

**Dog Chase**  
PRIMM Page 1 PREDICT



# Count controlled loops

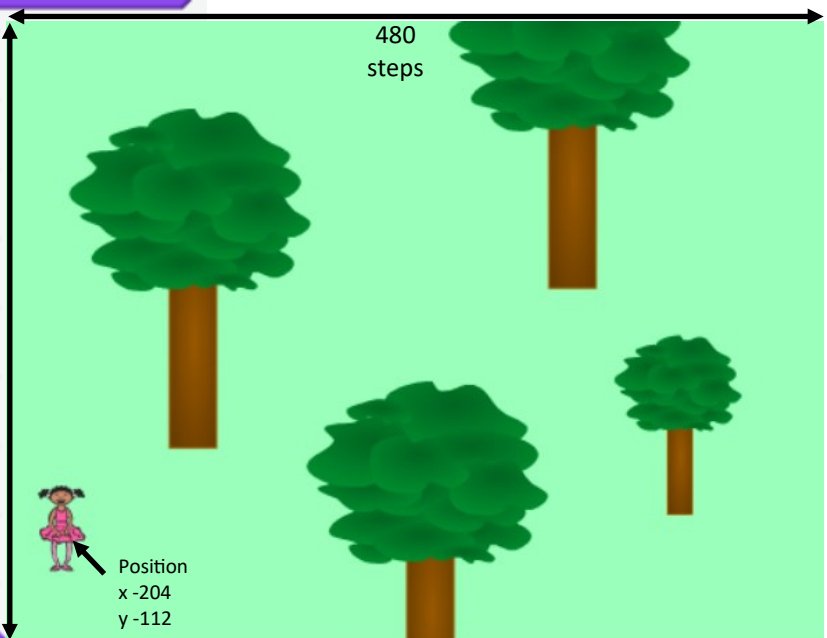
Name

```

when clicked
  go to x: -204 y: -112
  clear
  pen down
  point in direction 0
  say Where is my dog? for 2 secs
  say I will leave a trail behind for 2 secs
  say so I can find my way home. for 2 secs
  set pen color to orange
  repeat 250
    move 1 steps
  say Here boy! for 2 secs
  point in direction 90
  set pen color to red
  repeat 160
    move 1 steps
        
```

Direction finder

Read the code on the left really carefully. The girl is looking for her dog. Use the steps and the direction finder to help you understand what will happen.



- 1, What is the first thing she will say?
- 2, She says she will leave a trail behind. What code blocks will make that happen?
- 3, Which code block sends her to the start position? (initialisation)
- 4, Which letter have the Americans missed out of their spelling of colour?
- 5, Name the two count controlled loops
- 6, What does she say after walking for 250 steps?
- 7, Draw on the picture with a ruler and pencil where you think the code takes her.

Now mark your work using the answersheep

**Dog Chase**  
**PRIMM Page 2 RUN & INVESTIGATE**  
Start Scratch and load  
dogchase



# Count controlled loops

**INVESTIGATE** (Run the code and answer the questions. Don't make any changes)

Look at the code inside the Girl!



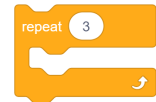
### Girl Sprite Questions

1, Which block starts the code?

2, What is the first thing the girl says?

3, How many count controlled loops are there?

Count controlled loop

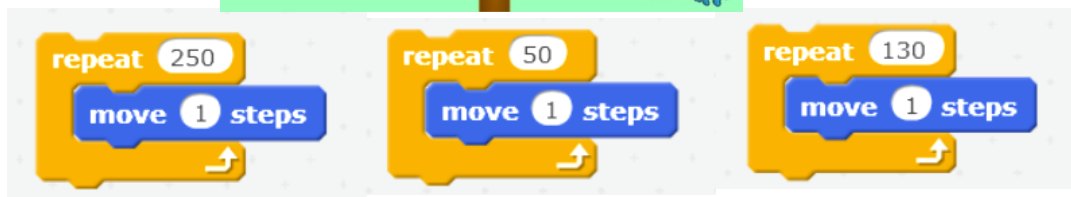
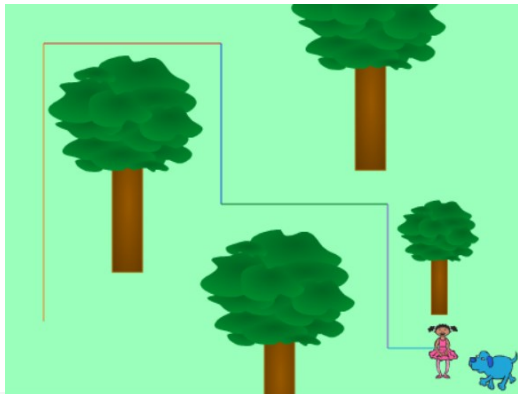


4, How many times will the first **move 1 step** code block be run when the program has started? HINT What is it inside?

5, What is the smallest count controlled loop?

6, Each loop draws a line. Draw a line to connect the loop to its coloured line.

7, Which block changes the girls direction?



Look at the code inside the Dog



### Dog Sprite Questions

8, Why does the dog wait until the Girl arrives?

9, Which blocks get repeated 20 times?

Now mark your **USE** work using the answer sheep



Name

**Dog Chase**  
**PRIMM Page 3 MODIFY**  
Start Scratch and load  
dogchase



# Count controlled loops

**MODIFY Questions** (Run the code and make changes)

1, Can you make the Girl say something different when she finally finds the dog?  
What did you change?



2, Can you make the Girl bump into the dog at the end?  
What did you change?



3, Can you make the dog say something after the girl bumps into him?  
What code did you add? HINT Wait until touching.....



4, Can you make the dog go twice as fast but still only go the same distance?  
What did you change? HINT You will need to make two changes



Now mark your **USE** work using the answer 

Name



# Count controlled loops

## MAKE INSIDE (Choose one or more of these to make)

1, Design and program your own route through the trees for the girl to take. Keep the code and modify it. Draw your new route on the picture below.



2, Add another character to the woods that the girl meets. Program the character to do or say something when the girl touches them.

3, Program the large tree to say or do something when the girl touches it.

4, Draw a spider sprite that drops out of a tree using the pen command as its web. Drag the sprite to its start position and drag out a go to x and y block so the spider always starts in the same position (initialisation).

## CREATE NEW

Design and make your own moving animation using count controlled loops. Draw a picture below to help you plan it.

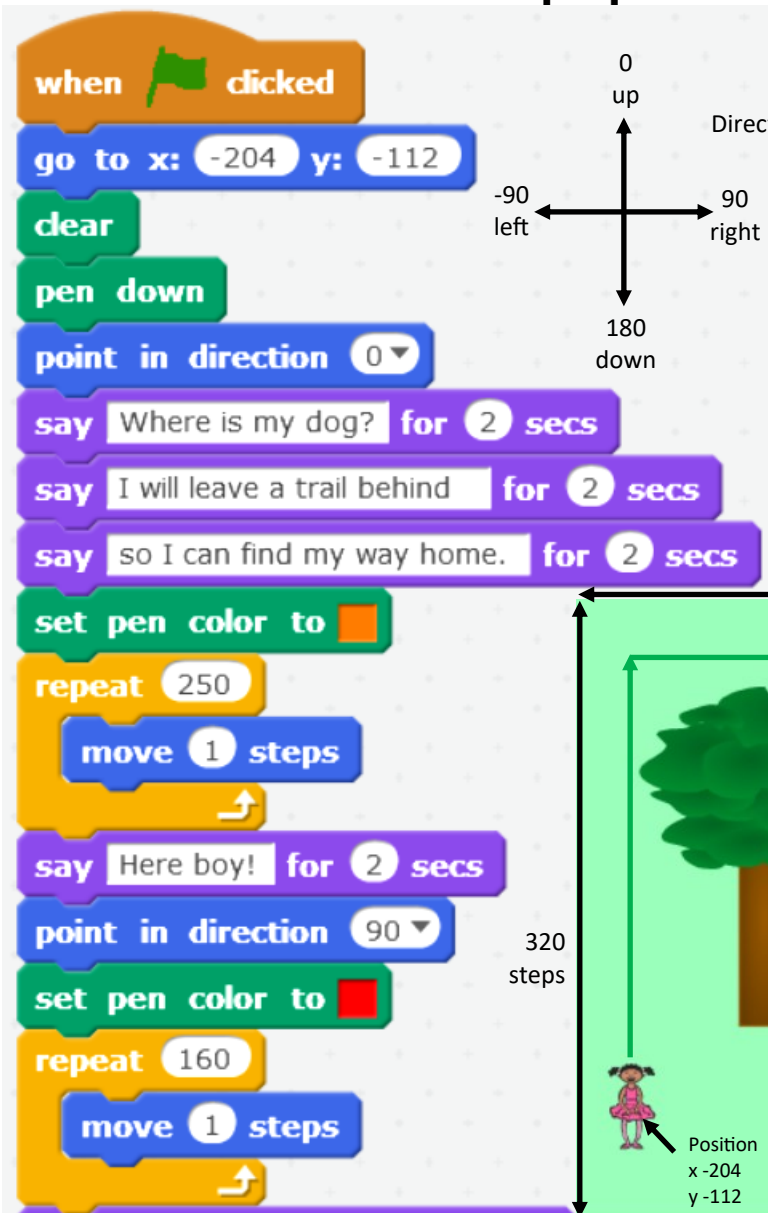
My idea

My design

Name

## Dog Chase

### PRIMM Page 1 PREDICT ANSWER



when clicked

go to x: -204 y: -112

clear

pen down

point in direction 0

say Where is my dog? for 2 secs

say I will leave a trail behind for 2 secs

say so I can find my way home. for 2 secs

set pen color to orange

repeat 250

move 1 steps

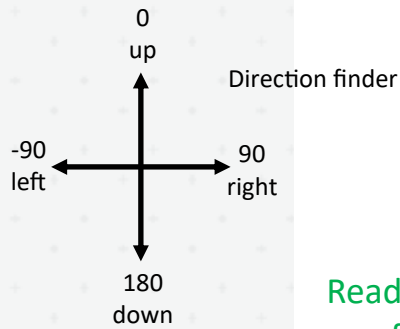
say Here boy! for 2 secs

point in direction 90

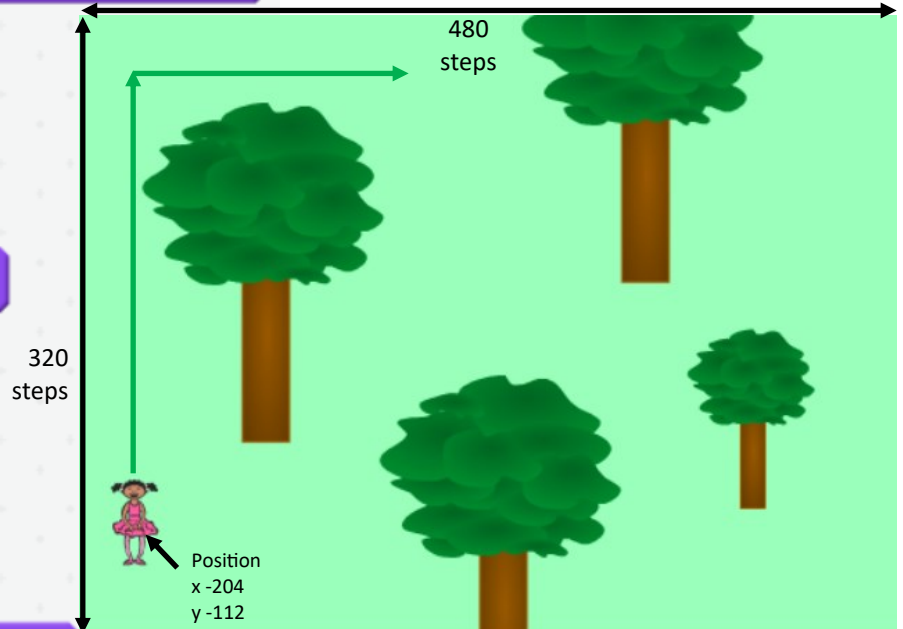
set pen color to red

repeat 160

move 1 steps



Read the code on the left really carefully. The girl is looking for her dog. Use the steps and the direction finder to help you understand what will happen.



1, What is the first thing she will say?

Where is my dog? (1 mark)

2, She says she will leave a trail behind. What code blocks will make that happen?

Pen down, set pen colour to, optionally clear remove lines from last program

(1 mark for first two)

3, Which code block sends her to the start position? (initialisation)

go to x -204 y -112 (1 mark)

4, Which letter have the Americans missed out of their spelling of colour?

U (1 mark)

5, Name the two count controlled loops

Repeat 250, repeat 160 (1 mark for naming both)

6, What does she say after walking for 250 steps?

Here boy! (1 mark)

7, Draw on the picture with a ruler and pencil where you think the code takes her.

(1 mark for each line is roughly same place)





# Count controlled loops

## MODIFY Questions (Run the code and make changes)

1, Can you make the Girl say something different when she finally finds the dog?

What did you change?

Change say there you are to something else (1 mark)

2, Can you make the Girl bump into the dog at the end?

What did you change?

Change repeat 50 loop to a higher number (1 mark)

3, Can you make the dog say something after the girl bumps into him?

What code did you add? HINT Wait until touching.....

Add a wait until touching dog section and then a say command after this (1 mark)

4, Can you make the dog go twice as fast but still only go the same distance?

What did you change?

Change repeat 130 to repeat 65 and increase move 2 steps to move 4 steps (1 mark)

Change repeat 120 to repeat 60 and increase move 1 steps to move 2 steps (1 mark)

(other correct answers are available)