Year 1: Computational Thinking with Cubetto **Unit 1: Lesson 8: Cubetto's Jewels**	• 6 Cubettos and 6 boards • 6 Ancient Egypt maps • 6 sets of blocks (4 of each colour)	**Cross-curricula area:** Art/Design

NC Objectives	**Outcomes**	**Computational thinking**		**Resources provided**	**Resources needed**
		Concept	**Approach**		
To create a simple algorithm	• I can create a simple algorithm • I can make a 3D model	Algorithms	Creating		• Pictures of inside tomb • Shiny objects/play jewels • Materials to make jewels • Pyramid template for assessment

Preparation needed
- Check batteries.
- Prepare craft materials.
- Print pictures of the tomb treasures.
- Copy pyramid template.

Teacher-led introduction
1. Show video of inside a **pyramid** in Egypt: https://www.youtube.com/watch?v=kKsJAgmGAW4
2. Explain that the pyramids were built for people who have died and they were buried inside. This video shows what it looks like inside now (anyone can visit them!) but in Ancient Egypt, they were full of treasures and statues.
3. Show pictures of what the tombs would have looked like thousands of years ago.
4. Ask: What can you see in the photos? Why do you think all those objects are in the tomb?
5. Show the Primo map and ask the children to find the **jewels** and the pyramid.
6. Place the play jewels on B5 and ask: How would you move Cubetto to take the jewels to the pyramid (E5)?
7. Collect answers and invite children to suggest the **algorithm**. Put the jewels on top of Cubetto and test out the algorithm.
8. Now explain to the children that they will have a problem to solve today: Cubetto can't get wet! Cubetto can't go through or over the squares of the **River Nile**…

Key vocabulary
Pyramid
Jewels
Algorithm
River Nile

Guided activity
1. Place Cubetto on B5. Explain that Cubetto is a computer and can't get wet, so they cannot go over the River Nile – they must go around it!
2. Ask: Where is the next square that Cubetto can move to? *B4*. Place a jewel on B4 and repeat the question until jewels are placed along the route Cubetto can take, avoiding the river.
3. Ask: What blocks do we need to make Cubetto collect the jewels? What are the first two blocks we need?
4. Ask: Can we use the function block? How?
5. Allow time for the children to try out and discuss the algorithm to make Cubetto collect the jewels.

Challenge
Can you make your own map for Cubetto to explore?

Independent activity
1. Look at the pictures of the jewels found in the pyramids.
2. What colours can you see? What shapes are there?
3. Pick one of the pictures of the jewels you would like to make.
4. Touch and look at the different materials you can use to make the jewels.
5. Use the materials to make jewels for Cubetto to take to the pyramid.

Creative play
Make Cubetto into a pyramid!

Plenary and assessment
1. Ask: What is inside the pyramids? Ask pupils to share their jewels with the class and to describe them.
2. Ask: What did you find easy when writing the algorithm for Cubetto? What was difficult?
3. Ask: What have we learnt about Ancient Egypt? What have we learnt about algorithms? Invite children to share and record their learning as pictures or writing in pyramid templates.