



Blooming budget

Scratch lesson plan – Code Playground



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	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• Laptops or desktop computers• Access to Scratch website - https://scratch.mit.edu

Content

Activities	Time	Page
Introduction	10 mins	3
Activity – Blooming budget	35 mins	4
Code snippets	-	5
Summary	-	7

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

```

when I receive Reset items ▼
show
go to x: 111 y: -33
wait 0.5 seconds
say Hi, I'm Anika for 2 seconds
say I've got £10 to spend on items for my school garden for 4 seconds
say The garden centre has lots of items that I need and some that I want for 4 seconds
say What can I buy with my £10 budget? for 3 seconds
  
```

Stage

```

when flag clicked
set Money £ ▼ to 10
set Total spend £ ▼ to 0
delete all of Items chosen ▼
broadcast Reset items ▼
  
```

Tomato seeds

```

when this sprite clicked
if Total spend £ < 8.80 then
change Money £ ▼ by -1.20
change Total spend £ ▼ by 1.20
add Tomato seeds to Items chosen ▼
say You bought tomato seeds for 1.5 seconds
glide 1 secs to Shopping basket ▼
hide
start sound Coin ▼
wait 0.5 seconds
go to x: 165 y: 119
show
else
say You don't have enough money for 2 seconds
  
```


Code snippets

Birdbox

```

when this sprite clicked
if < Total spend £ < 5 then
  change Money £ by -5.00
  change Total spend £ by 5.00
  add Birdbox to Items chosen
  say You bought a birdbox for 1.5 seconds
  glide 1 secs to Shopping basket
  hide
  start sound Coin
  wait 0.5 seconds
  go to x: 165 y: 32
  show
else
  say You don't have enough money for 2 seconds
  
```

Checkout till

```

when I receive End game
wait 0.5 seconds
play sound Machine until done
wait 1 seconds
say Thanks for shopping at Code Playground Garden centre for 4 seconds
say Well done for staying in your budget... for 3 seconds
say ...but did you get everything you need to help your garden grow? for 4 seconds
say Click the green flag to try again for 5 seconds
  
```

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?