PlanIt Year 2: Using and Applying Skills – Lesson 6 Adult Guidance

Using and Applying Skills

The purpose of the Using and Applying Skills unit is for children to review and recap learning from prior units in the year. It provides a chance to reinforce their skills and apply them in a new context.

The format of the unit at KS1 is the same as other PlanIt Computing units with six lessons. However, there is an assumption that the Using and Applying unit will be done after some or all of the previous units.

Some Using and Applying lessons will only rely on the prior teaching of one previous unit or a particular lesson.

In this case, Lessons 5 and 6 revisit the Y2 Programming-Turtle Logo and Scratch unit. There is some overlap intended to remin   Scratch and give them examples of code or blocks they have already used. The   can be used from the previous unit to ensure consistency of understanding and the Castle Information Sheet from the previous lesson in this unit may also be helpful to provide text.

The aim of this particular lesson is to put their knowledge and skills of using Scratch into practice. Where possible, children should be encouraged to use their existing skills and apply their of 'castles'. However, for children who are less confident with their coding skills, the   is provided for guidance and reinforcement. An example Scratch 2.0 file is included, which can be used for reference or demonstration.

This unit also links to the theme of castles and the information provided for children's use has an accompanying reading comprehension activity for optional follow-up in the classroom.

Using and Applying Skills: Scratch Skills

Aim:	Success Criteria:	Resources:
Understand what algorithms are; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs using Scratch. I can create code for a pair of characters, involving speech and movement.	I can find and open a saved file. I can add a second character and position on the backdrop. I can add code for a series of speech bubbles. I can add code for characters to move in turn or sequence. I can close windows and applications	Lesson Pack Computers with Scratch 2.0 installed or online

	Key/New Words:	Preparation:
	Scratch, program, code, algorithm, commands, instructions, repeat, sound, variable, blocks, sprites, backdrops.	Castle Characters Activity Sheet – as required

Prior Learning: Children will have studied Scratch in an earlier unit and should have begun a new Scratch project in Lesson 5.

Learning Sequence

Rearrange the Code: Recap previous lesson by providing some sample code that the children may have entered, which is muddled up on screen for them to reorder. Can the children describe what each part of the code does?

Open a Saved File: If required, demonstrate to the children where to find their saved files from the last lesson and how to open them (either by finding in a file manager and double-clicking or by first opening the Scratch software and then using File → Open). Can children open their own saved file?

Adding a Second Character: Continuing with the project started in the last lesson, the pupil's task is to add a second character (sprite) and further information within speech bubbles. The challenge will be to make the two characters move and speak (within speech bubbles) in turn. Children may require a demonstration using Scratch software of how to turn the new character to face in the opposite direction to make the two characters appear to be in conversation. If sounds are to be added, demonstrate adding a new sound from the library, which should be done separately for each character.

Continuing to Code: Can the children add a second character and add code for a series of speech bubbles?

★ Use Scratch Characters Activity Sheet for additional help and guidance.

★★★ Children to use existing skills of adding characters and code within this new task. Can children add code for a character to speak or move in turn or sequence?

Code Questions and Answers: Ask if any children wanted their character to do something but didn't know how to do it. Can anyone else solve the problem and help out with how to do it? (Note: This could also be a mini-plenary session part-way through the lesson.)

Taskit
Buildt: Build a model of the castle with characters for role play – it could be from cardboard, building bricks or anything else that is readily available.

Computing

Using and Applying Skills

Scratch Skills

Aim

- I can create code for a pair of characters, involving speech and movement.

Success Criteria

- I can find and open a saved file.

- I can add a second character and position on the backdrop.

- I can add code for a series of speech bubbles.

- I can add code for characters to move in turn or sequence.

Rearrange the Code

This code from the last lesson is to make a character move and speak with a speech bubble, but it is mixed up.

Can you say how to rearrange it into the correct order so that the sound plays first before the character (sprite) moves and then speaks.

move 5 steps

say Some castles have a main door, a moat and a drawbridge.

when 🚩 clicked

play sound cymbal crash ▾ until done

Open a Saved File

Can you remember where to find a saved file from the last lesson?

How do we open it in Scratch?

- This could either be by finding your work in the file manager and double-clicking on it...

- or by first opening the Scratch software and then using File → Open.

Can you open your own saved files?

Adding a Second Character

Continuing with our project started in the last lesson, the task is to add a second character (sprite) and another speech bubble for them.

Who can remember how to add a new character?

Tip: You might need to turn the new character to face in the opposite direction so that the two characters are facing each other!

If you add sounds, you can find a new sound from the library, but you need to do this separately for each character.
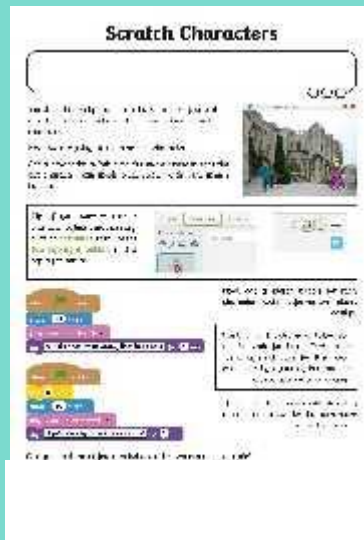

Scratch Castle - Lesson 6

Continuing to Code

Can you add a second character and add code for a series of speech bubbles?

You may be able to use the **Scratch Characters Activity Sheet** for extra help if you need it.

Demonstrate and Share

Is there anyone who wanted their character to do something but didn't know how to do it?
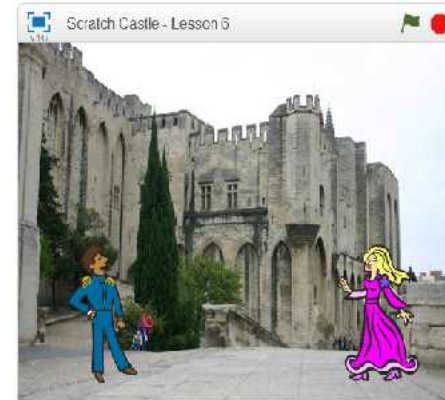
Can anyone else solve the problem for them?

Aim

- I can create code for a pair of characters involving speech and movement.

Success Criteria

- I can find and open a saved file.
- I can add a second character and position on the backdrop.
- I can add code for a series of speech bubbles.
- I can add code for character to move in turn or sequence.

Scratch Characters

I can create code for a pair of characters, involving speech and movement.

You should already have started a Scratch project with a castle backdrop and a sprite chosen to be a suitable character.
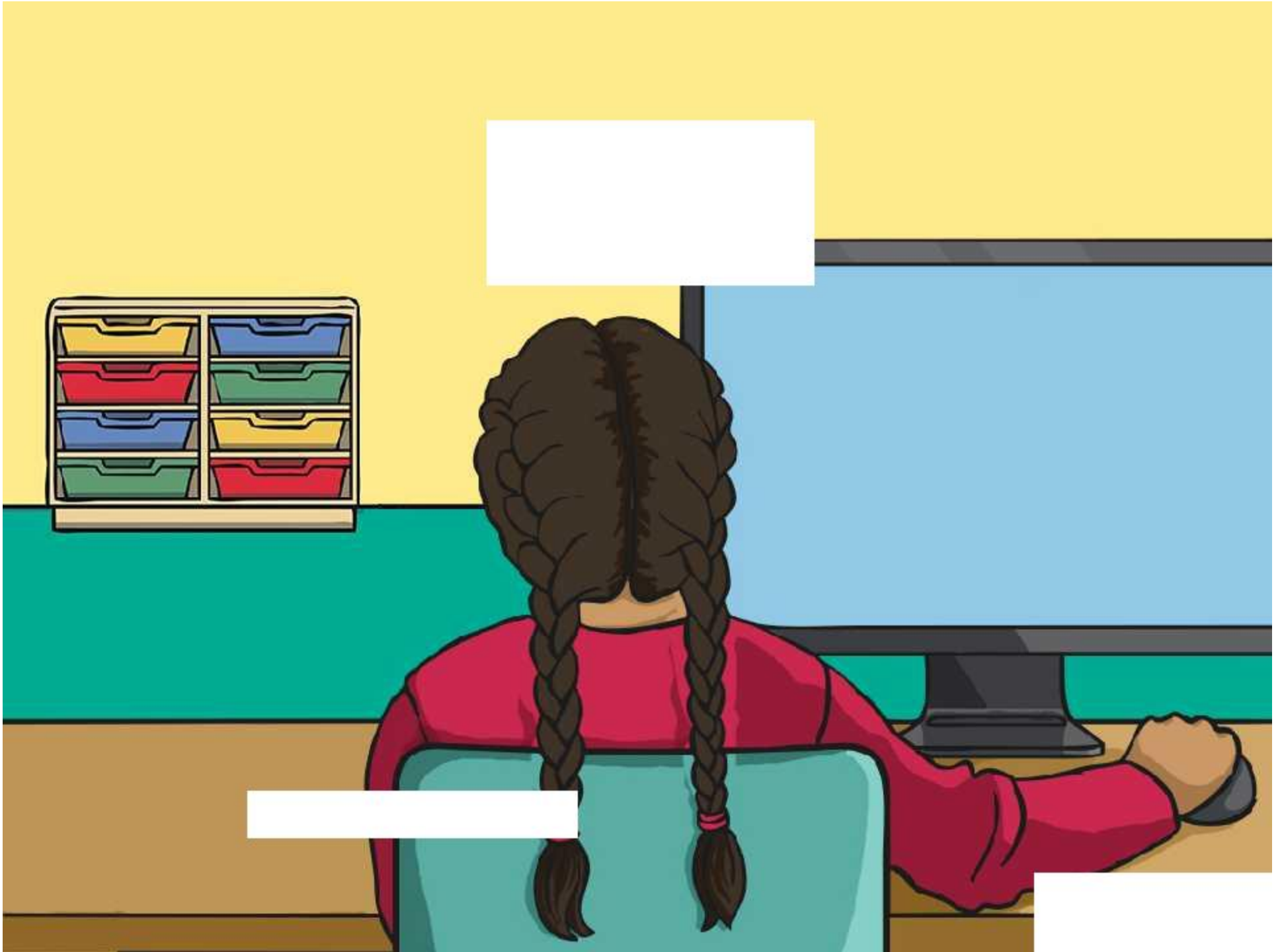
Next, we are going to add a second character.

Add a new sprite suitable for the castle theme so that the two characters can speak to each other within the speech bubbles!

Tip: If you want to turn a character to face the other way, click on **costumes**, then use the **flip left-right button** in the top right corner.

Now, add a speech bubble for each character with information about castles.

Tip: Click on the character before you add the code for them. Each sprite has a different page for their own script- don't get yourself in a muddle with which sprite is talking!

If you have time, you could also play a sound and make the character move when they speak!

when ⚑ clicked
move **50** steps
play sound cough-male ▾
say A lord or nobleman usually lives in a castle. for **5** secs

when ⚑ clicked
wait **5** secs
move **-50** steps
play sound cough-female ▾
say A princess might live in a castle too! for **5**

Can you spot the differences between the two examples of code?

Why do you think they might be different?

Scratch Characters

You should already have started a Scratch project with a castle backdrop and a sprite chosen to be a suitable character.
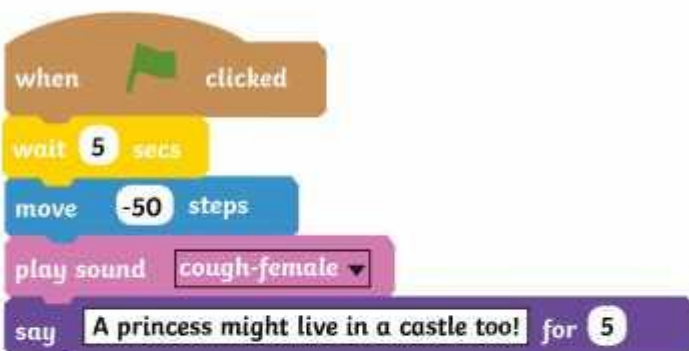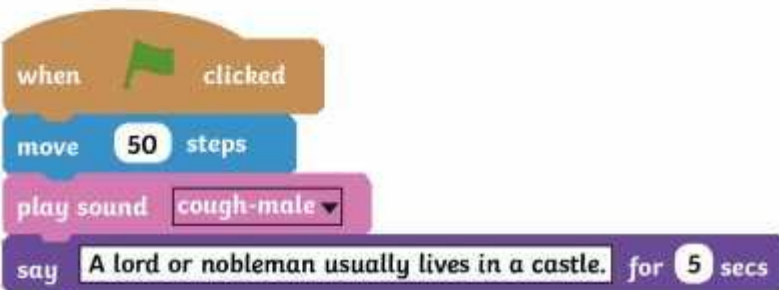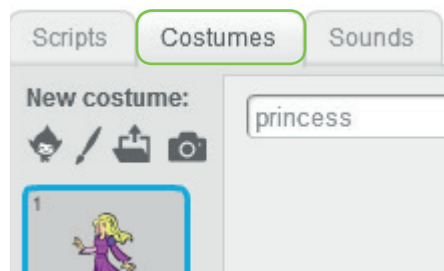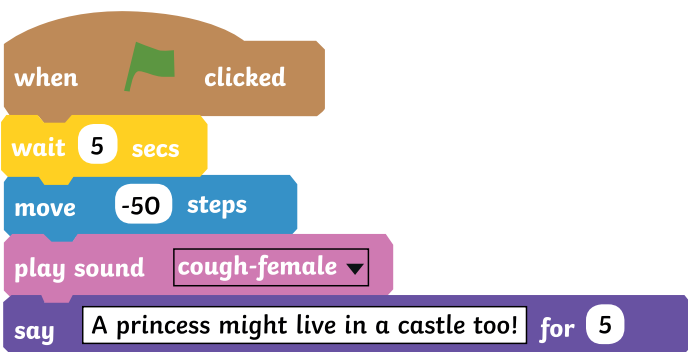
Next, we are going to add a second character.

Add a new sprite suitable for the castle theme so that the two characters can speak to each other within the speech bubbles!

Tip: If you want to turn a character to face the other way, click on **costumes**, then use the **flip left-right button** in the top right corner.

Now, add a speech bubble for each character with information about castles.

when [flag] clicked
move 50 steps
play sound cough-male ▼
say A lord or nobleman usually lives in a castle. for 5 secs

Tip: Click on the character before you add the code for them. Each sprite has a different page for their own script- don't get yourself in a muddle with which sprite is talking!

when [flag] clicked
wait 5 secs
move -50 steps
play sound cough-female ▼
say A princess might live in a castle too! for 5

If you have time, you could also play a sound and make the character move when they speak!

Can you spot the differences between the two examples of code?

Why do you think they might be different?

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