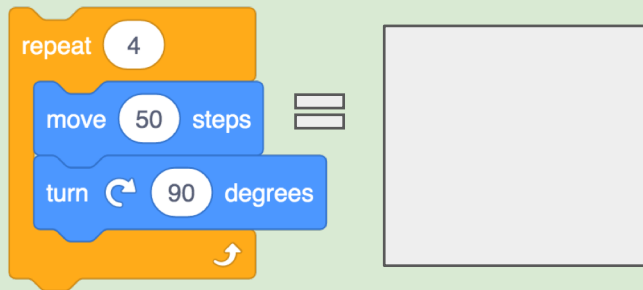# Repetition in Games

Count controlled loop - repeats instructions a set amount of times

```
repeat 4
  move 50 steps
  turn ↻ 90 degrees
```
= ▢
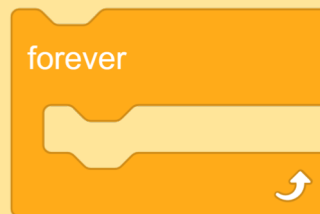
In an **infinite loop**, commands are repeated over and over again, without an end point. In Scratch, this is called the repeat forever block.

```
forever
  change y by 50
  wait 1 seconds
  change y by -50
  wait 1 seconds
```

Count Controlled Loop

```
repeat 10
```

Infinite Loop

```
forever
```
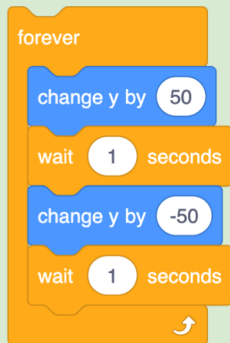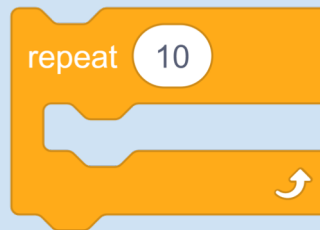
```
wait 1 seconds
```
Wait - delay next instruction running

```
go to random position
```
Move to a random position on the stage

```
show
```
Show the sprite

```
hide
```
Hide the sprite

Code | Costumes | Sounds
1 🔊 Water drop 0.69
Sound Water drop
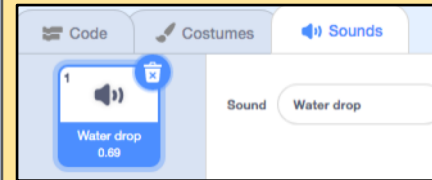
Add sound

Sprite name	Sprite 1: Bat 1
How will the sprite move?	Randomly
Will there be any sounds?	Owl sound when clicked
Type of repetition used (✓)	✓ Infinite (forever) ❑ Count-controlled
Write the algorithm for the sprite	Repeatedly • Make it invisible • Move somewhere random on the screen and wait for 1 second • Make it visible and wait for 1 second
Which backdrops will you use?	Spooky forest
How will the game end?	When all the bats have been caught