Start Scratch and load
Toygiveaway
Run the program a few times first

Work with a partner
of same ability

Name

repeat 3

Count-Controlled-Loop

INVESTIGATE 👁

1, When the sprite is clicked, how many times will next costume be run?

INVESTIGATE 👁

2, How long is there between each costume change?

INVESTIGATE 👁

3, Complete the sequence below that could replace the code inside the balloon loop.
next costume, wait 1 secs, next costume,

CHANGE ✏

4, Make the balloon change through all the colours twice. Describe what you changed.

ADD ➕

5, Make the balloon sprite say *end* for a second after it has changed colours. What did you add?

Balloon

INVESTIGATE 👁

6, Which direction is the bowtie pointing before it spins? (number of degrees)

INVESTIGATE 👁

7, What is the largest percentage % the bowtie grows to?

CHANGE ✏

8, Make the **bowtie** spin slower. Describe what you changed.

Bowtie

INVESTIGATE 👁

9, When the sprite is clicked how many times does it wait for 0.5 seconds?

INVESTIGATE 👁

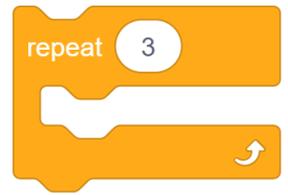10, What direction does –20 move the ball, up or down?

CHANGE ✏

11, Make the beachball bounce higher. Describe what you changed.

Beachball

Code-IT
code-it.co.uk

Start Scratch and load
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Count-Controlled-Loop

CHANGE

12, Change the code to make the dog walk slower. What did you change?

ADD

13, Make the dog change costume to dog2-c at the end of the program. What did you add?

Dog

CHANGE

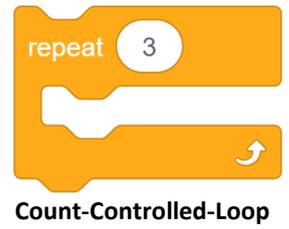14, Make the bell swing in a wider arc. Describe what you changed.

If we swung a piece of string from the blue circle. How far it swings would be the arc

Bells

Name

Count-Controlled-Loop

Work with a partner
of same ability
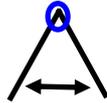
Create easier choice (Choose one or more of these ideas first)

1, Look for another toy sprite to add to the table. Decide what the toy is going to do. Adapt one of the ideas from **toygiveaway** such as moving up-down, rotating, changing costumes, playing a sound etc to program the toy to do something when clicked on.

2, Find two character that have multiple costumes (not all sprites have multiple costumes). Animate them to look like they are moving for a short period of time using a count controlled loops.

Create harder choice (Choose one or more of these ideas second)

1, Make your own scene with sprites that do something when they are clicked. You must use count controlled loops as part of each sprites programming.

2, Make a sprite move around the screen using multiple count controlled loops, the move steps and the point in direction blocks.

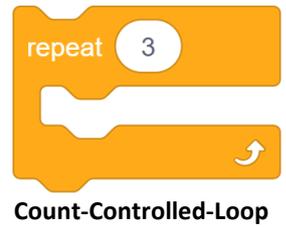3, Make your own program that uses count controlled loops.

Use the space below to plan 1, 2 or 3

Task Level (What will my program do? What characters will it have?)

Design Level 1 (What will each of my characters do in detail?)

Design Level 2 (Turn what your character will do into an algorithm, Plan what your program will look like)

Name

repeat `3`

Count-Controlled-Loop

INVESTIGATE

1, When the sprite is clicked, how many times will next costume be run?

3 times (1 mark)

INVESTIGATE

2, How long is there between each costume change?

1 second (1 mark)

INVESTIGATE

3, Complete the sequence below that could replace the code inside the balloon loop.

next costume, wait 1 secs, next costume,

wait 1 secs, next costume, wait 1 secs (1 mark)

CHANGE

4, Make the balloon change through all the colours twice. Describe what you changed.

Increase the number of repeats to 6 (1 mark)

ADD

5, Make the balloon sprite say *end* for a second after it has changed colours. What did you add?

Add a say end for 2 seconds block to the end (1mark)

Balloon

INVESTIGATE

6, Which direction is the bowtie pointing before it spins? (number of degrees)

90 degrees (pointing right) (1 mark for mention of 90 degrees)
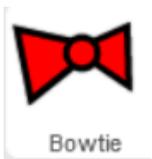
INVESTIGATE

7, What is the largest percentage % the bowtie grows to?

240% (1 mark)

CHANGE

8, Make the **bowtie** spin slower. Describe what you changed.

Reduce the amount of turn to less than 15 degrees (1 mark)

Bowtie

INVESTIGATE

9, When the sprite is clicked how many times does it wait for 0.5 seconds?

8 times (1 mark)

INVESTIGATE

10, What direction does –20 move the ball, up or down?

Down (1 mark)

CHANGE

11, Make the beachball bounce higher. Describe what you changed.

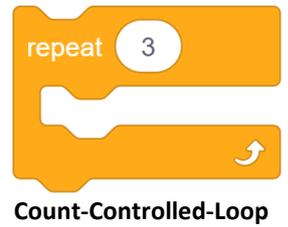Change the move 20 steps to a higher number (1 mark)

Beachball

Start Scratch and load
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Count-Controlled-Loop

CHANGE

12, Change the code to make the dog walk slower. What did you change?
Increase both waits to numbers larger than 0.3 (1 mark)

ADD

13, Make the dog change costume to dog2-c at the end of the program. What did you add? Add a switch costume to dog2-c after the repeat 20 loop (1 mark)

Dog

CHANGE

14, Make the bell swing in a wider arc. Describe what you changed. Change the turn right and turn left degrees to numbers larger than 20 (1 mark)

If we swung a piece of string from the blue circle. How far it swings would be the arc

Bells