# Handa's Surprise

## 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
Optional Story Stimulus Handa's Surprise: The savannah animals are trying to eat the tangerine can you stop them? Tap the animals to keep them away from the tangerine.

## Learning Objectives
- To use the 'Go Home' block.
  To use a variety of trigger blocks with support.

## National Curriculum / EYFS Curriculum Links

**Technology:**
- Completes a simple program on a computer.

**Listening and attention:**
- They listen to stories, accurately, anticipating key events and respond to what they hear with relevant comments, questions or actions

## Warm up game: Can you go home?
- Ask the children to sit/stand somewhere memorable in the room (e.g. next to the door, in the chair by the tutor, etc.) Explain that this is their 'home'. They need to remember where it is for this game. Invite the children to walk around the room (you could use laminated code blocks to control their movements). Show the 'Go Home' block and explain that when you show this the children need to go back to their home.
- You could also get the children to sit in a circle (noting who they are sat next to). Invite them to walk around the room, but when you show the 'Go Home' block they must return to their original position in the circle.
- Depending on space children could play together, or individually with the group supporting the individual.

## Introduction (discuss the project together, share ideas and create excitement)
- Read the story of Handa's Surprise. *Who was more surprised Akeyo or Handa? Why was Handa surprised? What did Handa think was in her basket? Can you remember what animals were in the story? What fruits were in Handa's basket? Do you have a favourite fruit?*
- Today we are going to make a game. The aim of the game is to stop the animals eating the delicious piece of fruit. Show the game.
- Show the children the flash cards of the three start blocks, [Start on Green Flag] [Start on Bump ] [Start on Tap] Each animal will need one line of code using each of these start blocks.
- *What do the animals do when the green Flag is tapped? Display [Start on Green Flag, Move up, Move Down, Move left Move Right] the wait blocks help the animal move slowly, so the player has time to stop them. Draw the children's attention to the direction each animal moves in and how it relates to the start position.*
- *When the animals are tapped what happens?* Display [Start on Tap, Go Home] for the children to refer to.
- *What happens to the animals when they bump into the fruit?* Display [Start on Bump, Stop] Why do we need the stop block?
- *What happens to the fruit when an animal character bumps into it?* Display [Start on Bump Hide]

## Project Plan

MAMA
.codes

# Handa's Surprise
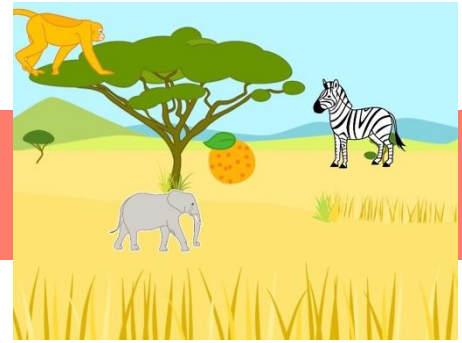
## Main Activity  Key questions and teaching

1. Choose the savannah background.
2. Select from the library or draw your favourite fruit.
3. Choose 3 savannah animals from the library. Position the animals around the fruit's
4. First you need to code each animal to reach the fruit. [Start on green Flag, Left 1 wait2, Down 1, Repeat forever] *Will you use a slow speed block or wait blocks to slow the animal down to give the player time to catch them?* Test and Debug. *Do your characters reach the fruit?*
5. Code each animal character to 'Go home' when tapped. *Which button will make my character go home? What will my start block be?*
6. When each of the animal characters bumps the fruit we would like them to stop moving. What start block will you need? How do we stop a repeat forever? [Start on Bump, Stop] Children can drag and drop this line of code to the other 2 animals
7. Play, check and debug game so far.
8. What happens to the fruit when the animals bump into it? What will the start block be? Where will you find the hide block. [Start on Bump, Hide]
9. Test and Debug. *Does the game work? What is the player experience like? Are the animals moving slow enough to catch and fast enough that the game is finished? Are the animals big enough for the player to tap?*

## Teaching Points

- To ensure there's progression and learning encourage the children to copy-code the first character, do the second character with less support, and attempt to code the third character independently.
- Make sure the children are aware how to use the Go Home button (next to the green flag) to reset their characters.
- You could also show the children how to drag and drop code from one character to another.
- Encourage children to test and debug throughout.
- Remind children to use the Flashcards to support their coding and growing independence.

## Possible Extensions

- Have four animal characters and a Handa Character
- Switch to a second page after a wait block. Make a winners page congratulating the player for stopping the animals eating the fruit.
- After the animal has eaten the fruit switch to another page with the animals celebrating.
- Record clear and precise instructions on how to play the game.

## To Simplify

- Only have 2 animal characters.
- Have code sheets available for children to copy code and explain why this is an important teaching strategy.

## Finishing up

- Swap your tablet with a friend and play their game. *What did you like about your friend's game?*