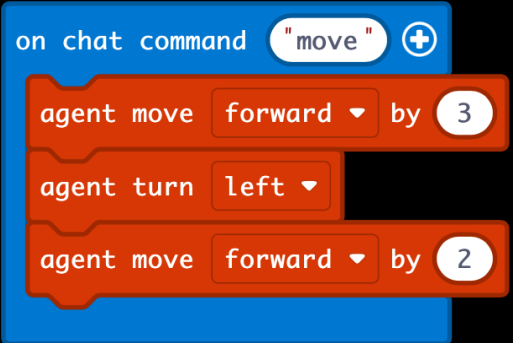


Block Coding Test 1 - Loops

Complete the questions by writing the answers in the empty spaces.
If you finish early, draw some doodles on the back of the last page.

1. What is your name? (1)

2. How far will the agent move? (1)

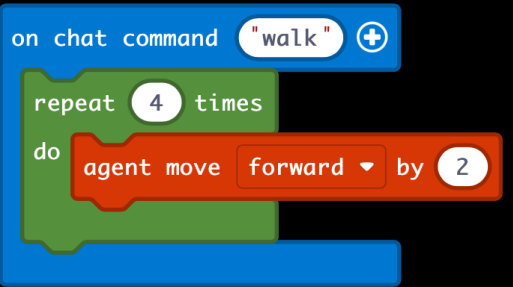


The code blocks for question 2 are:

```
on chat command "move" +
  agent move forward by 3
  agent turn left
  agent move forward by 2
```

Answer space:

3. How far will the agent move? (1)



The code blocks for question 3 are:

```
on chat command "walk" +
  repeat 4 times
  do
    agent move forward by 2
```

Answer space:

4. Rewrite this using as little code as you can. (1)

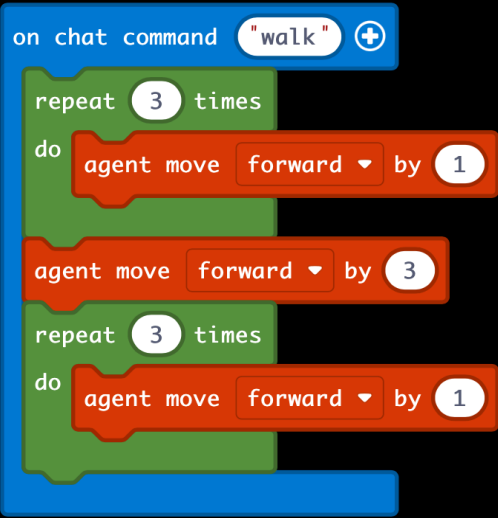


The code blocks for question 4 are:

```
on chat command "move" +
  repeat 4 times
  do
    agent move forward by 1
  repeat 2 times
  do
    agent move forward by 2
```

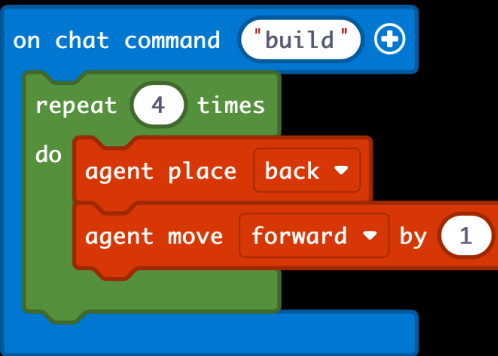
Answer space:

5. Rewrite this using as little code as you can. (1)



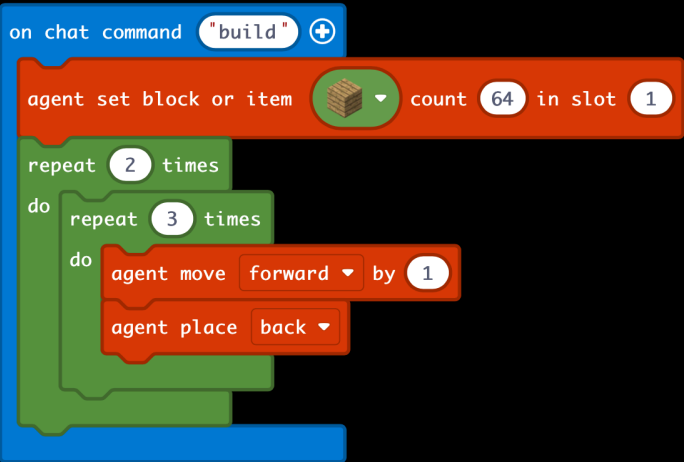
The code is a Scratch script on a black background. It starts with a blue 'on chat command' block containing the text '"walk"' and a plus icon. Below it is a green 'repeat' block set to '3 times'. Inside the repeat block is a red 'do' block containing an 'agent move forward by 1' block. After the first repeat block, there is a red 'agent move forward by 3' block. This is followed by another green 'repeat' block set to '3 times', which contains a red 'do' block with an 'agent move forward by 1' block. The script ends with a blue block.

6. How many blocks will the agent place? (Assume the agent has blocks) (1) Explain your answer. (2)



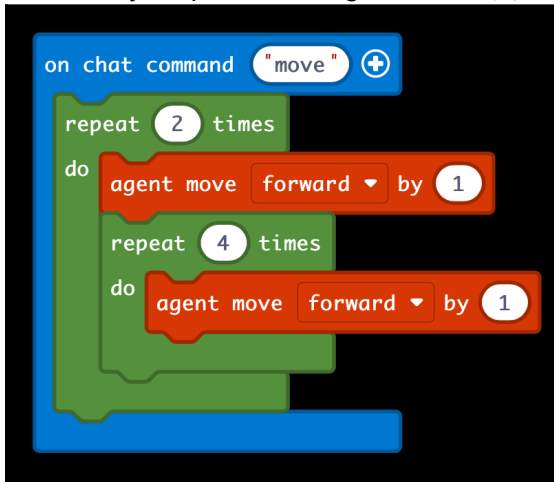
The code is a Scratch script on a black background. It starts with a blue 'on chat command' block containing the text '"build"' and a plus icon. Below it is a green 'repeat' block set to '4 times'. Inside the repeat block is a red 'do' block containing two blocks: 'agent place back' and 'agent move forward by 1'. The script ends with a blue block.

7. How many blocks will the agent place? (1) Explain your answer. (2)

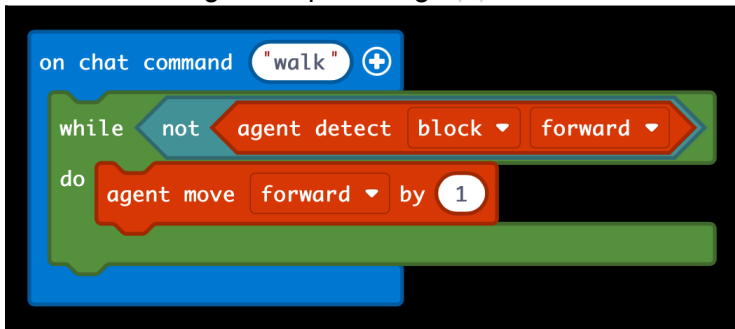


The code is a Scratch script on a black background. It starts with a blue 'on chat command' block containing the text '"build"' and a plus icon. Below it is a red 'agent set block or item' block with a wood block icon, 'count 64', and 'in slot 1'. This is followed by a green 'repeat' block set to '2 times'. Inside this repeat block is a red 'do' block containing a green 'repeat' block set to '3 times'. Inside the inner repeat block is a red 'do' block containing two blocks: 'agent move forward by 1' and 'agent place back'. The script ends with a blue block.

8. How many steps will the agent take? (2)



9. When will the agent stop walking? (2)



10. Draw the shape the agent will build. (1) Explain your answer. (4)

