

<u>Year 1</u>: Computational Thinking with Cubetto <u>Unit 1: Lesson 5</u>: Cubetto's Saving

- 6 Cubettos and 6 Boards
- 6 City Maps
- 6 Sets of Blocks (with 19 blocks in each)

Cross-curricular area: Maths

NC Objectives

To use logical reasoning to predict the behaviour of simple programs

Preparation Needed

- Check batteries.
- Create algorithms for children to predict (ending at bank) incl. the backward block.
- Create and copy 'diamond 9' cards on needs & wants (e.g. food, holiday).

Key Vocabulary Saving

Wait £1/£2 Predicting Backwards

Challenge

Can you use the backward block to move from the taxi to the bank?

Outcomes

- I can recognise and use £1 and £2 coins
- I can predict Cubetto's moves

Computational Thinking Concept Approach Logic Persevering

Resources Provided Resources Needed

- £1 & £2 coins on board & on cards
- Needs and wants 'diamond 9' cards
- 'Diamond 9' grid template & glue

Teacher-led introduction

- 1. Read, "I want it!" story to class: https://valuesmoneyandme.co.uk/teachers/i-want-it-ks2. Ask: What does Tara's mum talk to her about?
- 2. Ask: What things have you asked for when you're shopping? What would you like to save up to buy?
- 3. Explain that **saving** is a way of building up your money you have to **wait** and not buy small things so you can buy something big, like a holiday or car!
- 4. Show £1 and £2 coins on board and ask: What are these? How much are they worth?
- 5. Make copies of both coins and ask: How could you make £10? How many coins would you need? Ask volunteers to come to front.
- 6. Explain that Cubetto needs their help saving. Ask: What do you think Cubetto is saving up to buy? Collect ideas and choose one.
- 7. Ask children to point to the bank on the map and explain that this is where Cubetto needs to take the money he collects today, and that the bank keeps your money safe for you until you're ready to spend it.
- 8. Place a coin on the board and show the prepared algorithm ending at the bank. Ask: Where do you think Cubetto will move to?
- 9. Explain that when you guess what will happen using your knowledge of what has happened before, this is called **predicting**.
- 10. Run the algorithm and ask: What does the purple block do? Introduce the backward block and demonstrate its use.

Guided activity

- 1. Lay out the £1 and £2 coins on the table. Ask: How many £1 coins do you need to make £5? How many £2 coins to make £10?
- 2. Explain that Cubetto wants to save £5 towards buying a new wheel. Ask: Which coins add up to £5?
- 3. Place the coins chosen on the map near the bank and place Cubetto nearby. Ask: <u>Do you remember where Cubetto needs to take the money to save it?</u>
- 4. Show a prepared algorithm and ask: Where do you **predict** Cubetto will move? Explain that Cubetto needs to collect the coins on top of it and end at the bank, where the coins will be piled up.
- 5. Allow time for pupils to run algorithm and discuss their predictions.
- 6. Ask: How could you use the backward block to move Cubetto to the bank? Children explore together.

Independent activity

- 1. Read the 'diamond 9' cards with a partner.
- 2. Which of these things do you need? Why? Discuss with your partner. Are there some things that you don't need, but you want?
- 3. Use the diamond template to put the cards in order, with what you need at the top and what you only want at the bottom. Stick down.
- 4. Which of these things would you need to save up for?



Creative Play

Turn Cubetto into a piggy bank! Make pigshaped sides.

Plenary and assessment

- 1. Ask volunteers to share their diamonds of wants and needs. Ask: What did you decide you could wait to save up for?
- 2. Show a prepared algorithm and ask pupils to lay out £1 coins on the map to show what they **predict** Cubetto's journey will be.
- 3. Show a £20 note and ask: What coins could I use to make £20? How many coins is that in total?
- 4. Discuss whether it's easier to carry around all those coins, or a note. Explain that is why people use notes they are lighter (and now waterproof too!), so easier to carry around for large amounts of money.