



Year 1: Computational Thinking with Cubetto
Unit 1: Lesson 4: Cubetto's Shopping

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

Cross-curricular area:
Maths

NC Objectives

To create a simple algorithm

Preparation Needed

- Check batteries.
- Stick coin pictures to the board, face down, at random.
- Label items on the City Maps with price tags of 1-10p.

Key Vocabulary

Coins
Money
Pence

Challenge

You've lost the purple backward block! Can you still make Cubetto go backwards?

Outcomes

- I can recognise 1p, 2p, 5p and 10p coins
- I can write an algorithm

Teacher-led introduction

1. Tell the children that they're going to play snap!
2. Ask a child to take one of the coin pictures off the board and turn it over, then show the class. Ask: What is this a picture of? Clarify its value.
3. Tell the volunteer to remain standing at the front and ask for a second child to choose a card and show the class.
4. Ask: Do these pictures match? If not, stick the second picture back on the board and repeat until a match is found.
5. Show the four different **coins** and ask: How much money do we have in total here?
6. Show the labelled map and ask: How much does the bike cost? 10p.
7. Ask: Which coin should Cubetto use to pay for the bike? Repeat for other items (e.g. taxi ride, playground in the park, fruit/veg at market).
8. Show 20p on the board made up of different coins (e.g. one 10p, one 5p, two 2ps, one 1p). Ask: How much money do I have in total?

Guided activity

1. Hand out coins to children (differentiate from total of 10-20p). Ask: How much money do you have to spend?
2. Explain that children need to choose one or more items on the map that they can buy with their money. They can't spend more than that!
3. Place Cubetto near the middle of the labelled map and show the Board template
4. Model using the coloured pens to match the block colours and write an algorithm to buy one item.
5. Tell the children to write an algorithm to move Cubetto to the first item they want to buy.
6. When they have checked, allow time for pupils to test out their algorithms.

Independent activity

1. What would you like to buy when you go shopping?
2. Draw a picture of what you would like to buy and cut it out.
3. Stick your picture to a grey square on the map.
4. Make a price tag and decide how much your item costs: 10p, 5p, 2p or 1p.
5. Stick the label to your drawing.
6. Which coin would you need to pay for your item?

Computational Thinking

Concept
Algorithms

Approach
Creating

Resources Provided

- Board template

Resources Needed

- Large 1p, 2p, 5p and 10p coin images
- Plastic coins
- Price tags: 1p, 2p, 5p, 10p & blank
- Coloured whiteboard pens

**Creative Play**

Design new money for Cubetto's world.

Plenary and assessment

1. Describe one of the coins for the children to guess (e.g. I'm thinking of a grey coin. It's small. What coin am I thinking of?).
2. Repeat for the other coins.
3. Ask children to share their pictures of what they would like to buy and ask: Which coin would you need to buy that?
4. Ask: How many items could you buy on the map for 20p?