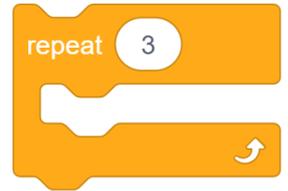


Toy Give Away App
Parsons USE MODIFY Page 1
Start Scratch and load
toygiveawayparson



All the code has been selected but some of it in the app is unconnected.
Use the algorithms below to help you connect the code.

Beachball

- Start when touched
- Go to a specific x and y place
- Point up
- Loop 4 times
 - Move 20 steps forward
 - Pause
 - Move 20 steps backwards
 - Pause



Balloon

- Start when touched
- Go to a specific x and y place
- Start on costume 1a
- Loop 3 times
 - Change costume
 - Pause



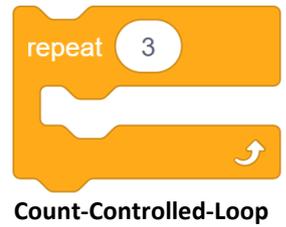
Bowtie

- Start when touched
- Set size to 160%
- Go to a specific x and y place
- Point right
- Make bigger by set size to 240%
- Loop 100 times
 - Turn right 15°
- Point right
- Make smaller by set size to 160°



Now check your answers to see if they are correct using the parsons answer 

Name



USE (Run the programs lots of times but don't change the code)

Look at the code inside **balloon** and answer these questions.

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



2, How long is there between each costume change?

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

Look at the code inside the **bowtie** and answer these questions.

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



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

Look at the code inside the **beachball** and answer these questions.

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

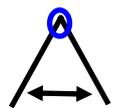


7, What direction does -20 move the ball, up or down?

Now mark the **USE** questions using the answer **sheep**



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



Modify (Make small changes to the code)

1, Adapt the code to make the **dog** walk slower. Describe what you changed.

2, Adapt the code to make the **bell** swing in a wider arc. Describe what you changed.

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

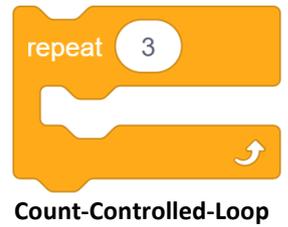
4, Make the **balloon** change through all the colours twice. Describe what you changed.

5, Make the **beachball** bounce higher. Describe what you changed.

Now mark the **modify** questions using the answer **sheep**



Name



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

Self & Teacher Assessment

Pupils draw a line to show how far you understand and can use count controlled loops. Pupils put a large dot on the line if you have programming evidence to prove it and write the name of the saved scratch document next to it. Tell your teacher.

Teachers highlight any dots you have checked personally.

	Understand concept and can write everyday algorithm using it	Can modify it and answer questions about it	Can use it independently within the genre it was taught in	Can use it independently outside of the genre it was taught in
Count controlled Loops Line starts here →				

Name

(genre= type of programming it is. The genre of this program is an interactive animated scene)



Toy Give Away App Parsons Answers



Count-Controlled-Loop



Beachball



Balloon



Bowtie

```

when this sprite clicked
  go to x: -37 y: -1
  point in direction 0
  repeat 4
    move 20 steps
    wait 0.5 secs
    move -20 steps
    wait 0.5 secs
  
```

```

when this sprite clicked
  go to x: -53 y: 77
  switch costume to balloon1-a
  repeat 3
    next costume
    wait 1 secs
  
```

```

when this sprite clicked
  set size to 160 %
  go to x: 64 y: -14
  point in direction 90
  set size to 240 %
  repeat 100
    turn 15 degrees
  point in direction 90
  set size to 160 %
  
```

```

when this sprite clicked
  go to x: -37 y: -1
  point in direction 0
  repeat 4
    move 20 steps
    wait 0.5 seconds
    move -20 steps
    wait 0.5 seconds
  
```

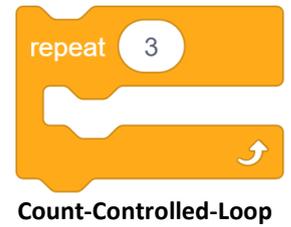
```

when this sprite clicked
  go to x: -53 y: 77
  switch costume to balloon1-a
  repeat 3
    next costume
    wait 1 seconds
  
```

```

when this sprite clicked
  set size to 160 %
  go to x: 64 y: -14
  point in direction 90
  set size to 240 %
  repeat 100
    turn 15 degrees
  point in direction 90
  set size to 160 %
  
```

Toy Give Away App Parsons USE Answer Sheep



USE (Run the programs lots of times but don't change the code)

Look at the code inside balloon1 and answer these questions.

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

3 times (1 mark)

2, How long is there between each costume change?

1 second (1 mark)

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

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

Look at the code inside the bowtie and answer these questions.

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

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

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

240% (1 mark)

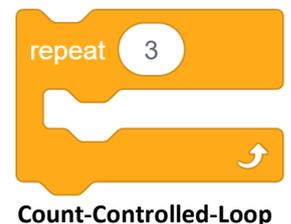
Look at the code inside the beachball and answer these questions.

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

8 times (1 mark)

7, What direction does -20 move the ball, up or down? Down (1 mark)

Toy Give Away App USE MODIFY CREATE Page 2 Answer Sheep MODIFY



Modify (Make small changes to the code)

1, Adapt the code to make the **dog** walk slower. Describe what you changed.

Increase both waits to numbers larger than 0.3 (1 mark)

2, Adapt the code to make the **bell** swing wider. Describe what you changed.

Change the turn right and turn left degrees to numbers larger than 20 (1 mark)

3, Make the bowtie spin slower. Describe what you changed.

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

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

Increase the number of repeats to 6 (1 mark)

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

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