# Around the World

## 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 last project in this course so we have given the children more freedom to decide how their finished project will look. They will create 2-4 different pages/scenes for their character to journey seamlessly across.

### **Learning Objectives**

- To use the movement and 'Go to page' blocks to make a character appear to travel seamlessly from one page to the next.
- To use everything that they have learned so far to start designing and planning their own projects.

### National Curriculum / EYFS Curriculum Links

Creative: Constructs with a purpose in mind, using a variety of resources.

**Being Imaginative:** Create simple representations of events, people and objects.

### Warm up game: Beat the Teacher

- Put all the flash cards for the blocks that have been taught this half term in a pile. Play Beat the Teacher. If you can correctly tell me what a block is for you get a point, but if you get it wrong I get a point. Let's see who can get the most points: the children or the tutor. Run through each of the blocks to check that the children remember what it is used for.
- You could target your questioning to check the understanding of less confident coders.

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

- Optional: as a stimulus for discussion you could read a picture book about visiting different places or look at pictures of different parts of the world.
- Has anyone ever been on holiday? Where did you go? What was your favourite thing? How did you get there?
- Show the children the project. Where did my plane go? Who did I see on my journey? Where would you go? Would you meet someone different, e.g. you could go to the jungle and meet a monkey, or you could go to the desert and meet a camel. Perhaps you'll meet an astronaut on the moon??
- I travelled in a plane but you could use another form of transport. What could it be?
- How do you think I made the plane travel smoothly across the scenes? Show the code for the plane.
- Open a new project and turn on the 'grid' (grid icon at the top of the screen). Use the Scratch cat and some forward movement blocks to demonstrate how each time the cat moves 'forward 1' it's the same as moving forward one square on the grid (the square appears blue on the screen as the character moves). Older children could use the grid to support them to code their own 'plane' character. Younger children can use trial & error to code their 'plane' character. Demonstrate both approaches.



# Around the World

### Main Activity Key questions and teaching

- 1. Choose a mode of transport from the library. Some children might like to use a character that allows them to insert a photo of their face. If younger children want to do this, they will probably need support to use the camera tool.
- 2. Add 1-3 further pages to the project. Where will you visit? Choose a background for each of the pages. Encourage the children to have fun with their choices and be as creative (or silly) as they like. Give them the option to draw one of the backgrounds using the Paint Editor but impose a time limit (possibly five minutes).
- **3.** Let's get our plane moving across the scenes! Position the plane in its start position on page 1 (this is a good opportunity to remind children that they can use the 'Go Home' icon at the top of the screen to reset their characters' positions).
- 4. Turn on the grid feature. Demonstrate and encourage the children to use the grid to count up to 20 (the far right of the screen). How many squares did we need to move? (It's usually about 15-17). Let's code our plane to move that many places forward when we tap the green flag.
- **5.** Add a [Go to page...] block to the end of the code.
- **6.** Add the plane character to each of the remaining scenes, position it, then code it to move forward till it reaches the end of the screen (and goes to the next page). Experienced coders could drag and drop the original page 1 character into the other pages then debug to check the movements are correct.
- 7. At this point some children might like to experiment with making their plane's movements more interesting by inserting jumps. To do this they might need to split the movement blocks, e.g. [forward 8], [jump], [forward 8], [Go to page 2].
- **8.** Experienced coders could also try adding a second line of code to make the plane move up and down while moving forward (like in the example).

- **9.** Who will your plane meet on their journey? Let the children populate their different scenes with 2-3 additional characters.
- **10.** Encourage them to use their own ideas and coding skills to decide how these characters will move. Will you have a whale swimming at the beach, could there be an alien that pops up on the moon? Remind them to use a [repeat forever] block at the end of most movements.
- **11.** At this point you might need to support the children to manage their time so that they are able to finish their projects to their satisfaction and not get bogged down. *E.g. Five minutes left that's about enough time to code 1-2 more characters.*

## Teaching points

- When coding the movements for the plane discourage less experienced coders from adding 'turns' as it makes it much trickier to achieve the smooth journey across the pages.
- Offer lots of praise, support and encouragement when the children use their own ideas.

### **Possible Extensions**

- Experienced coders could decide what they want their scenes to look like, then decide how they will achieve this with the code blocks.
- Encourage experienced coders to work more independently.
- Create more sophisticated movements and effects for the characters, e.g. add some sound and say blocks

### To Simplify

- Keep ideas quite simple, or just work across two pages.
- Allow less confident children to copy ideas from the example project.
- Support the children by pulling down the blocks they will need so that all they need to do is order them.

## Finishing up

• Share the projects. Praise and celebrate the children for everything that they have achieved this term/lesson.

