

# Activity Structure – 45min

Activity	Timing
Warm up Game	5 mins
Introduce Story and Project	10 mins
Main Activity	25 mins
Final test & debug	throughout
Share with group	5 mins

### Overview

This is the first project in the Autumn 2 course so there are options to create a very simple version for new coders.

This game is a bit like the TV show *Catchphrase;* children will create an animated rhyme, then cover it up with coloured tiles. Tap the tiles to reveal part of the animated image. Can you guess the popular rhyme without revealing the whole picture?

#### Learning Objectives

- To use the green flag and motion blocks to create a simple animation of a popular rhyme.
- Position characters behind and in front of each other.

### National Curriculum

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

### Warm up game

- Run through the flashcards of the coding blocks the children will use today. *Can you remember what each of these blocks do?*
- Encourage new coders to have a guess even if they're not sure. Praise them for having a go.

Introduction (discuss the project together, share ideas and create excitement)

- Show the children the project. Invite them to tap on 2-3 of the tiles. *Can anyone guess which nursery rhyme is hiding behind the squares? What characters do you think you can see? What are they doing?*
- Play 2-4 of the projects. Point out the musical note character. *Does anyone know what this is? What does it do? What block did I use to make this happen?*
- What code do you think I used for each of the tiles?
- Let's take a closer look at the animated characters moving about. What code might I have used for them?
- Address any misconceptions by showing and running the correct code.
- How did I create the tiles? Recap how to use the Scratchjr Paint Editor to draw and fill a shape: Tap then drag diagonally to draw a shape. Remember, if you stop dragging and lift your finger up the shape will stop getting bigger.



# **Project Plan**

# Guess the Rhyme

### Main Activity Key questions and teaching

- Which rhyme will you use? Write down some possible ideas for the children: Old Macdonald, Row your boat, Twinkle Twinkle and Happy Birthday are good options for new coders as they can use library characters.
- 2. Select, draw or edit the characters you'll need for your rhyme. *Do you need to draw any characters? Are you sure they're not too tricky?*
- 3. Select, edit or draw a suitable background.
- 4. Set a time limit for creating/selecting characters and backgrounds. *Remember, you can always go back and edit your character later.*
- 5. Let's code our characters! *What simple movements could your characters do?*
- 6. Remind/demonstrate how to code a character to do a repeated movement when the green flag is pressed.
- 7. Give the children time to work on the code for their characters, providing support and guidance where it is needed. New coders could work more closely with the tutor or TA to do this.
- 8. Now let's do the button which plays the rhyme. Use the Paint Editor to create a button character. New coders could use the circle tool or edit one of the ball characters to create a big red button.
- 9. *Now let's code the button:* record yourself singing the nursery rhyme. *Which start block do I need to use?* Support new coders to record their song.
- 10. Now let's create the tiles: use the Paint Editor to draw and fill a large rectangle. Repeat so that you have enough tiles to cover your animation. Remember to have different colour tiles. Support new coders to create their tiles.
- 11. Position the tiles over the rhyme. *How could we change the size of the tile? What colour are the "Grow" and "Shrink" blocks?*
- 12. Let's code the tiles: which start block should we use for the tiles? Will you include a pop sound? Will the pop be before or after the Hide block?
- 13. Use the same code for all the tiles. Experienced coders could drag and drop to copy the code from one character to another.

## Teaching points

- We suggest allocating 15 minutes to make the rhyme scene and 10 minutes to record the song and code the tiles. Help the children to manage their time by reminding them how long they have left.
- Remind children that the last character you touch will be positioned in front of the other characters.

### **Possible Extensions**

- Create a more sophisticated animation for the rhyme, e.g. it could show Incy Wincy Spider climbing up the water spout, then being flushed out. Use messaging blocks to do this.
- Early finishers could decorate their tiles or add further details to any drawn characters or backgrounds.

## To Simplify

- Choose a simple rhyme that uses library characters.
- Have only four tiles hiding the animation.
- Simplify the animation, e.g. for *Old Macdonald* a new coder could just tinker with using the motion blocks and the green flag.

## Finishing up

• Play the children's games. Either as a whole group or swapping iPads with a partner.

