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1 Copy these sentences and fill in the blanks using the words below.

infinite

iteration

count-controlled

loop

a An _____ is one execution of a loop. There are two types of loops _____ and _____ loops.

b A count-controlled _____ is repeated a fixed number of times.

2 Choose the correct ending for the sentence.
A count-controlled loop _____

a loops an indefinite number of times.

b uses a counter to keep track of the number of times a loop is executed.

c cannot keep track of the number of times a loop is executed.

d is executed an unspecified number of times.

3 Discuss the following question with your partner:

Why do you need to shorten a loop using repeat command?

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4 Your school is having a charity cake sale and wants to show how many cakes have been baked.

a Look at the algorithm below.

Algorithm name: Cake donation

Step	Intstruction
1	Start program when Green Flag is clicked
2	Choose a random position on the screen
3	Wait 1 second
4	Display the Cake sprite
5	Choose a random position on the screen
6	Wait 1 second
7	Display the Cake sprite
8	Choose a random position on the screen
9	Wait 1 second
10	Display the Cake sprite
11	Stop program

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b Rewrite the algorithm so that it is shorter.

Algorithm name: Cake donation	
Step	Intstruction
1	Start program when Green Flag is clicked
2	
3	
4	
5	
6	Stop program

c Create a Scratch program from your rewritten algorithm using the **Repeat** block.

d If 25 people baked, how would your algorithm change?

If 25 people baked cakes, step 5 in the algorithm would change to:

Repeat step ____ to 4
_____ times.