Animate a Character Cards

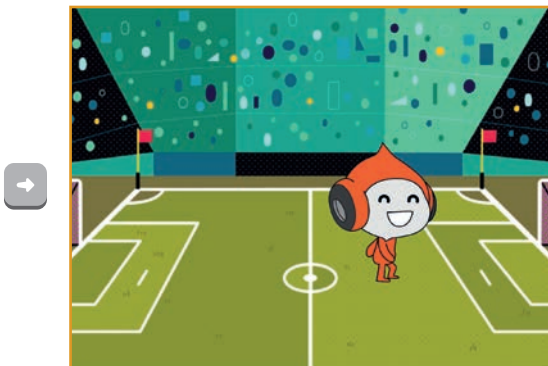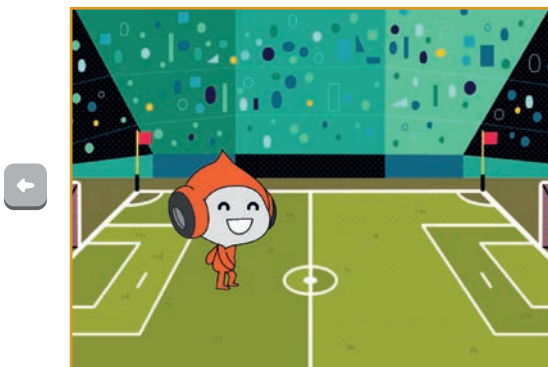**Bring characters to life with animation.**

Animate a Character Cards

Try these cards in any order:

- **Move with Arrow Keys**
- **Make a Character Jump**
- **Switch Poses**
- **Glide from Point to Point**
- **Walking Animation**
- **Flying Animation**
- **Talking Animation**
- **Draw an Animation**

Move with Arrow Keys

Use the arrow keys to move your
character around.

Move with Arrow Keys

GET READY
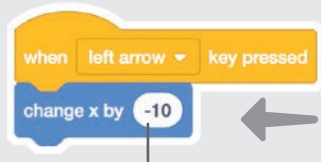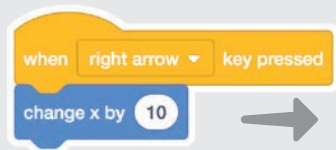
Choose a backdrop.

Soccer 2

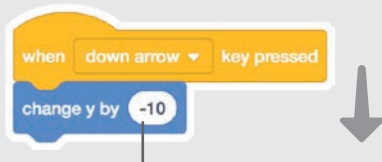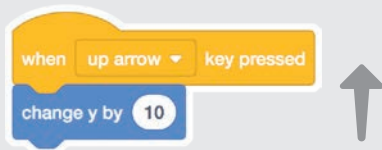**Choose a character.**

Pico Walking

ADD THIS CODE

Change x
Move your character *side to side*.

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

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

Type a minus sign to move *left*.

Change y
Move your character *up and down*.

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

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

Type a minus sign to move *down*.

TRY IT

Press the arrow keys on your keyboard to move your character around.
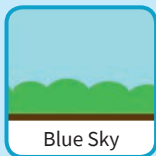
Make a Character Jump

Press a key to jump up and down.

Make a Character Jump

GET READY

Choose a backdrop.

Blue Sky

Choose a character.

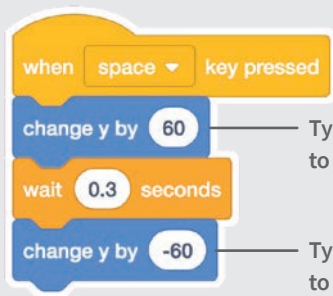Giga Walking

ADD THIS CODE

Giga Walking

when space ▾ key pressed

change y by 60 — Type how high to jump.

wait 0.3 seconds

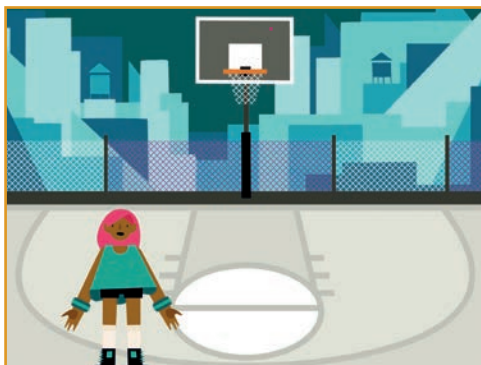change y by -60 — Type a minus sign to go back down.

TRY IT

C V B N M

Press the **space** key on your keyboard.

Switch Poses

**Animate a character
when you press a key.**

SCRATCH

Switch Poses

GET READY

Choose a character with multiple costumes, like Max.

Max

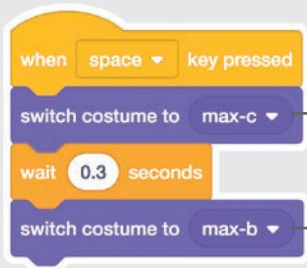Scroll over sprites in the Sprite Library to see if they have different costumes.

✏ Costumes

Click the **Costumes** tab to view all of your sprite's costumes.

ADD THIS CODE

Click the **Code** tab.

Max

```
when  space ▾  key pressed
switch costume to  max-c ▾
wait  0.3  seconds
switch costume to  max-b ▾
```

Choose a costume.

Choose a different costume.

TRY IT

C V B N M

Press the **space** key on your keyboard.

Glide from Point to Point

Make a sprite glide from
point to point.

SCRATCH

Glide from Point to Point
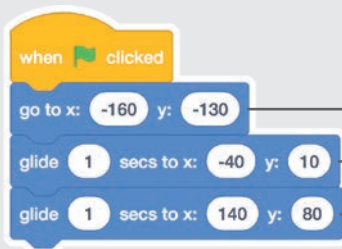
GET READY

Choose a backdrop. **Nebula**

Choose a character. **Rocketship**

ADD THIS CODE

Rocketship

```
when [green flag] clicked
go to x: -160 y: -130
glide 1 secs to x: -40 y: 10
glide 1 secs to x: 140 y: 80
```

Set the starting point.

Set another point to glide to.

Set the end point.

TRY IT

Click the green flag to start.

TIP

| Motion |
| Looks |
| Sound |

```
go to x: -40 y: 10
glide 1 secs to random position ▾
glide 1 secs to x: -40 y: 10
```
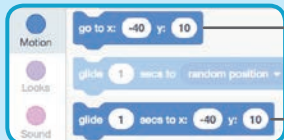
When you drag a sprite, its **x** and **y** positions will update in the blocks palette.

Walking Animation

Make a character walk or run.

scRATcH

Walking Animation

GET READY

Choose a backdrop.
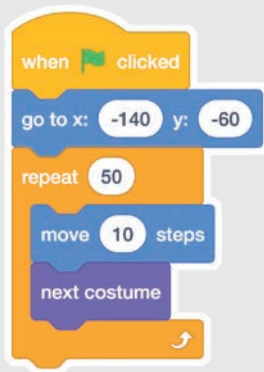
Jungle

Choose a walking or running sprite.

Unicorn Running

ADD THIS CODE

Unicorn Running

```
when 🏳 clicked
go to x: -140 y: -60
repeat 50
    move 10 steps
    next costume
```

TRY IT

Click the green flag to start.

TIP

wait 0.01 seconds

If you want to slow down the animation, try adding a **wait** block inside the **repeat** block.

Flying Animation

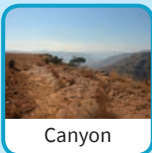Have a character flap its wings as it moves across the stage.

SCRATCH

Flying Animation

GET READY

Choose a
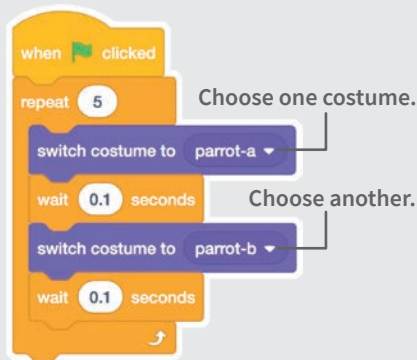backdrop.

Canyon

Choose Parrot
(or another flying sprite).

Parrot

ADD THIS CODE

Glide across the screen

Set the starting point.

```
when [flag] clicked
go to x: -170 y: 120
glide 1 secs to x: 150 y: 50
```

Set the end point.

Flap the wings

```
when [flag] clicked
repeat 5
  switch costume to parrot-a ▾
  wait 0.1 seconds
  switch costume to parrot-b ▾
  wait 0.1 seconds
```

Choose one costume.

Choose another.

TRY IT

Click the green flag to start. ──── [⚑ ⬤]

Talking Animation

Make a character talk.
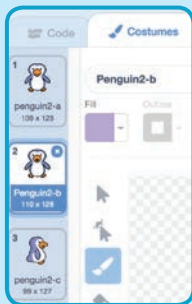
SCRATCH

Talking Animation

scratch.mit.edu

GET READY

Choose Penguin 2.

Penguin 2

Click the **Costumes** tab to view the penguin's other costumes.
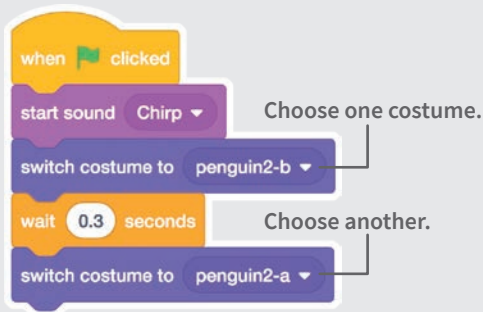
ADD THIS CODE

Click the **Code** tab.

when 🚩 clicked

say Hello! for 2 seconds
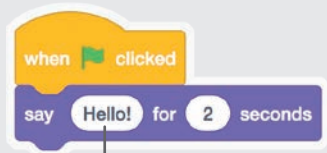
Type what you want your character to say.

when 🚩 clicked

start sound Chirp ▾

switch costume to penguin2-b ▾

Choose one costume.

wait 0.3 seconds

Choose another.

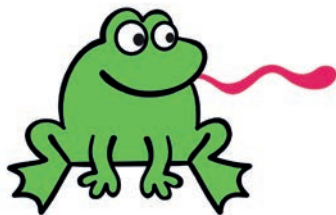switch costume to penguin2-a ▾

TRY IT

Click the green flag to start.

Draw an Animation

Edit a sprite's costumes to create your own animation.

SCRATCH

Draw an Animation

GET READY

Choose a character.
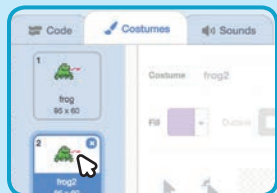
Frog

Costumes

Click the **Costumes** tab.

Right-click (on a Mac, control-click) a costume to duplicate it.

duplicate

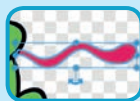Now you should have two identical costumes.

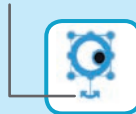Click a costume to select and edit it.

Click the **Select** tool.

Select a part of the costume to squeeze or stretch it.

Drag the handle to rotate an object you've selected.

ADD THIS CODE

```
when this sprite clicked
next costume
wait 0.5 seconds
next costume
```

Code

Click the **Code** tab.

Use the **next costume** block to animate your character.

TRY IT

Click the green flag to start.