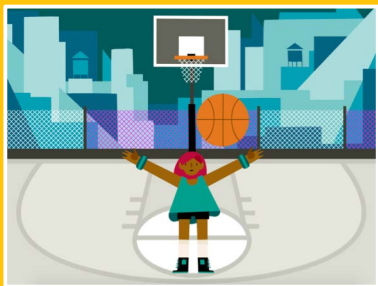


Animate a Character Cards



Bring characters to life with animation.

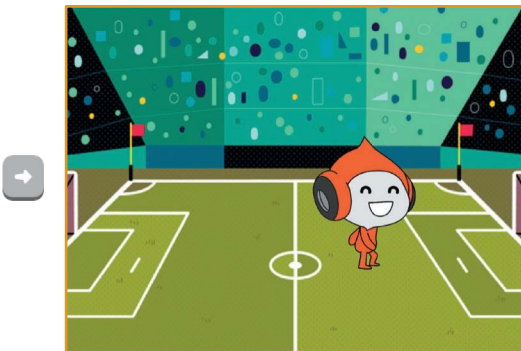
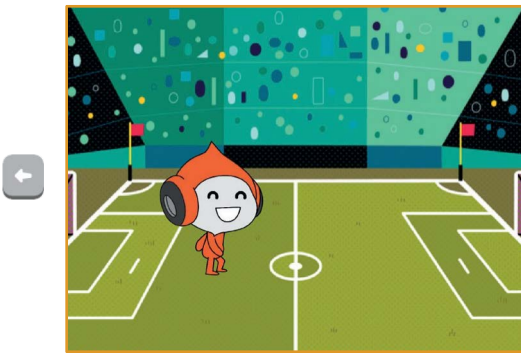
Animate a Character Cards

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

scratch.mit.edu

GET READY



Choose a backdrop.



Soccer 2



Choose a character.

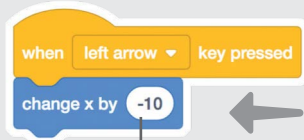
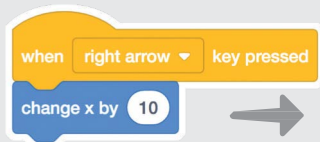


Pico Walking

ADD THIS CODE

Change x

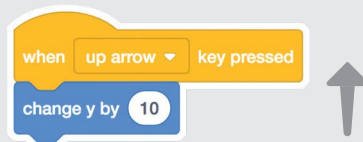
Move your character *side to side*.



Type a minus sign to move *left*.

Change y

Move your character *up and down*.



Type a minus sign to move *down*.

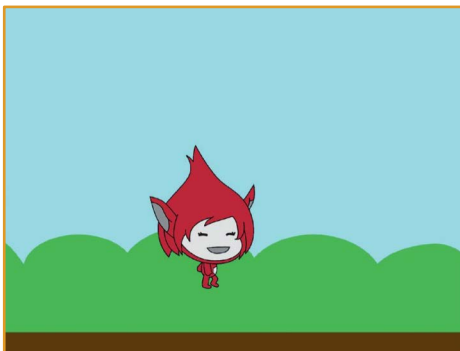
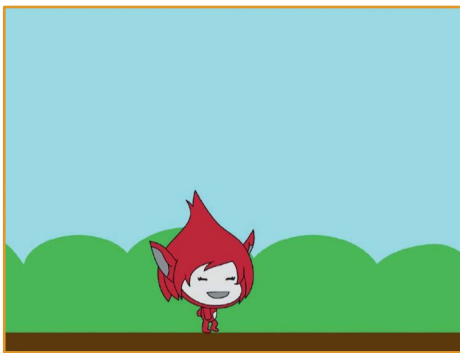
TRY IT



Press the arrow keys on your keyboard to move your character around.

Make a Character Jump

Press a key to jump up and down.



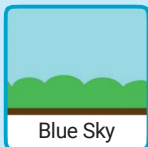
Make a Character Jump

scratch.mit.edu

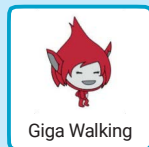
GET READY



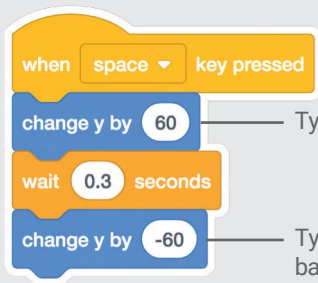
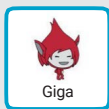
Choose a backdrop.



Choose a character.



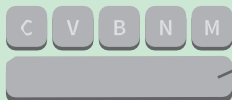
ADD THIS CODE



Type how high to jump.

Type a minus sign to go back down.

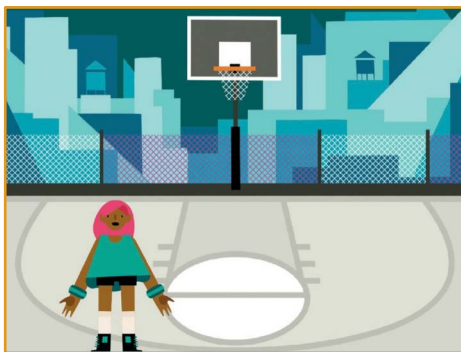
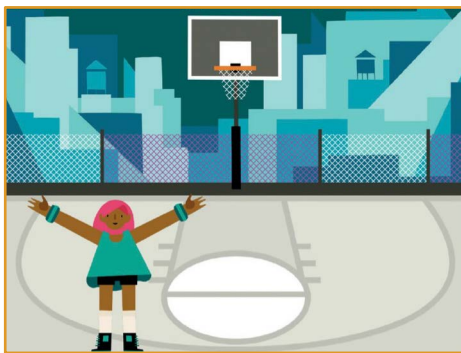
TRY IT



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

Switch Poses

Animate a character when you press a key.



Switch Poses

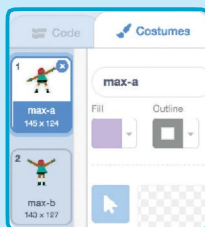
scratch.mit.edu

GET READY

Choose a character with multiple costumes, like Max.



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

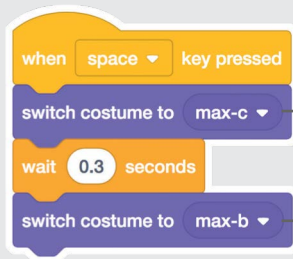
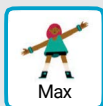


Click the **Costumes** tab to view all of your sprite's costumes.

ADD THIS CODE



Click the **Code** tab.



Choose a costume.

Choose a different costume.

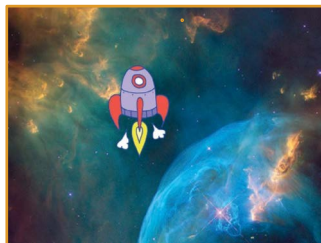
TRY IT



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

Glide from Point to Point

Make a sprite glide from point to point.



Glide from Point to Point

scratch.mit.edu

GET READY



Choose a backdrop.



Nebula



Choose a character.



Rocketship

ADD THIS CODE



when  clicked

go to x: -160 y: -130

Set the starting point.

glide 1 secs to x: -40 y: 10

Set another point to glide to.

glide 1 secs to x: 140 y: 80

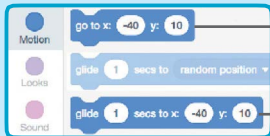
Set the end point.

TRY IT

Click the green flag to start.



TIP



When you drag a sprite, its **x** and **y** positions will update in the blocks palette.

Walking Animation

Make a character walk or run.



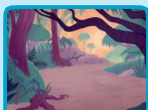
Walking Animation

scratch.mit.edu

GET READY



Choose a backdrop.



Jungle



Choose a walking or running sprite.



Unicorn Running

ADD THIS CODE



```
when green 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.



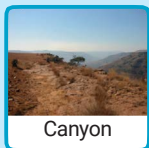
Flying Animation

scratch.mit.edu

GET READY



Choose a backdrop.



Canyon



Choose Parrot
(or another flying sprite).



Parrot

ADD THIS CODE

Glide across the screen

when clicked Set the starting point.

go to x: -170 y: 120

glide 1 secs to x: 150 y: 50

Set the end point.

Flap the wings

when 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.



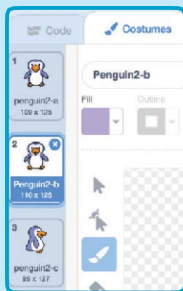
Talking Animation

scratch.mit.edu

GET READY



Choose Penguin 2.

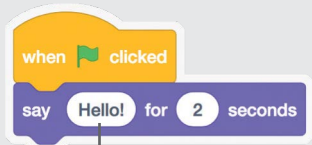


Click the **Costumes** tab to view the penguin's other costumes.

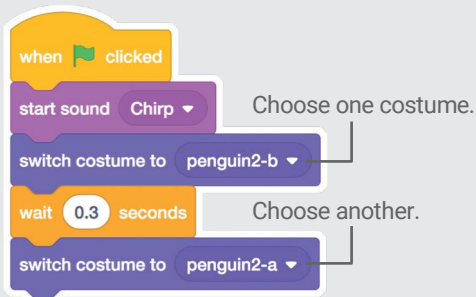
ADD THIS CODE



Click the **Code** tab.



Type what you want your character to say.



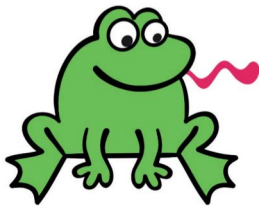
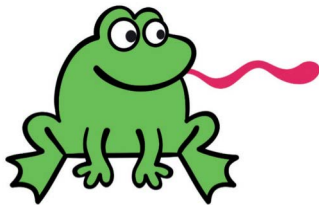
TRY IT

Click the green flag to start.



Draw an Animation

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



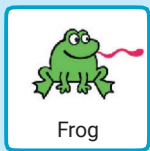
Draw an Animation

scratch.mit.edu

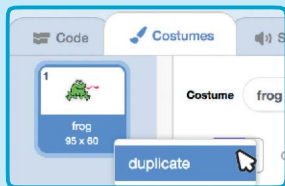
GET READY



Choose a character.

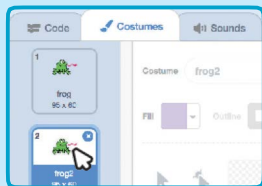


Click the **Costumes** tab.



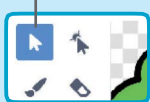
Right-click (on a Mac, control-click) a costume to duplicate it.

Now you should have two identical costumes.

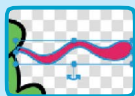


Click a costume to select and edit it.

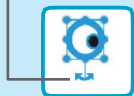
Click the **Select** tool.



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



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



ADD THIS CODE



Click the **Code** tab.



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

TRY IT



Click the green flag to start.