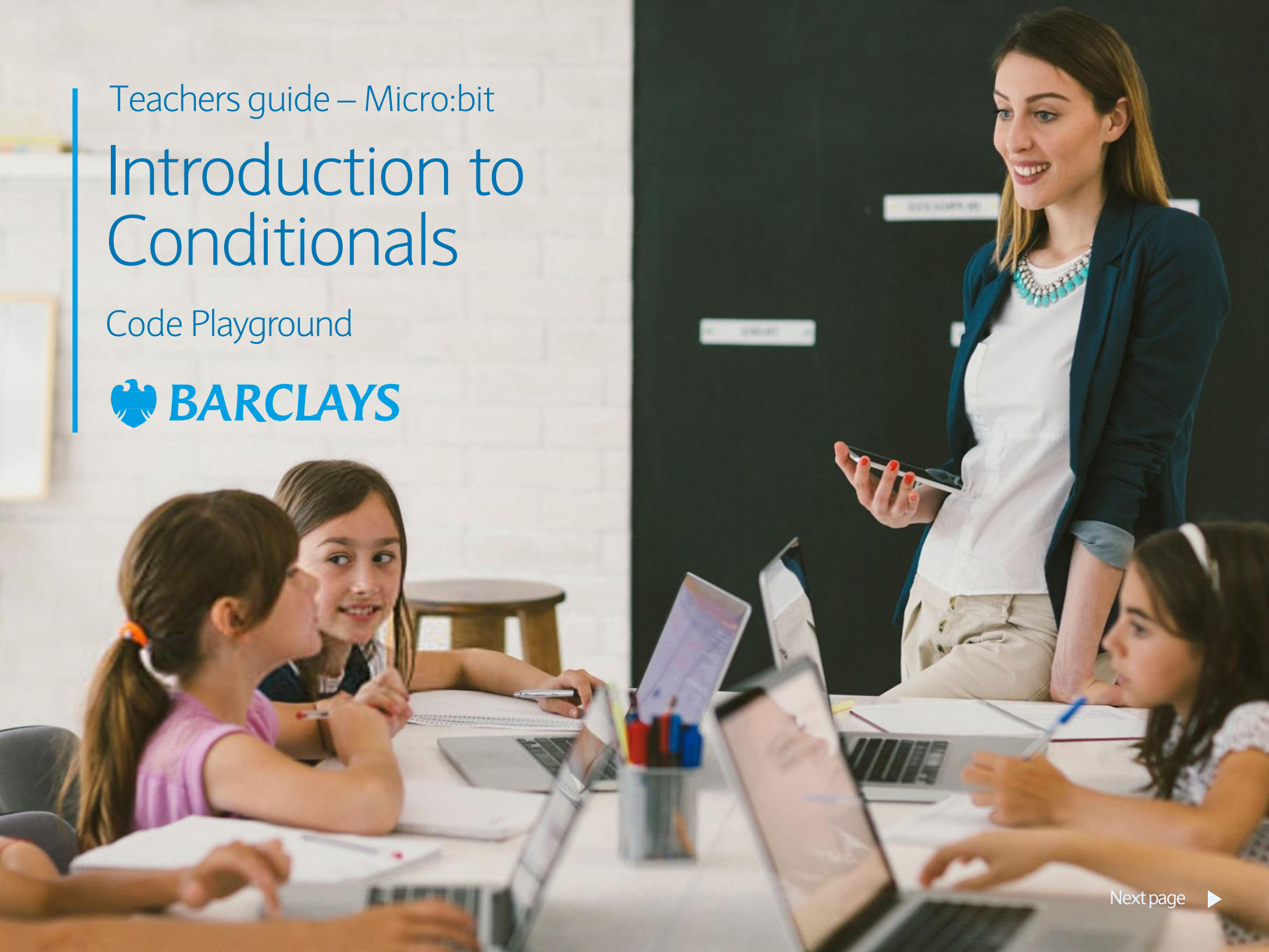Teachers guide – Micro:bit

Introduction to Conditionals

Code Playground

❦ BARCLAYS

Introduction to Conditionals
Micro:bit project

The conditional blocks can be found in the 'Logic' section. There are two main blocks which can be expanded or simplified using the '+' or '-' symbols on the blocks to include as many or as few variables as are needed. With this in mind, either block can be used.

In the diamond shape where the block says 'true', the pupils will need to add the variable that will determine which of the three outcomes the micro:bit will 'choose'. The comparison block required for this is also under 'loops'.
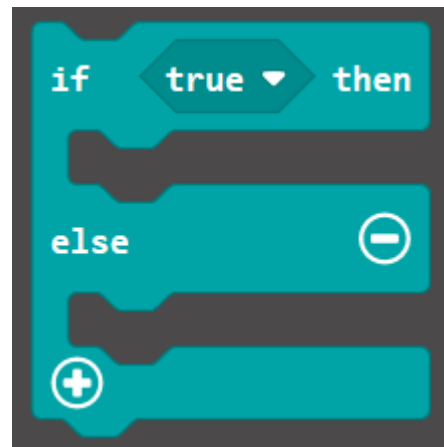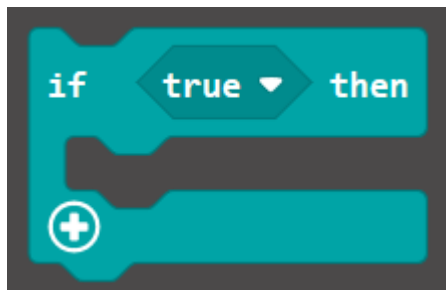
The pupils should choose an input. We've chosen shake but any could be used.

Next the variable should be set up to randomly pick either rock, paper or scissors. We've named our variable 'hand' to represent the hand gestures that are used in the classic game.

This 'choice' is stored in the micro:bit memory until we tell it what to display. This is where the conditionals come in

Introduction to Conditionals
Micro:bit project

It is very likely that your pupils will come up with the above, using a separate conditional statement for each possible outcome (rock, paper or scissors). While this is not incorrect, the code on the next page is more concise and less repetitive. Pressing the **+** symbol on the 'if' block adds 'else' components to the statement

Code Playground

Using Radio
Micro:bit project

For pupils with lower ability, use the skeleton code above and ask the pupils to fill in the gaps

Notes

Code Playground