does urban mean?</u> 4. Explain that when you visit somewhere, you're a tourist. Show map & ask: <u>Where should Cubetto visit first with his friend?</u> (e.g. the park) 5. Write up the seven days of the week on the board and explain that Cubetto needs something for a tourist to do each day for a week! 6. Stick the picture of the first activity under Monday and ask pupils to suggest two more activities to take Cubetto up to Wednesday. 7. Explain that pupils will work together to make the longest algorithm they can, getting Cubetto to visit as many places as possible! 8. Recap the function of all the blocks, including the special ones, and clarify how to use the function line. 9. Explain that children need to use all their knowledge about programming and Cubetto to make the best journey for Cubetto's friend. 			
<p>Key Vocabulary</p> <p>Days of the week Urban Tourist Algorithm Debug</p>	<p>Guided activity</p> <ol style="list-style-type: none"> 1. Ask the children to decide where they want Cubetto's tourist friend to visit on the map. 2. Place the corresponding laminated pictures on the squares. 3. Give each pair one set of pictures to move between and ask them to write an algorithm. 4. Share algorithms with each other. Discuss any debugging needed and encourage pupils to help each other fix any problems. 5. Now challenge pairs to make the longest algorithm possible, using the function line, to get Cubetto to visit as many places as possible. 6. Ask: <u>How did you use the negation/backward/random blocks?</u> 7. Try out pupils' algorithms and work together to observe and evaluate. 			
<p>Challenge</p> <p>Can you make Cubetto repeat his movement forever?</p>	<p>Independent activity</p> <ol style="list-style-type: none"> 1. Write a postcard to Cubetto's tourist friend, telling them about all the adventures you have been on together as a class. 2. Think about what you learnt about shape and symmetry, as well as directions, money and saving. You even solved a crossword! 3. <u>How does Cubetto move?</u> <u>What other types of computers do you use?</u> <u>What have you enjoyed about Cubetto?</u> <u>What was hard?</u> 4. Use the following word bank to write your letter: block, Board, Cubetto, program, map, predict, debug. 			
<p>Creative Play</p> <p>Role play going on a bus tour of your area. Where would you take a tourist?</p>	<p>Plenary and assessment</p> <ol style="list-style-type: none"> 1. Show the days of the week mixed up on the board with one missing. Ask: <u>Can you work out which day is missing?</u> 2. Ask pupils to come to the front to put the days in order. Ask: <u>Can you remember the song?</u> 3. Ask volunteers to share their longest algorithm and ask: <u>How many places did Cubetto visit?</u> <u>How did you use the function line?</u> 4. Encourage pupils to share their postcards to Cubetto's friend, telling them about everything they have learnt. 5. Ask: <u>What has been the most interesting thing you've learnt about programming Cubetto?</u> <u>What did you find hardest?</u> 			

