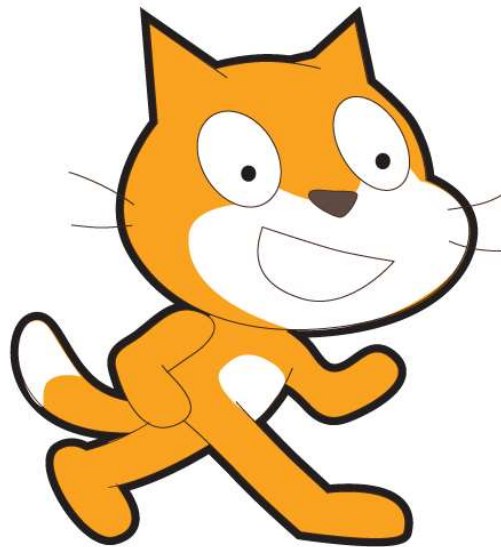


Scratch Beginners



Lesson 1

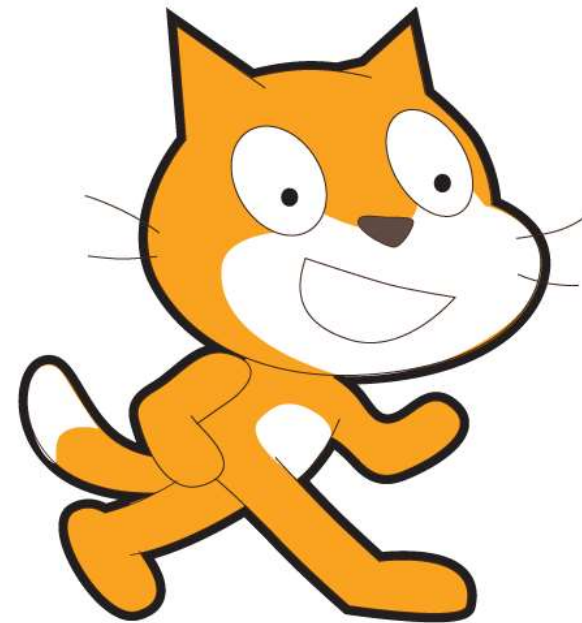
By the end of this unit...

- You are going to learn how to write computer programs using a software package called ***Scratch***.
- You will create a computer game and test out each others' games to decide what makes a good computer game.



Starter

1. Log onto your computer.
2. Find the program called ***Scratch***.
3. Load it up.





Objective

Write the code to move a sprite

- **All of you will:**
 - Change the look of a sprite.
- **Most of you will:**
 - Make the sprite move.
- **Some of you will:**
 - Add further sprites and alter the speed that they move.

Scratch

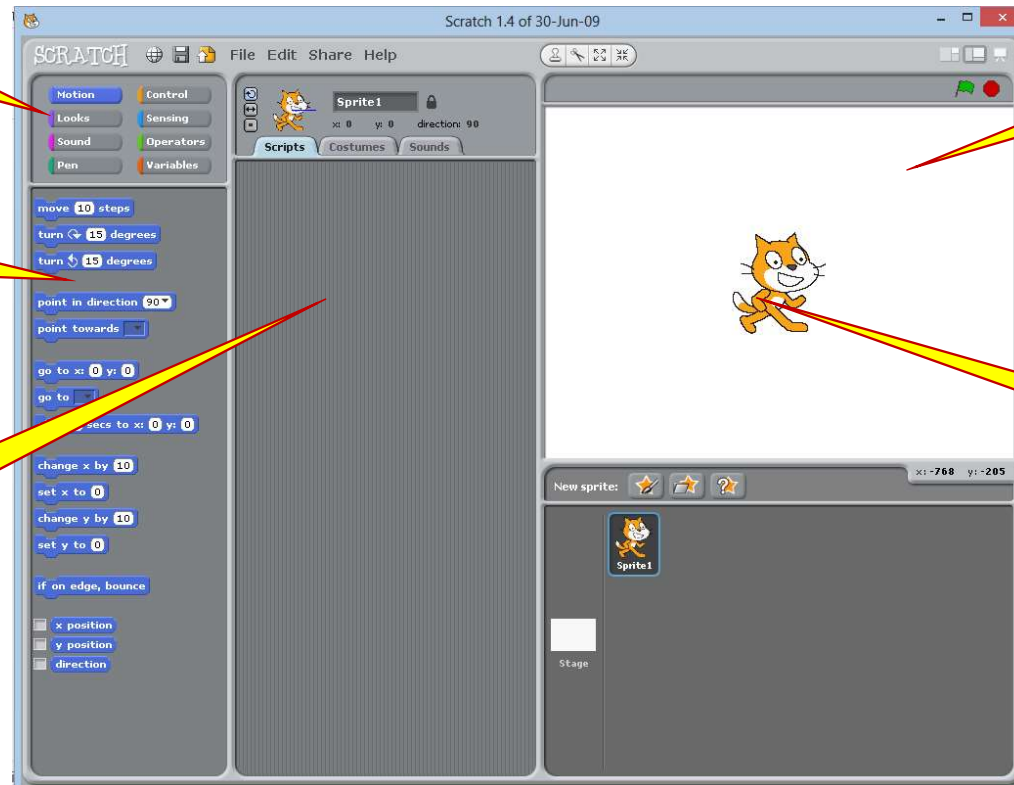
Script Groups

Script Blocks

Script Area

Stage

Sprite



Changing the Sprite



Click to start the video

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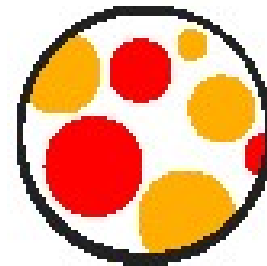
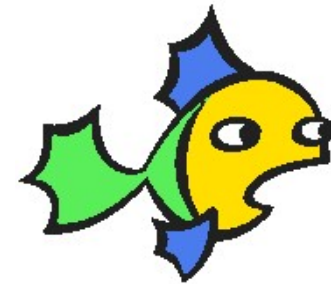
How much do you remember?



1. What is a sprite?
2. What is the stage?
3. How can you delete a sprite?
4. Which button can you use to add a sprite to the stage?
5. How can you change the folder you are looking at?

Over to you...

- Delete the cat sprite.
- Add the fish3 sprite.
- Delete the fish3 sprite.
- Add the beach ball sprite.
- Delete the beach ball sprite.
- Add any sprite of your choice.



Moving the Sprite



Click to start the video

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How much do you remember?

1. In which group of scripts would you find the option for “When space key is pressed”?
2. In which group of scripts would you find “Move 10 steps”?
3. How can you stop your sprite going off the edge of the screen?
4. How can you stop your sprite from turning upside down?

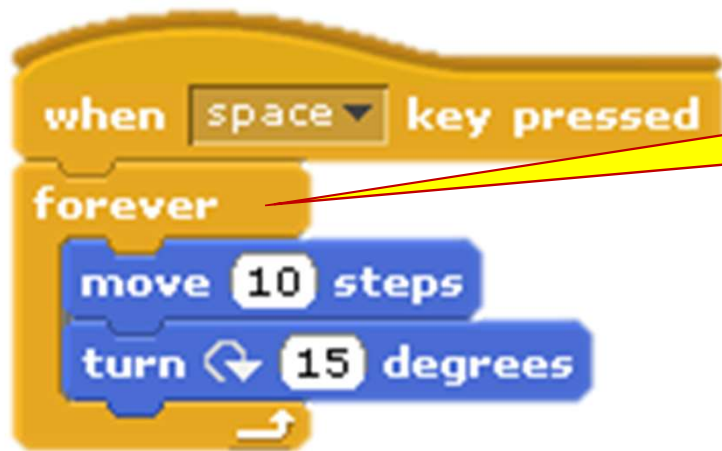


Changing the speed

- To make the sprite go faster or slower, change the number of steps it moves.
- What happens when it moves 3 steps?
- What happens when it moves 20 steps?
- Work out how you can get your sprite to move and turn using the turn option.

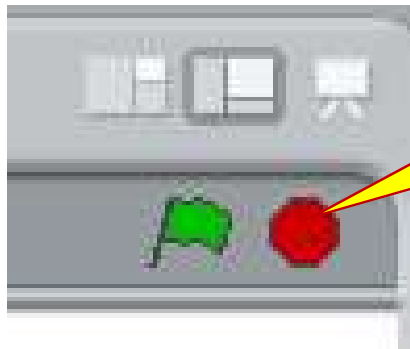


What will this code do?



This time we have a "Forever" loop in our script

- When you press the space bar the sprite will keep moving, even after you release the spacebar.
- Try it out.
- Use the stop button to stop the sprite from moving.



Stop button

Over to you...

- Add a second sprite of your choice.
- Make it move at a different speed to your first sprite.
- Work out how you can make that sprite move when you press the up arrow rather than the space bar.
- Add another sprite which starts to move when you press a different button.



How much do you remember?



1. What is a sprite?
2. Which script group will allow you to move a sprite?
3. Which script group will allow you to choose how a script starts?
4. How can you stop a script from running?
5. What does the forever loop do?
6. How can you stop a sprite from going over the edge of the stage?
7. How can you change the speed that a sprite moves?

What skills have you practised today?

New skills you have learnt today...



Scratch Beginners

Name: _____

		Your Marks
1	I can import a sprite and make it move.	😊😊😊😊
2	I can use a "Forever" and "Repeat" loops.	😊😊😊😊
3	I can write instructions to draw simple shapes.	😊😊😊😊
4	I can make a sprite change costume and use the "wait" function	😊😊😊😊
5	I can use the "If" statement to make a decision in a program.	😊😊😊😊
6	Use X and Y coordinates to control the position of sprites.	😊😊😊😊
7	Make improvements to games to make them more exciting	😊😊😊😊
8	Evaluate computer games and explain what you like and think can be improved in them.	😊😊😊😊
9	Use "Variables" to keep numeric values in your game.	😊😊😊😊
10	Create a computer game where the sprites interact with each other.	😊😊😊😊

Key

- 😊😊 I still need help with this area.
- 😊😊😊 I can do this but sometimes get stuck.
- 😊😊😊😊 I can do this on my own.
- 😊😊😊😊😊 I can confidently do this and feel I can even teach others this skill.

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