Blooming budget

Scratch lesson plan – Code Playground

BARCLAYS

Lesson overview

In this lesson, students will create a Scratch game called blooming budget. Players will create a functioning garden centre and learn about wants, needs and how to budget. Teachers will guide students through the project using the workbook.

Time	Key learning outcomes	Resources
45 mins	• Program sprite with broadcast messages • Use of variables to track spend • Create and manage variables to track money • Use if else statements to track items being bought • Wants and needs and how to budget.	• Laptops or desktop computers • Access to Scratch website - https://scratch.mit.edu

Content

Introduction

In this project, you'll help Anika choose essential gardening items while sticking to a £10 budget. You will explore the real- life concept of needs versus wants and apply thinking to a school garden scenario. You must select key items like gloves, seeds, a watering can and a trowel.

Real life connection: Talk about needs and wants.

Needs are things that help us survive or achieve our goals.

Wants are things we'd like, but they aren't essential.

"Imagine you're in charge of planting a garden at school. You only have £10.
What will you buy to help it grow?"

Through coding and discussion, you will also build an understanding of money choices, value, and goal setting. You'll have the chance to level up your game by adding features or making it more efficient.

In this project you'll learn how list variables keep lots of things in order. Each item in the list has its own number, called a position.

Scratch practical

Ask the children to log into Scratch and set up their workspace as described in the workbook.
Show the blooming budget video as a guided lesson pausing regularly when the pupils need to catch up.

- Children should be able to follow along with the workbook or the guided lesson video
- By the end of the lesson children should be able to create a working program showcasing the blooming budget game.

Activity – blooming budget

Before starting the project, recap key coding concepts:

What is a normal variable? (A variable acts as memory within our project. It can hold one bit of data like a budget total.)

What is a list variable? (A group of items in order, such as a shopping list.)

"What happens if Anika buys all the wants first?"

"How can you stop her going over budget?"

Scratch practical

Using the video and workbooks support the children to follow the instructions and complete the coding project. Have them think of other ways to enhance the project if they have extra time. You'll learn how to list variables to keep track of items in your shopping basket.

Activity wrap up

Prepare to share your project with the class:

- Has Anika bought the right items?"
- What did you spend the most money on, and why?"

Encourage customisation

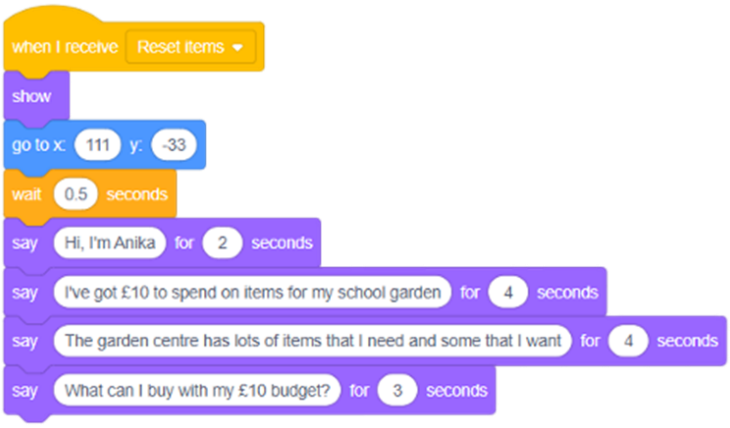
- Add a message to confirm when all essential items are bought

- Add more items to the garden shop

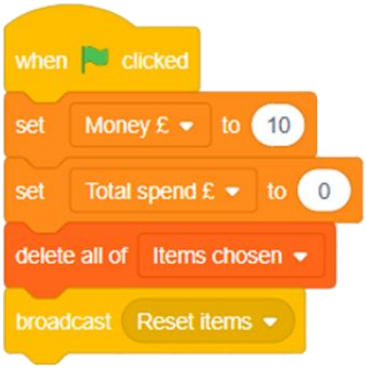
- Add animations to your sprites.

Code snippets

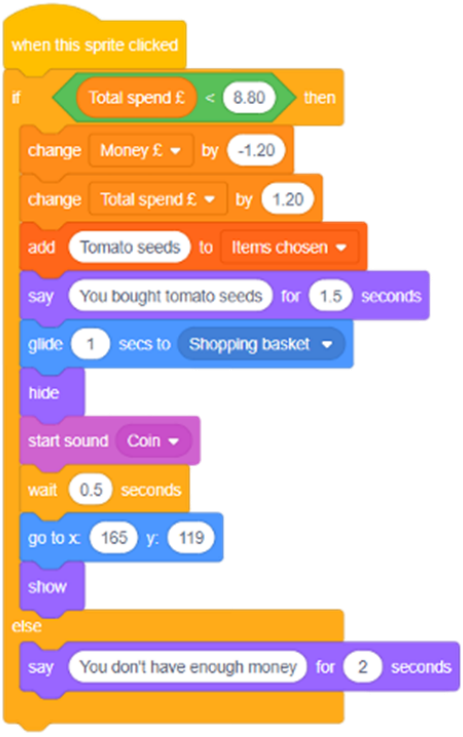
Anika



Stage

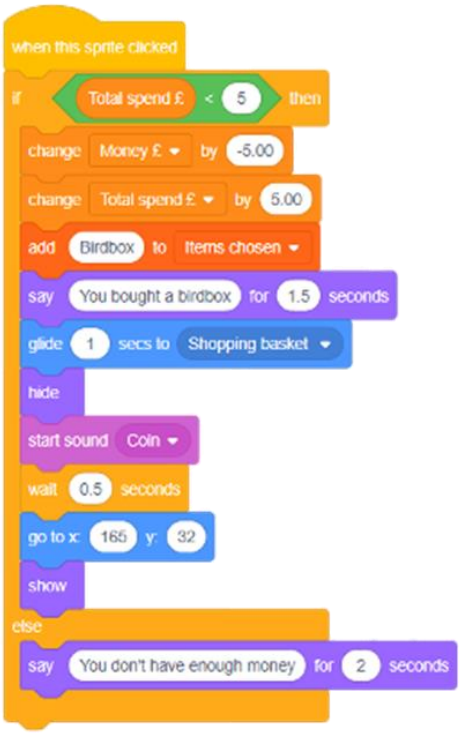


Tomato seeds

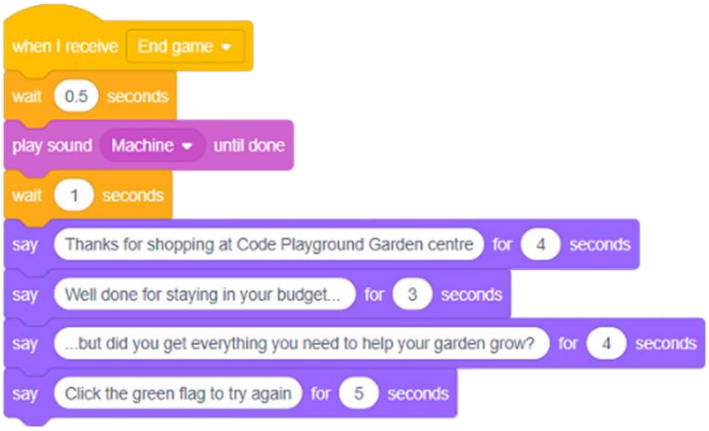


Code snippets

Birdbox



Checkout till



Summary

The following information is an example of what a child at an expected level would be able to demonstrate when completing these activities with additional examples to demonstrate how this would vary for a child with emerging or exceeding achievements.

Assessment guidance

Differentiation – Lower ability/ASN

- Provide visual guides or printouts of the scripts
- Allow paired work for additional support
- Provide a shopping list with clear icons for the essential items.

Differentiation – Higher ability/extension

- Can they change the starting budget?
- Ask them to include custom blocks to reduce repetition
- Challenge students to build a second shop with a new budget.

Plenary

- What's the difference between a need and a want?
- Why do we need to think about budgeting?
- How did you use coding to help Anika make good choices?

Assessment questions

1. How did the code check the budget?
2. What happened when Anika picked an item?
3. When could a want possibly become a need?