

# Movement

## With the Arrow Keys

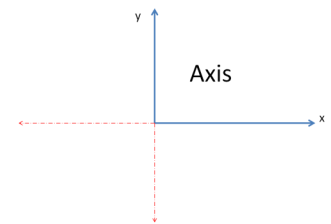


```
when right arrow key pressed
change x by 10
```

```
when left arrow key pressed
change x by -10
```

```
when up arrow key pressed
change y by 10
```

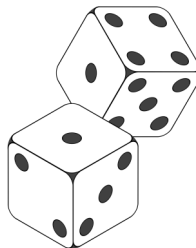
```
when down arrow key pressed
change y by -10
```



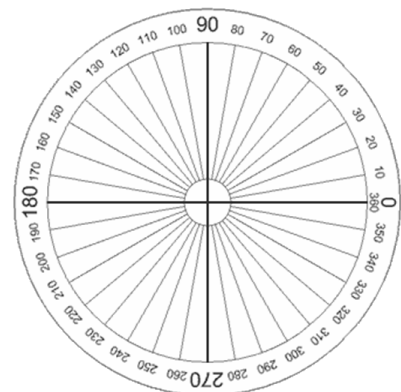
```
when flag clicked
forever
  point towards mouse-pointer
  move 5 steps
```



## Moving Randomly

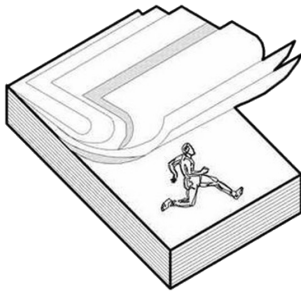


```
when flag clicked
forever
  turn pick random 1 to 360 degrees
  move pick random 10 to 100 steps
  if on edge, bounce
  wait 0.2 secs
```



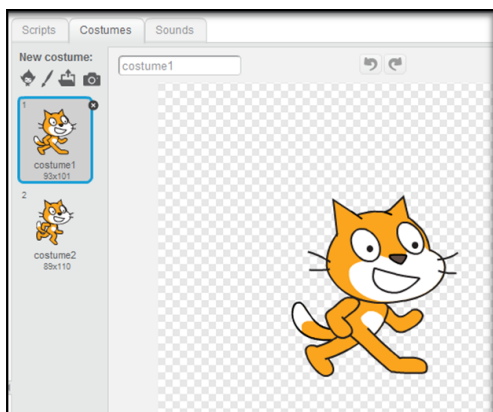
# Animation

## How Animation Works



switch to costume costume1

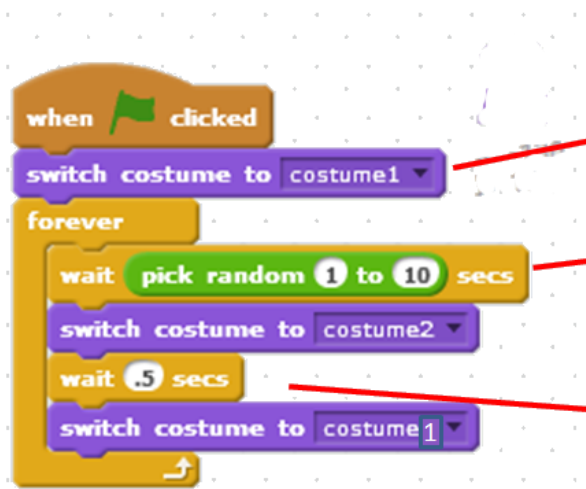
next costume



wait 1 secs

forever

repeat 10



At the start, not blinking

Every now and again...

Close eyes for ½ second, then open them again

CoderDojo Athenry

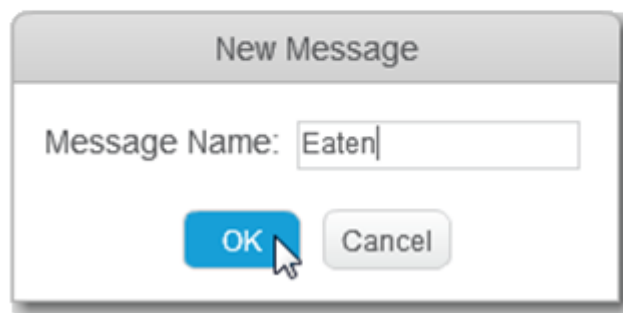
Notes by Martha Fahy



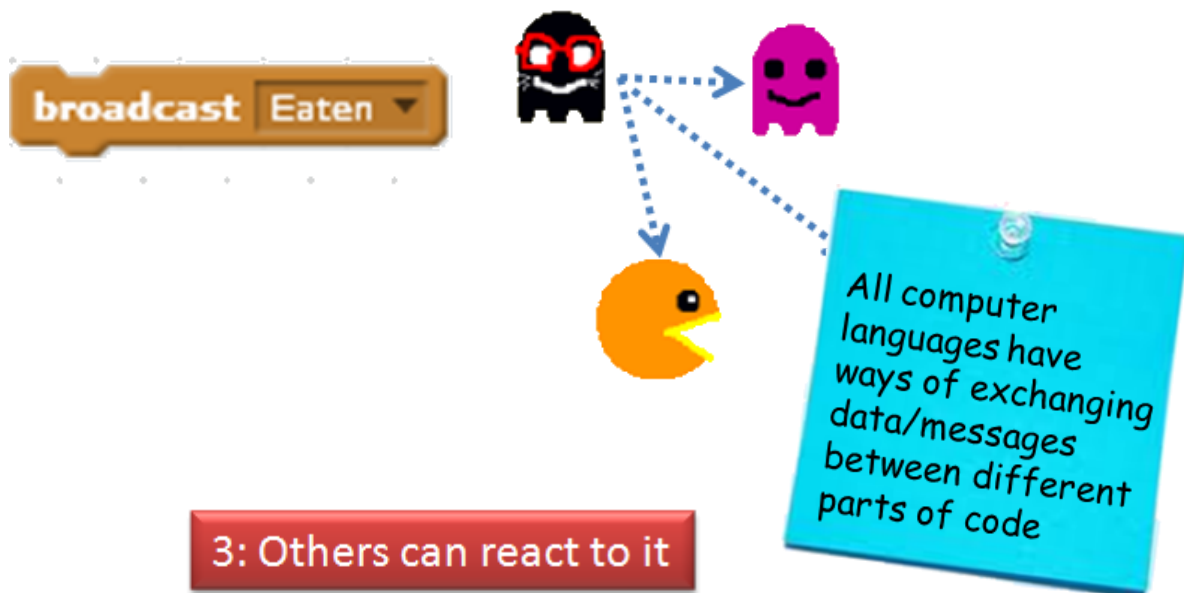
# Broadcast

## How Sprites Communicate

1: Make new message



2: A sprite broadcasts it



3: Others can react to it



# Variables

Keep Track of Score/Lives

Data

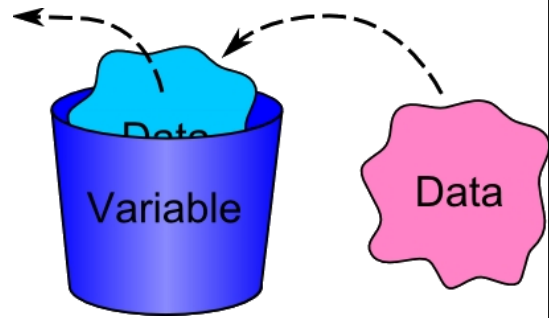
Make a Variable

New Variable

Variable name:

☒ For all sprites

OK Cancel



☒ Score

set Score to 0

change Score by 1

show variable Score

hide variable Score

Example of Code to be added:

change Score by 1

```

when green flag clicked
  show
  go to x: 215 y: 89
  forever loop
    turn pick random 1 to 360 degrees
    move pick random 30 to 70 steps
    if on edge, bounce
    wait 0.1 secs
    if touching color red? then
      play sound fairydust
      change Score by 1
      hide
      wait 2 secs
      show
  
```

set Score to 0

```

when green flag clicked
  switch backdrop to slopes
  set Score to 0
  forever loop
    if Score = 5 then
      play sound whoop
      switch backdrop to backdrop3
      stop all
  
```

```

if Score = 5 then
  play sound whoop until done
  switch backdrop to backdrop3
  
```

CoderDojo Athenry

Notes by Martha Fahy

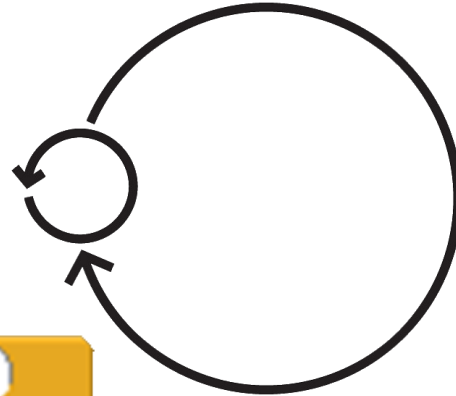


# Loops and Decisions

**Key programming concepts**

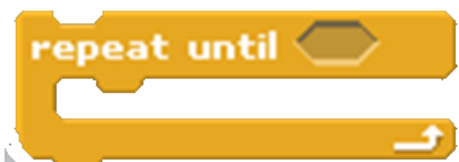
**Loop:**

**Repeat code multiple times**



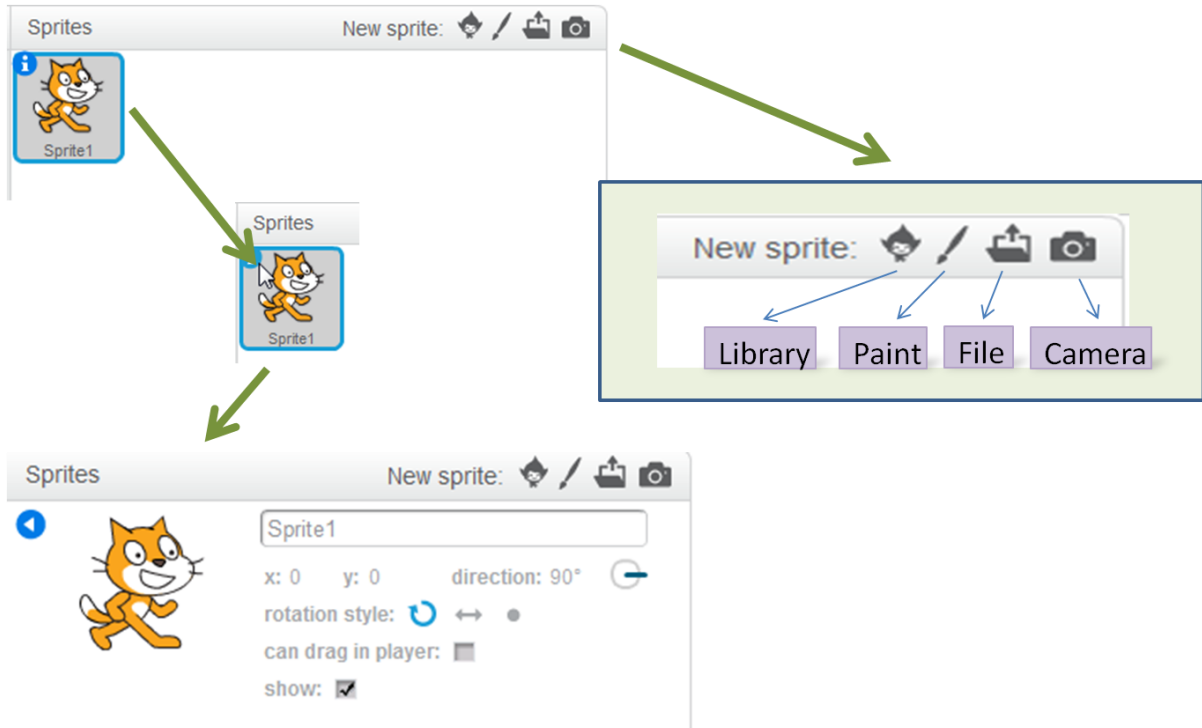
**Decision:**

**Decide whether or not to do something**



## Tools

### *The Sprites, your Characters*



### *Cursor Tools*

