Animate a Character Cards

**Bring characters to life
with animation.**

SCRATCH

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.

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Move with Arrow Keys

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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.

scratch
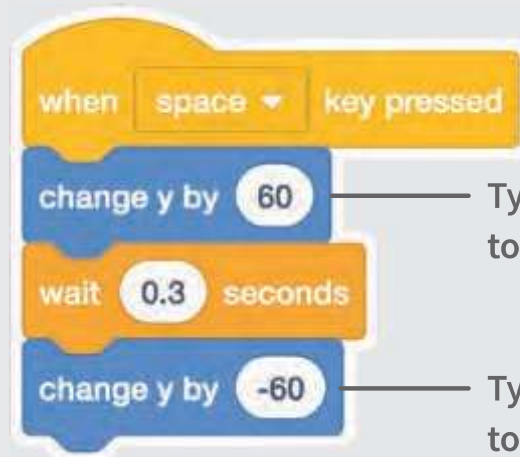
Make a Character Jump

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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
wait 0.3 seconds
change y by -60
```
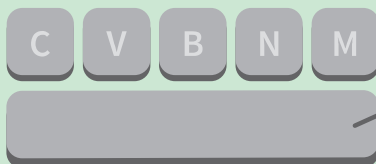
Type how high to jump.

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.
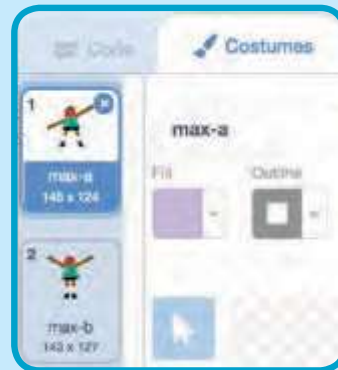
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Switch Poses

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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

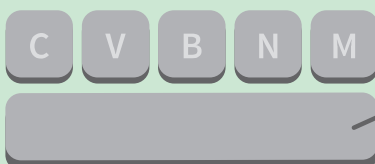Click the **Costumes** tab to view all of your sprite's costumes.

ADD THIS CODE

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.
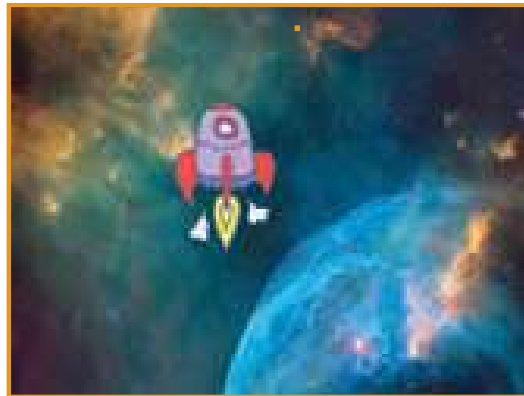
TRY IT

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.

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Glide from Point to Point

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GET READY

Choose a backdrop. — Nebula

Choose a character. — Rocketship

ADD THIS CODE

Rocketship

```
when 🚩 clicked
go to x: -160 y: -130
glide 1 secs to x: -40 y: 10
glide 1 secs to x: 140 y: 80
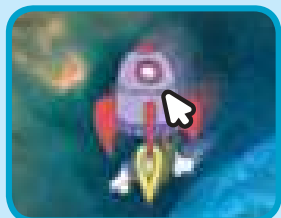```

Set the starting point.

Set another point to glide to.

Set the end point.

## TRY IT

Click the green flag to start. — 🚩 🔴

## TIP

```
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.
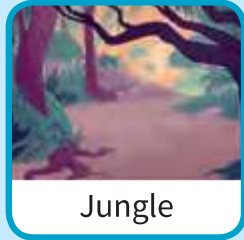
Walking Animation

Make a character walk or run.

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Walking Animation

GET READY

Choose a backdrop.

Jungle

Choose a walking or running sprite.

Unicorn Running

ADD THIS CODE

Unicorn Running

```
when [flag] 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

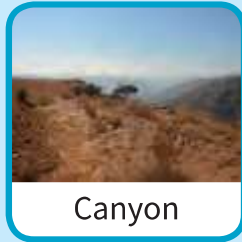Have a character flap its wings as it moves across the stage.

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Flying Animation

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GET READY

Choose a backdrop.

Canyon

Choose Parrot (or another flying sprite).

Parrot

ADD THIS CODE

Glide across the screen

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

Set the starting point.

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

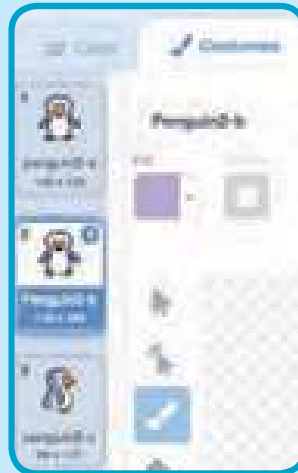Click the green flag to start.

Talking Animation

Make a character talk.

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Talking Animation

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GET READY

Choose Penguin 2.

Penguin 2

Costumes

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

ADD THIS CODE

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 ▾
wait 0.3 seconds
switch costume to penguin2-a ▾
```

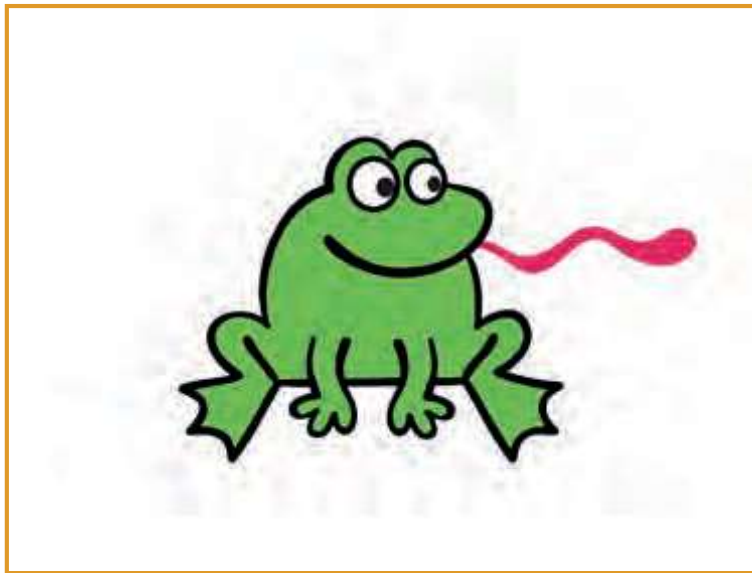Choose one costume.

Choose another.

TRY IT

Click the green flag to start.

Draw an Animation

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

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Draw an Animation

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GET READY

Choose a character.

Frog

Costumes

Click the **Costumes** tab.

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

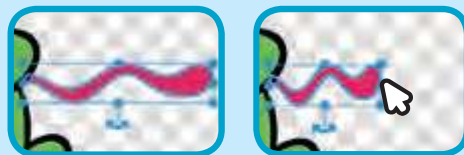Now you should have two identical costumes.
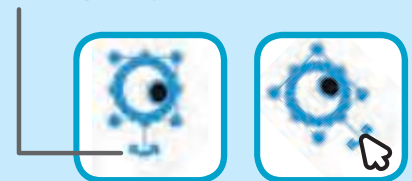
Click a costume to select and edit it.
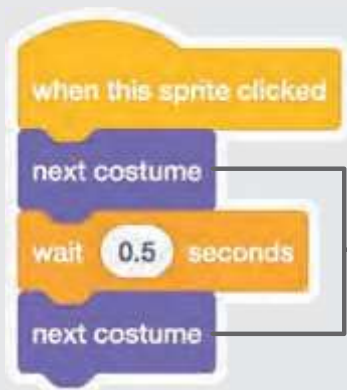
Click the **Select** tool.

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.