



# SPARE: What Does Your Pet Like?

## 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

Let's create a simple game where the player must decide which foods to feed their pet. The advanced version has a cat, the main version has a monkey and simple version has a penguin.

### Learning Objectives

- To use separate characters to make it appear as though a character's head is moving.
- To switch between multiple pages.

### National Curriculum

- create and debug simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

### Warm up game: Buggy Code

- Creates a line of erroneous code (use flash cards) for the children to read, correct and then act out. *What will happen when I run my code? Can you spot any mistakes / bugs? How could I correct them? Now what will happen when I run it?* Make it clear that making mistakes and checking our code is an important part of coding that we call 'debugging'.
- This game could also be played on the tutor's tablet or using a whiteboard. Create some lines of code for the children to read, but add some deliberate mistakes for the children to identify and correct, e.g. forget to join the blocks, have no start block, join a 'wait' block to 'repeat forever', etc.

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

- *Does anybody have a pet? What kind of pet do you have? What does your pet like to eat? Do you need to feed your pet special food?*
- Show the children the three projects.
- *For this project we need three pages. How do we add an extra page?* Show the children the code for switching between the pages. Point out that each time a sound recording plays before we go to a different page.
- *Why does it switch back to page 1? What code might I have used for this?*
- *How do you think the monkey's head moves when the body is still?* You could show the difference between the penguin in the simple project and the monkey in the main project.
- *The head and the body are two separate characters. The body remains still while the head mimes 'yes' or 'no'.*
- *Which movement blocks make the head nod yes? Which movement blocks make the head shake no?*



# SPARE: What Does Your Pet Like?

## Main Activity Key questions and teaching

1. *What animal /pet are you going to have? Where do they live?* Select a background appropriate for your pet. Add two subsequent scenes with the same background.
2. Draw monkey's head.
3. Draw monkey's body.
4. Use the 'Grow' and 'Shrink' buttons to adjust the size of the head and body, then position them.
5. Page 1: let's code monkey's head. Record the introduction. "What does Monkey like to eat? Tap the food to find out."
6. Go to page 2. This is your 'wrong guess' page. Add a monkey head and body, adjust the size and position them in the centre.
7. *How are you going to move the head so that the monkey looks like she is shaking her head?* [Start on Green Flag, Left 2, Right 2, repeat forever] *What happens if you have too big a number going left and right? Do you need to adjust the speed?*
8. Record "no, no, no, no, no" [Start on Green Flag, Play Recorded Sound, Go to page 1]. *Don't forget to return to page one.*
9. Go to page 3. This is the 'correct guess' page. Select, adjust and position the monkey's head and body again.
10. *How are you going to move the head so that the monkey looks like she is nodding her head?* [Start on Green Flag, Up 2, Down 2, repeat forever]
11. Record, "yes, yes, yes, yes, yes" or "Yum, yum, yum" [Start on Green Flag, Play Recorded Sound, Go to page 1]. *Don't forget to return to page one.*
12. Page 1: draw or select two foods monkey wouldn't like to eat, and one she would like.
13. For each of the food characters record "Does monkey like peach/cake/banana, etc?" and then switch to either the 'wrong guess' or 'correct guess' page. [Start on Tap, Play Recorded Sound, Go to Page...].
14. The children could code the first food with support, but then attempt to code the remaining foods independently.
15. Test and debug. And you're finished!

## Teaching points

- Help the children to manage their time. Give them clear time limits for drawing the characters. You might like them to do all the drawing first and the coding second.
- Encourage children to test and debug throughout.

## Possible Extensions

- Children could have four food characters.
- Children could draw the different foods.

## To Simplify

- Choose an animal from the library and move the whole animal to nod yes or shake no.
- Have just two food characters and select these from the library.

## Finishing up

- Share the projects.
- *Can anyone think of any other projects they could make where they have an animal or person but their head, arm, leg etc. is a different character. What would you do?*