Lesson 1: Exploring conditions

Year 5 - Programming - Selection in quizzes



Lesson 1: Exploring conditions

To explain how selection is used in computer programs

- I can recall how conditions are used in selection.
- I can identify conditions in a program
- I can modify a condition in a program

If you come across these icons they give you an instruction



Answers need writing in your book – or on the screen if you wish to use this as your textbook.



You will need to carry out some programming..

True or false?

On the next slide, several statements will appear.



Write them in your books and record whether the statement is true or false for you.



True or false?

Today is Wednesday

I walked to school this morning

My birthday is in March

Llike carrots

My first name contains the letter 's'

It is raining

Computing is my favourite lesson

I want extra homework this week

True or false?

If you recorded more than three 'trues'

Then stand up and take a bow



Selection

Play the program: (Hold down control and click the left hand mouse button

over the link.)

ncce.io/pg5b-1-a1-c

What selection is taking place?

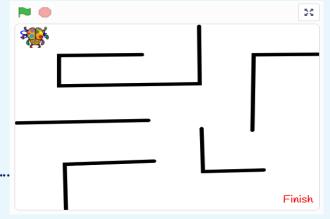
Selection refers to a decision in a computer program. If often uses "If...... next.

What conditions are being used?

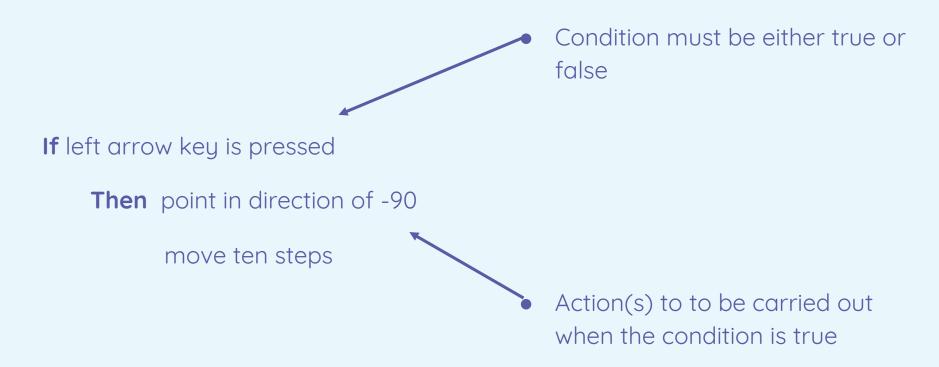
The computer program checks to see which button is pressed

• What actions are being carried out if the conditions are true?

If the computer detects the computer being pressed it enables an outcome



Using selection



Using selection



Condition must be either true or false

If touching the colour red

Then say 'You completed the maze!' for two seconds



Action(s) to to be carried out when the condition is true

Click 'See Inside' and look at the programming of the game



What does this piece of programming do?





What does this piece of programming do?



Condition in programs

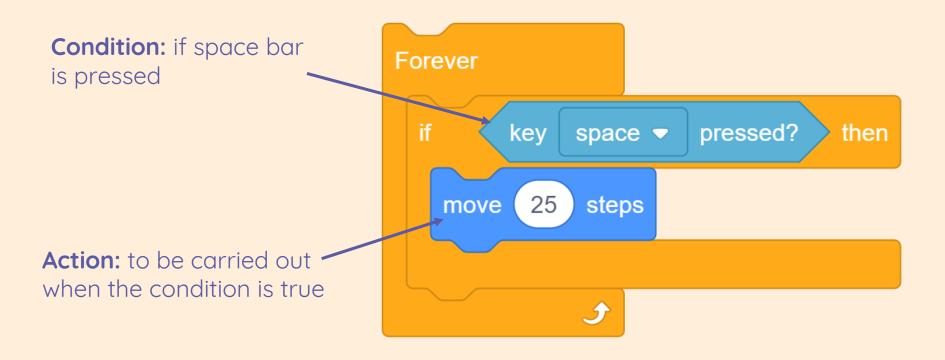
This **block** can be used as a condition when writing programs in Scratch.

The **condition block** needs to be used with other blocks to control the flow of actions.

Condition blocks are all the same shape (a hexagon). The blocks they are used with have a hexagonal space in them.



Condition in programs



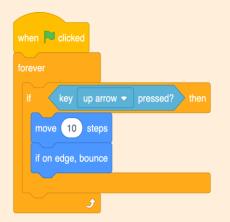
Condition in programs

```
when clicked

forever

if key space pressed? then

change color effect by 25
```





Open a new Scratch program.

Copy these programs out and then write down what happens to each one.

Can you change the output?

Copy your new programme out with an explanation.



Think and record

```
when Clicked
                   is touching (
   go to x: (-208)
   point in direction (180
           colour -
                      effect by 5
   change
```

Is selection used?





How confident are you? (1-3)

- I can recall how conditions are used in selection
- I can identify conditions in a program
- I can modify a condition in a program

3 - Very confident



2 - Unsure



1 - Not confident



Next lesson

In this lesson, you...

Explored some of the ways that conditions can be used in programs, and modified the conditions that were used in programs

Next lesson, you will...

Recall how repetition is used in selection, develop your understanding of selection by using the 'if, then, else' structure, and identify and modify the outcomes of programs that use selection