

PlanIt Year 2: Using and Applying Skills – Lesson 5 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 remind children of the features of Scratch and give them examples of code or blocks they have already used. The Scratch Overview (How to Use Scratch) sheet 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 Castle

<p>Aim: 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.</p>	<p>Success Criteria: I can select a relevant backdrop. I can make a character move. I can add suitable speech for a character. I can link actions and text to a theme.</p>	<p>Resources: Lesson Pack Computers with Scratch 2.0 installed or online.</p>
<p>I can create precise instructions for a character, on a particular theme.</p>	<p>Key/New Words: Scratch, program, code, algorithm, commands, instructions, repeat, sound, variable, blocks, sprites, backdrops</p>	<p>Preparation: Scratch Castle Activity Sheet</p>

Prior Learning: Children will have studied Scratch and Turtle Logo in an earlier unit and will be ready to use and apply skills.

Learning Sequence

	<p>Scratch – Can you Remember? Remind children of their work using Scratch in a previous unit. What examples of coding did they learn to apply? Answers should hopefully include: adding new characters, adding new backdrops, making a character move, adding sound, adding speech, using a repeat command and using the green flag to start an algorithm.</p>	
	<p>Castle Backdrop: Explain that they are going to use the skills they learnt in order to create some Scratch code about a castle - including an image and some text in speech bubbles. They can use the information and images they have already used in this unit, or some new ones that they find within Scratch. Note: This could be factual information or be flexible for children to add any relevant text and images as part of their Scratch code. An example Scratch 2.0 file is included within the Lesson Pack.</p>	
	<p>Say Something and Move: Recap the instructions and algorithm required to make a character (sprite) say something and how to instruct it to move. Demonstrate this using Scratch. Ask for examples of information that would be suitable to go inside their speech bubble about castles.</p>	
	<p>Can You Code? Can children create the instruction blocks required to add suitable character movement and speech?</p> <div style="display: flex; justify-content: space-around;"> <div>  Use Scratch to add a backdrop featuring a castle image and character (sprite). Use Scratch Castle Activity Sheet to copy and insert code. </div> <div>  Use Scratch to add a backdrop featuring a castle image and character (sprite) with a speech bubble to display relevant facts or information. Follow the guidance on the How to Use Scratch Sheet from the previous unit as additional help. </div> </div>	
	<p>Demonstrate and Share: During the lesson, look for successful code examples and ask children to share any working code that they create. Share with the whole class or use talking partners to swap and share work. Can anyone help a partner with advice or tips to improve their code? Ensure children save their work with a suitable filename and location in order to continue next lesson.</p>	

Taskit

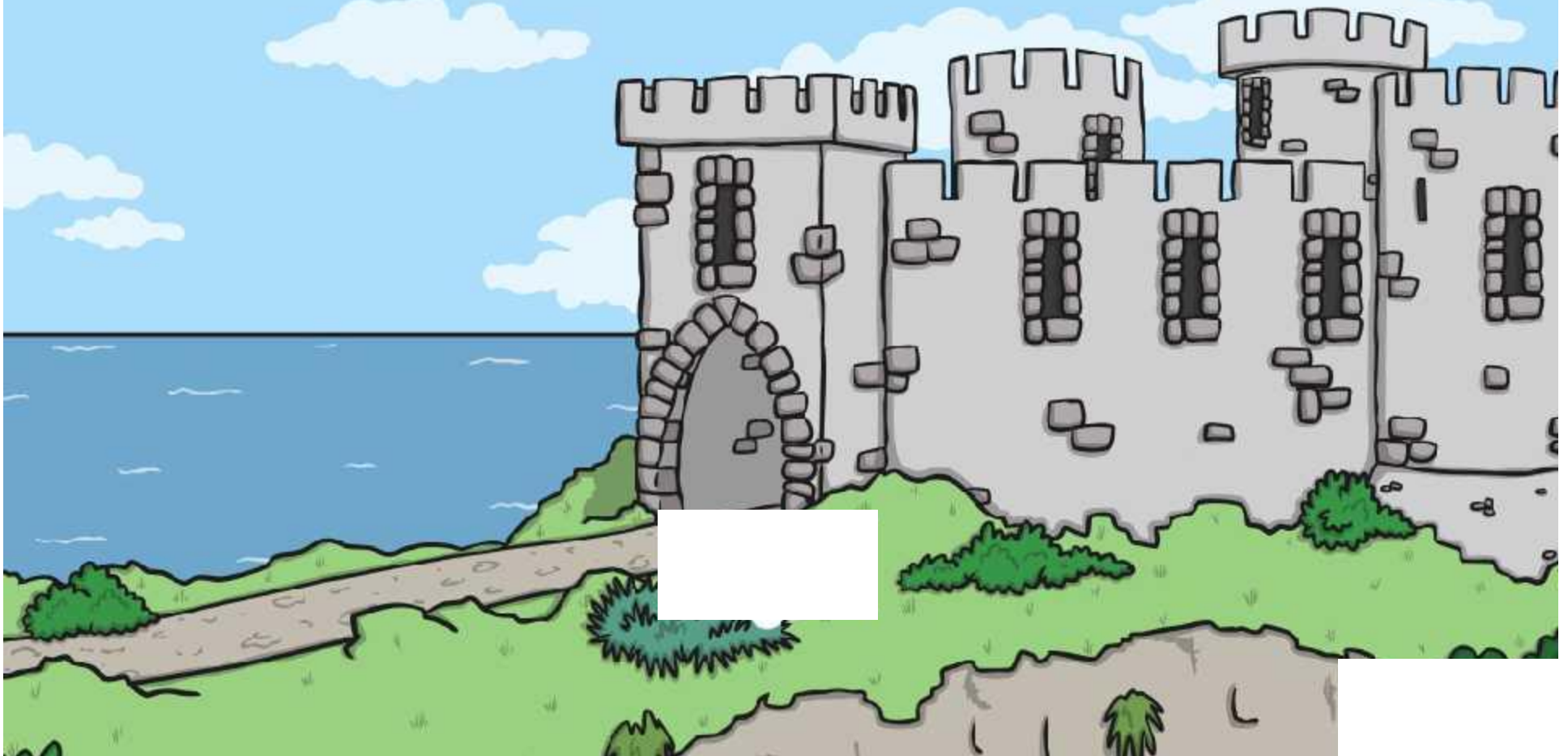
Recreateit: Can you create any of the same types of algorithms using Turtle Logo software to program it in a similar way? What are the similarities and differences?



Computing

Using and Applying Skills

Scratch Castle



Aim

- I can create precise instructions for a character, on a particular theme.

Success Criteria

- I can select a relevant backdrop.
- I can make a character move.
- I can add suitable speech for a character.
- I can link actions and text to a theme.

Scratch – Can you Remember?



Before starting this lesson, we should have all used Scratch before and learnt some skills about creating 'code'.

What skills can you remember that you used in Scratch?

adding new
characters
(sprites)

adding new
backdrops

making a
character
move

adding sound

adding
speech

using a
repeat
command

using the
green flag
to start an
algorithm

Castle Backdrop



We are going to use some of the skills we learnt, in order to create some Scratch code about a castle, which will hopefully include an image and some text in speech bubbles.



We can use the information and images we have already used in this unit, or some new ones that we find within Scratch.

Say Something and Move



Let's practise together the instructions and code to make a character (sprite) say something and how to instruct it to move.

Can anyone think of any information that would be suitable to go inside the speech bubbles about castles?

```
when green flag clicked
  play sound cymbal crash
  repeat 5
    move 10 steps
    play sound pop
  say A castle is a private fortified residence of a lord or noble, such as a prince. for 5 secs
```



Can you Code?



Can you create the instruction blocks required to add a suitable character (sprite), movement and speech within Scratch?

Use Scratch to add a backdrop featuring a castle image and character (sprite), with a speech bubble to display relevant facts or information.

You may need to use the How to Use Scratch or Scratch Castles Activity Sheets to help you.



Demonstrate and Share



Does anyone have any working code to demonstrate and share?

Can anyone help a partner with advice or tips to improve their code?

Make sure your work is saved in the correct place with a suitable filename in order to continue next lesson.



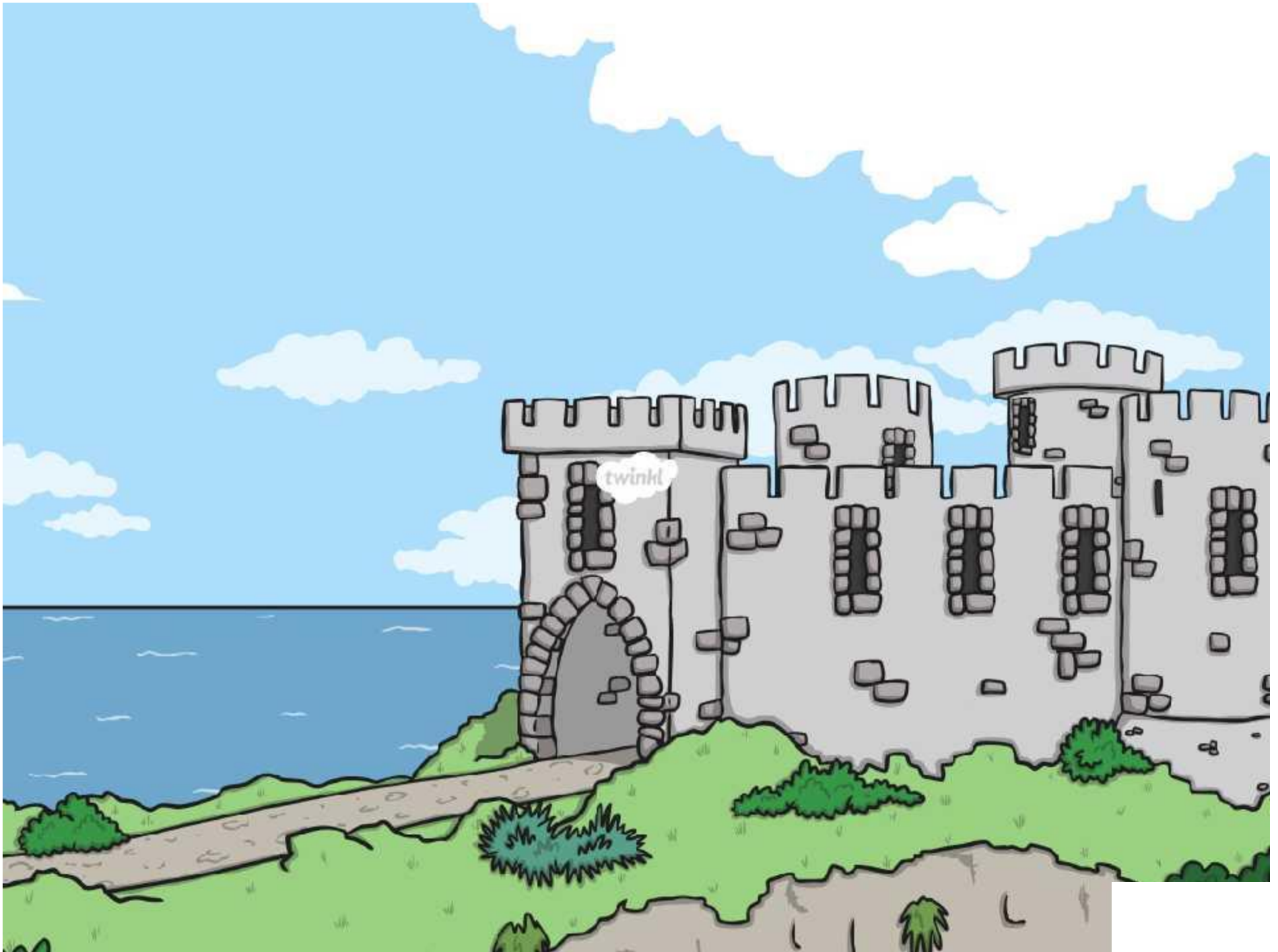
Aim



- I can create precise instructions for a character, on a particular theme.

Success Criteria

- I can select a relevant backdrop.
- I can make a character move.
- I can add suitable speech for a character.
- I can link actions and text to a theme.



Scratch Castle

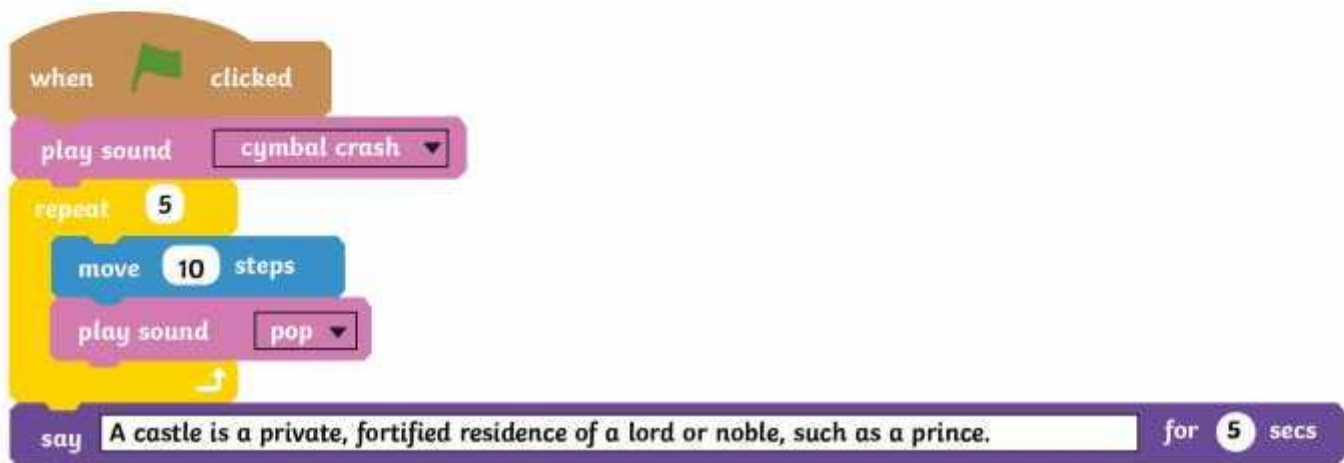
I can create precise instructions for a character, on a particular theme.



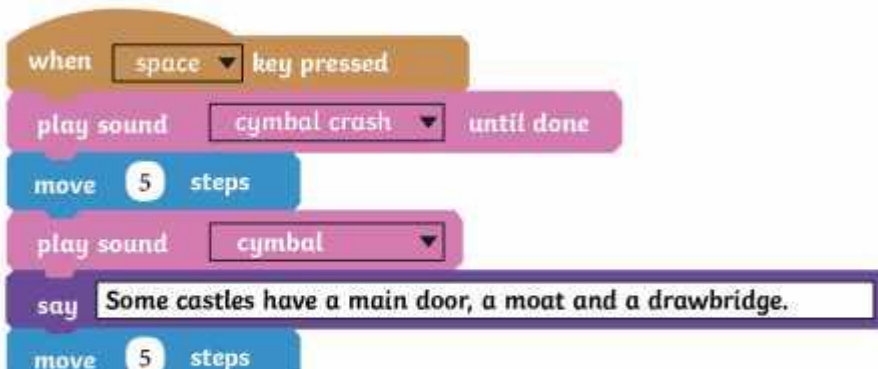
Your task is to use Scratch to write some code about castles.

Firstly, you need to add a character and a backdrop. You could use these ones available within Scratch or some of your own from your previous Computer Art lessons or from the Internet.

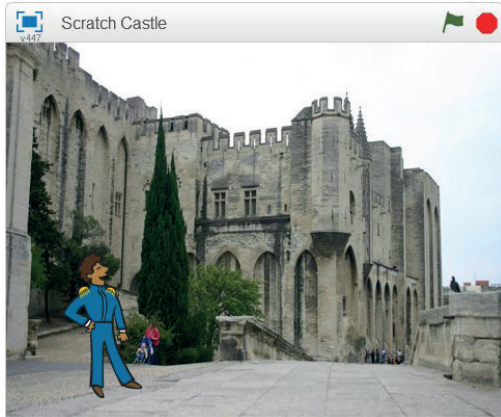
If you are unsure about which blocks to use to make your character move or speak with a speech bubble, try adding these Scratch blocks. Can you work out what will happen before trying it out?



You could add another section of code like this, or create some more ideas of your own:



Scratch Castle



Your task is to use Scratch to write some code about castles.

Firstly, you need to add a character and a backdrop. You could use these ones available within Scratch or some of your own from your previous Computer Art lessons or from the Internet.

If you are unsure about which blocks to use to make your character move or speak with a speech bubble, try adding these Scratch blocks. Can you work out what will happen before trying it out?

```
when green flag clicked
  play sound cymbal crash
  repeat 5
    move 10 steps
    play sound pop
  say A castle is a private, fortified residence of a lord or noble, such as a prince. for 5 secs
```

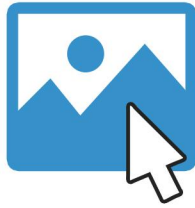
You could add another section of code like this, or create some more ideas of your own:

```
when space key pressed
  play sound cymbal crash until done
  move 5 steps
  play sound cymbal
  say Some castles have a main door, a moat and a drawbridge.
  move 5 steps
```

How to Use Scratch

Add a backdrop:

1.



Click the backdrop library icon.

2.



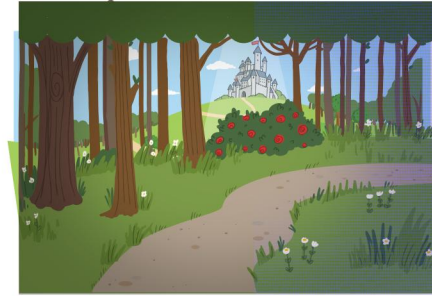
stage



forest

Choose a backdrop from the library and click OK.

3.



The new backdrop will now appear on the stage.

Add a sprite:

1.

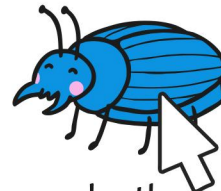


Click on one of the add new sprite icons.

2.



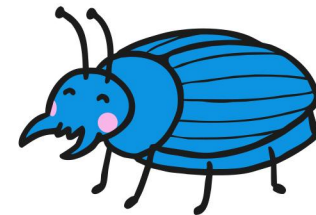
poodle



beetle

Choose a sprite from the library and click OK.

3.



Drag the sprite to where you want it to be.

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		

Using and Applying Skills | Scratch Castle

I can create precise instructions for a character, on a particular theme.		
I can select a relevant backdrop.		
I can make a character move.		
I can add suitable speech for a character.		
I can link actions and text to a theme.		