

Conditional Selection Scaffold Prompts

If pupils are stuck when they need to use a conditional selection block use these scaffolded prompts and questions to help them understand how selection works. These can also be used as part of formative assessment.

Stage 1 Prompts are abstracted code prompts using everyday conditions and action outputs. These are a good place to start for most pupils.

Stage 2 Prompts are text only prompts. Some pupils and adults find reading the text easier than puzzling out the code blocks. Only try these if pupils are struggling to comprehend the stage 1 prompts.

Stage 3 Prompts are real code examples and are good leads back into programming.

If pupils are struggling over a specific type of selection, condition starts action, condition switches between actions or condition stops loop then use prompts of that type.

```
if short hair then
  smile
else
  wave
```

Ask question who is your fav singer?
If their answer is the same (=) Prince
Say you are so wrong!

```
if touching color [red] ? then
  say Red for 2 secs
else
  say No red here for 2 secs
```

Condition starts action

```
if you are a dog then
  whine
  bark
```

Condition switches between actions

```
if blue eyes then
  nod
else
  tap head
```

Condition stops loop

```
repeat until foot touched
  smile
  wait 1 secs
  frown
  wait 1 secs
```



- 1, If you are a dog what will you do (act it out)?
- 2, If you are not a dog what will you do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again?
- 7, Which blocks are outputs?

Stage 1



- 1, If you love cats what will you do (act it out)?
- 2, If you don't love cats what will you do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again?
- 7, Which blocks are outputs?

Stage 1



```

if you have black hair then
  repeat 3
    jump
    wait 2 secs

```

- 1, If you have black hair what will you do (act it out)?
- 2, How many times will jump be run if someone has black hair?
- 3, What would you change to make someone jump faster?
- 4, Point to the condition.
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, When this code is run, how many times will it check the condition?
- 7, What could you do to check the condition over and over again?
- 8, Which blocks are outputs?

```

if you have brown eyes then
  repeat 3
    jump
    wave

```

- 1, If you have brown eyes what will you do (act it out)?
- 2, How many times will jump be run if someone has brown eyes?
- 3, What would you change to make someone jump 7 times?
- 4, Point to the condition.
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, When this code is run, how many times will it check the condition?
- 7, What could you do to check the condition over and over again?
- 8, Which blocks are outputs?



- 1, If the answer is less than 10 what will happen?
- 2, Point to the condition.
- 3, Does this code, start an action, switch between two actions or stop a loop?
- 4, If the answer is 13 what will happen?
- 5, If the answer is 7 what will happen?
- 5, Which block is an input block?
- 6, Which block is an output?



- 1, If the sprite is touching red what will it do?
- 2, If the sprite is not touching red what will it do?
- 3, What would you change to make the sprite get smaller when it touches red?
- 4, Point to the condition.
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, When this code is run, how many times will it check the condition?
- 7, What could you do to check the condition over and over again?
- 7, What block are outputs?

The image shows a Scratch code block. It is an orange 'if' block with a blue arrow pointing right. Inside the arrow, the text 'key space' is in a dropdown menu, followed by 'pressed?'. To the right of the arrow is the word 'then'. Below the arrow is a blue 'move 1 steps' block.

- 1, If the space key is pressed what will it do?
- 2, If the space key is not pressed what will it do?
- 3, What would you change to make the sprite move further when the space key is pressed?
- 4, Point to the condition.
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, When this code is run, how many times will it check the condition?
- 7, What could you do to check the condition over and over again?
- 8, Which block is an output?
- 9, Which block inputs information?

The image shows a sequence of Scratch code blocks. It starts with a blue 'ask' block with the text 'What is you favourite number?' and 'and wait'. Below it are three orange 'if' blocks. The first 'if' block has a green arrow pointing right with 'answer = 1' and 'then', followed by a purple 'say' block with 'That is a small number' and 'for 2 secs'. The second 'if' block has a green arrow pointing right with 'answer = 2' and 'then', followed by a purple 'say' block with 'An even number' and 'for 2 secs'. The third 'if' block has a green arrow pointing right with 'answer = 3' and 'then', followed by a purple 'say' block with '3 is cool' and 'for 2 secs'.

- 1, If the answer is 1 what will happen?
- 2, If the answer is 3 what will happen?
- 3, If the answer is 4 what will happen?
- 4, Point to the condition.
- 6, Which block is an input?
- 7, Which blocks are outputs?

Ask question who is your fav singer?
If their **answer is the same (=) Prince**
Say you are so wrong!

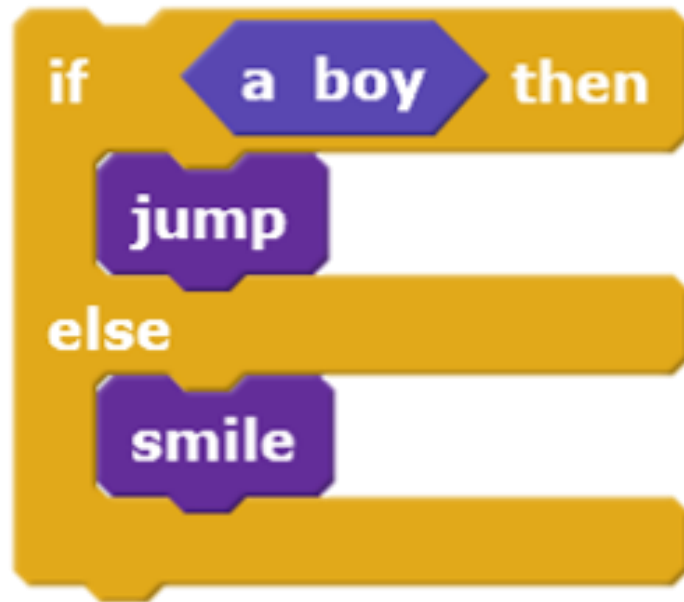
- 1, If the answer is **equal** to Prince what will happen?
- 2, If the answer is **not equal** to Prince what will happen?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, Is the **ask question** an input or output?
- 6, What command is an output?



Repeat this forever
If m key is pressed
Turn right 1 degrees
Move 1 step

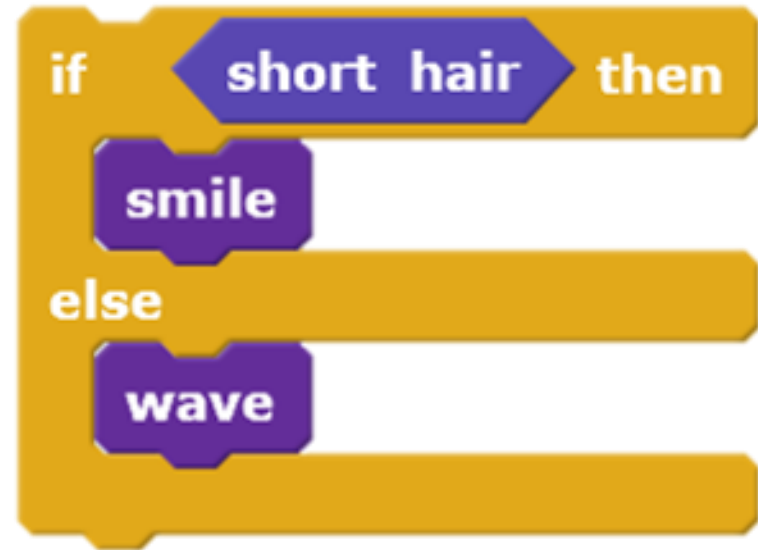
- 1, If the m key is pressed what will happen?
- 2, If the m key is not pressed what will happen?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, How many times will this condition be checked?
- 6, What would you change if you wanted this code to be started by the up arrow key?
- 7, Which parts of this algorithm are outputs?





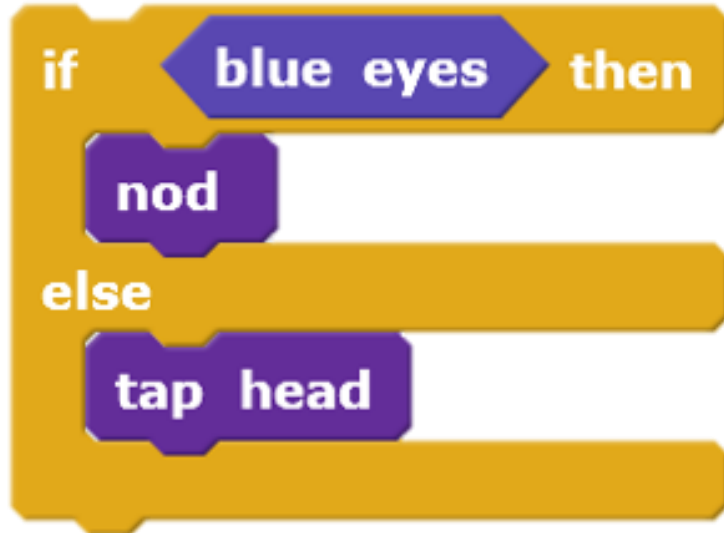
- 1, If you are a boy what will you do?
- 2, If you are not a boy what will you do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again?

7, Which blocks are outputs?



- 1, If you have short hair what will you do?
- 2, If you don't have short hair what will you do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again?

7, Which blocks are outputs?



- 1, If you have blue eyes what will you do?
- 2, If you don't have blue eyes what will you do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again?

7, Which blocks are outputs?



- 1, If you have brown eyes what will you do?
- 2, If you don't have brown eyes what will you do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again?

7, Which blocks are outputs?



- 1, If the sprite is touching the edge what will it do?
- 2, If the sprite is not touching the edge what will it do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again? Would that be a good idea?
- 7, What blocks are outputs?



- 1, If the sprite is touching the colour red what will it do?
- 2, If the sprite is not touching the colour red what will it do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, What could you do to check the condition over and over again? Would that be a good idea?
- 7, What blocks are outputs?

```

ask 100-90=? and wait
if answer = 10 then
  say Correct for 2 secs
else
  say Wrong for 2 secs

```

- 1, If the answer is **equal** to 10 what will it do?
- 2, If the answer is **not** equal to 10 what will it do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, What type of block is the ask block?
- 7, What blocks are outputs?

```

forever
  if touching edge? then
    turn 180 degrees
  else
    move 10 steps

```

- 1, If the sprite is touching the edge what will it do?
- 2, If the sprite is not touching the edge what will it do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, When this code is run, how many times will it check the condition?
- 6, Which blocks are outputs?

```
Ask question what is 100 - 10 =?  
If their answer is the same (=) as 90  
    Say well done correct answer  
Else  
    Say wrong answer
```

- 1, If the answer is **equal** to 90 what will happen?
- 2, If the answer is **not equal** to 90 what will it do?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, If you were giving a point for the correct answer where would that go?
- 6, Is the **ask question** an input or output?
- 7, What commands are outputs?



```
Repeat this forever  
    If c key is pressed  
        Turn right 5 degrees  
    Else  
        Turn left 5 degrees
```

- 1, If the c key is pressed what will happen?
- 2, If the c key is not pressed what will happen?
- 3, Point to the condition.
- 4, Does this code, start an action, switch between two actions or stop a loop?
- 5, How many times will this condition be checked?
- 7, What would you change if you wanted this code to be changed by another key?
- 8, Which parts of this are outputs?

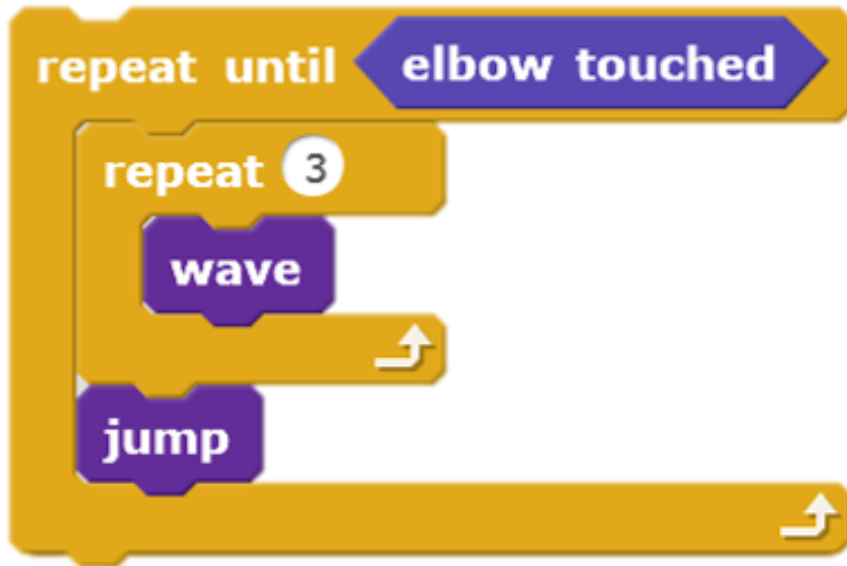




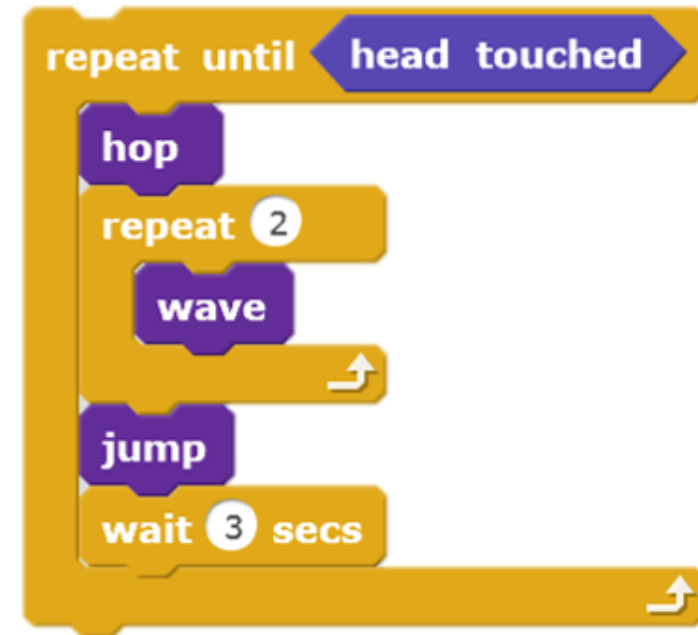
- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Which blocks are outputs?
- 6, How would you speed up the actions / outputs?
- 7, Does this code, start an action, switch between two actions or stop a loop?




- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Which blocks are outputs?
- 6, How would you speed up the actions / outputs?
- 7, Does this code, start an action, switch between two actions or stop a loop?



- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Which blocks are outputs?
- 6, How would you speed up the actions / outputs?
- 7, Does this code, start an action, switch between two actions or stop a loop?

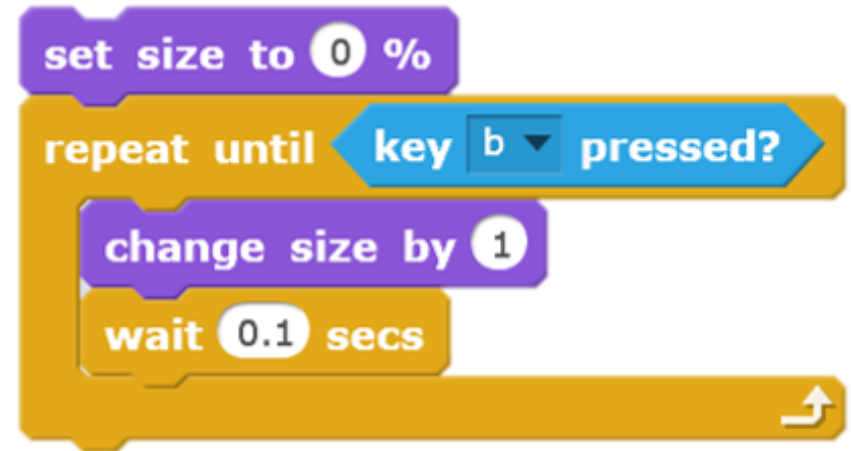


- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Which blocks are outputs?
- 6, How would you speed up the actions / outputs?
- 7, Does this code, start an action, switch between two actions or stop a loop?



```
repeat until touching color blue ?
say Not touching blue
```

- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, What is missing from the American spelling of colour?



```
set size to 0 %
repeat until key b pressed?
change size by 1
wait 0.1 secs
```

- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Does this code, start an action, switch between two actions or stop a loop?

```
set color effect to 0
repeat until key b pressed?
  change color effect by 3
```

- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, What is missing from the American spelling of colour?

```
set size to 0 %
repeat until key b pressed?
  repeat 100
    change size by 1
    wait 0.1 secs
  set size to 0 %
```

- 1, What actions are repeated?
- 2, How many times are the actions repeated?
- 3, What stops the repeated actions?
- 4, Point to the condition?
- 5, Does this code, start an action, switch between two actions or stop a loop?
- 6, What is missing from the American spelling of colour?