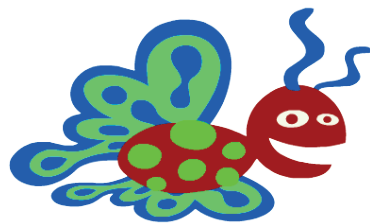
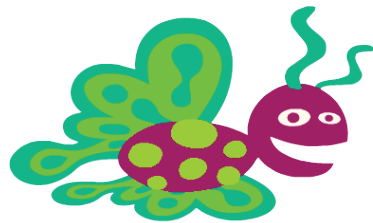
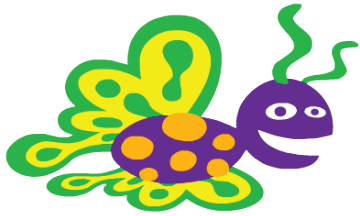


Change COLOR

Press a key to change the color of a sprite.



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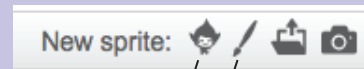
1

SCRATCH

Change COLOR



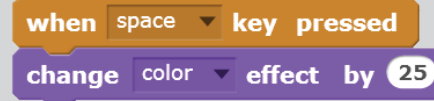
GET READY



Choose a sprite from the library.

Or, paint a new one.

TRY THIS CODE



DO IT!

Press the space bar to change colors.

EXTRA TIP

You can choose a different effect from the menu:

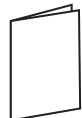


Or, type in a different number. Then press the space bar again.

To clear the effects, click the stop sign.



Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

Move to a Beat

Start dancing to a drum beat.



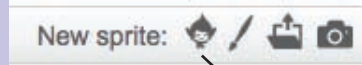
<http://scratch.mit.edu>

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Move to a Beat

GET READY



Choose a dancer or other image.

TRY THIS CODE

```
when green flag clicked
  forever loop
    move 30 steps
    play drum 1 for 0.5 beats
    move -30 steps
    play drum 2 for 0.5 beats
```

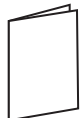
Type in this number.
Click to choose a drum sound.

DO IT!



Click the green flag to start.

Make A Card



1. Fold the card in half.



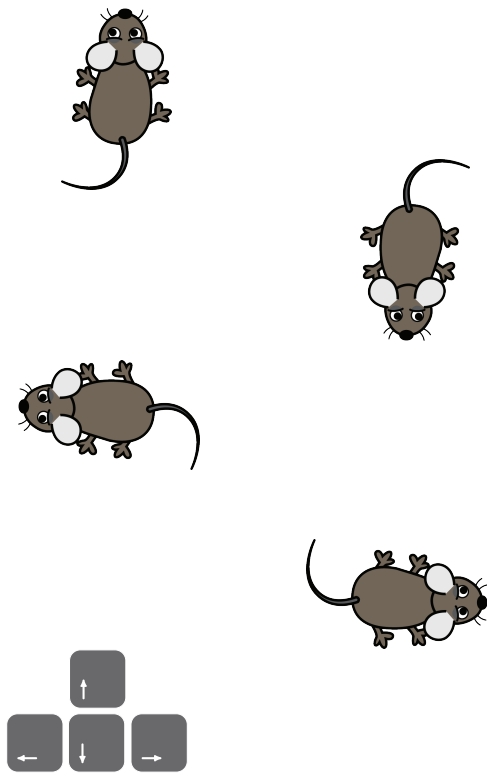
2. Put glue on the back.



3. Cut along the dashed line.

Key Moves

Use the arrow keys to move your sprite.



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SCRATCH

Key Moves

TRY THIS CODE

```
when up arrow key pressed
  point in direction 0
  move 10 steps

when down arrow key pressed
  point in direction 180
  move 10 steps

when left arrow key pressed
  point in direction -90
  move 10 steps

when right arrow key pressed
  point in direction 90
  move 10 steps
```

DO IT!



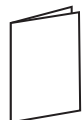
Press the arrow keys to move!

Does your sprite look upside-down?
You can change its rotation style.

EXTRA TIP

```
set rotation style all around
  all around
  left-right
  don't rotate
```

Make A Card



1. Fold the card in half.



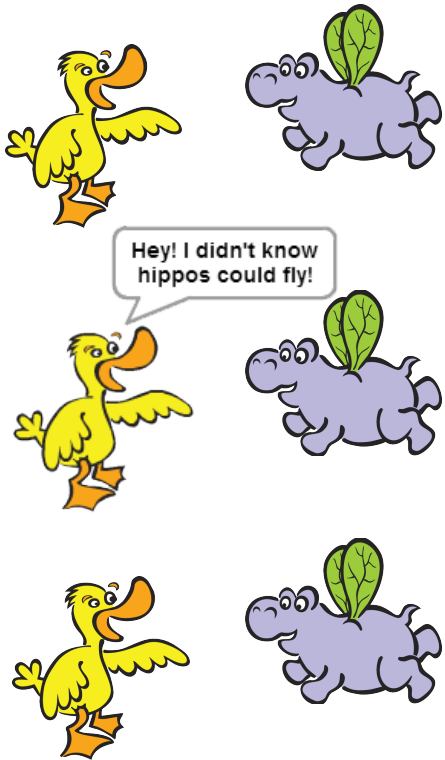
2. Put glue on the back.



3. Cut along the dashed line.

Say something

What do you want your sprite to say?



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SCRATCH

Say something



GET READY

New sprite:



Select a sprite.

TRY THIS CODE

when this sprite clicked

say Hey! I didn't know hippos could fly! for 2 secs

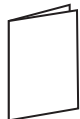
Type in any words.

DO IT!



Click on the sprite to start.

Make A Card



1. Fold the card in half.



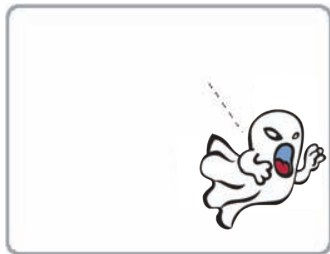
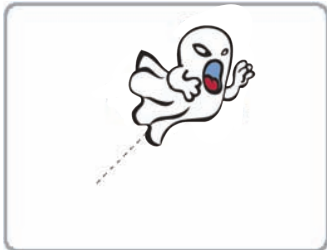
2. Put glue on the back.



3. Cut along the dashed line.

Glide

Move smoothly from one point to another.



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SCRATCH

Glide



GET READY

New sprite:    

Import a costume, or paint your own sprite.

TRY THIS CODE

when  clicked

glide 1 secs to x: 20 y: 80

glide 1 secs to x: 10 y: -20

glide 2 secs to x: -110 y: -100

Try different numbers.

how long horizontal position vertical position

DO IT!



Click the green flag to start.

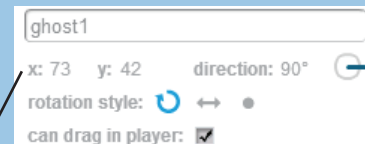
To see a sprite's current x y position:

EXTRA TIP



Click the **i**.

The x y position is shown here.



x: -240 y: 180

x: 240 y: 180

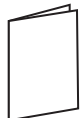
x: 0 y: 0

Here are the x and y positions on the Stage.

x: -240 y: -180

x: 240 y: -180

Make A Card



1. Fold the card in half.



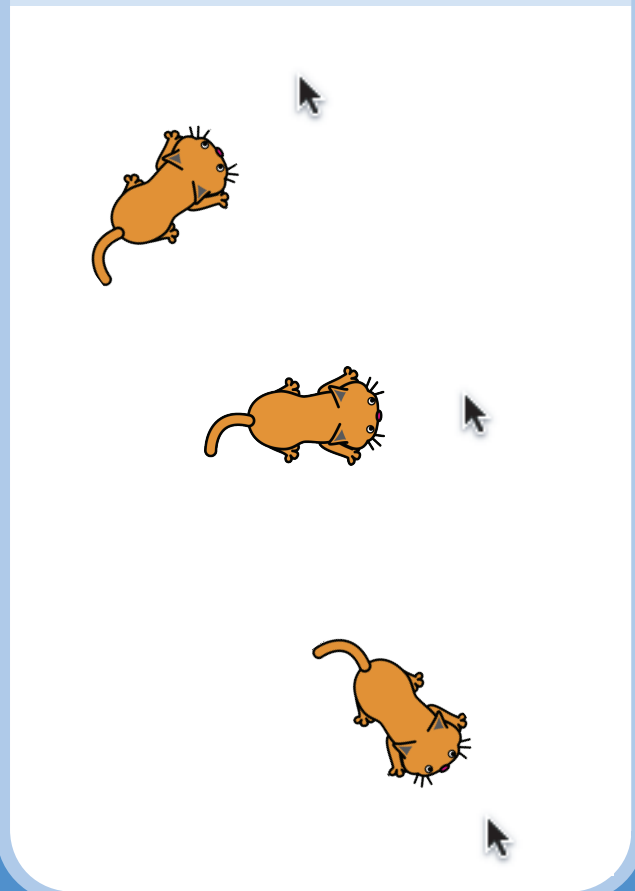
2. Put glue on the back.



3. Cut along the dashed line.

Follow the Mouse

Follow the mouse pointer.



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SCRATCH

Follow the Mouse



GET READY

New sprite:

Choose the cat or another costume.

TRY THIS CODE

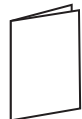
```
when green flag clicked
  forever loop
    point towards mouse-pointer
    move 3 steps
```

DO IT!



Click the green flag to start.

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

Dance Twist

Play a sound clip and do a body twist.



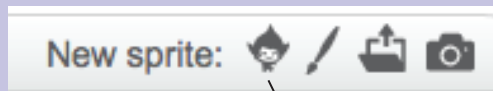
<http://scratch.mit.edu>

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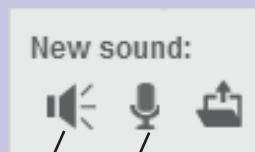
SCRATCH

Dance Twist

GET READY



Choose an image of a person ready to dance.



Choose or record a sound clip.
Keep it short!

TRY THIS CODE

```
when d key pressed
  play sound human beatbox2
  set whirl effect to 50
  wait 0.25 secs
  set whirl effect to 0
  wait 0.25 secs
```

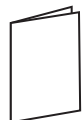
Choose whirl from the menu.

DO IT!



Press the key to start.

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

Interactive Whirl

Whirl a photo by moving the mouse.



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SCRATCH

Interactive Whirl



GET READY

New sprite:

Choose the squirrel or other photo to whirl.

TRY THIS CODE

when clicked

forever

set whirl effect to mouse x

Insert **MOUSE X** block here.

Choose whirl from the menu.



Click the green flag to start.

DO IT!

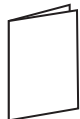
EXTRA TIP

Notice how the numbers change as you move the mouse.

X: 150 Y: -100

New sprite:

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

Animate It

Make a simple animation.



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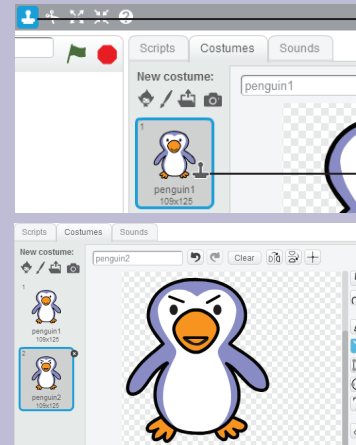
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SCRATCH

Animate It



GET READY

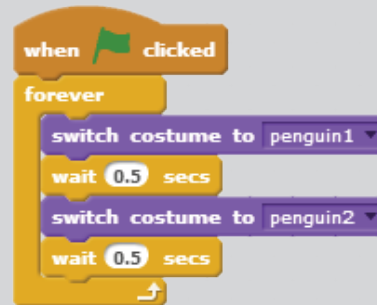


Click for duplicate (stamper) tool.

Click the sprite to duplicate the costume.

Use the paint tools to make the new costume look different.

TRY THIS CODE

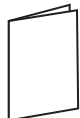


DO IT!



Click the green flag to start.

Make A Card



1. Fold the card in half.



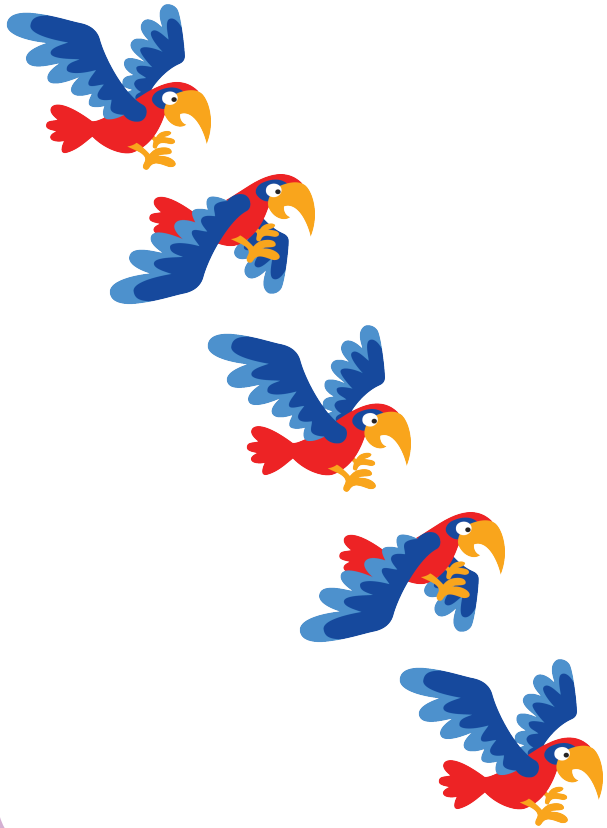
2. Put glue on the back.



3. Cut along the dashed line.

Moving Animation

Animate a character as it moves.



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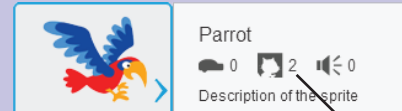
Moving Animation



GET READY

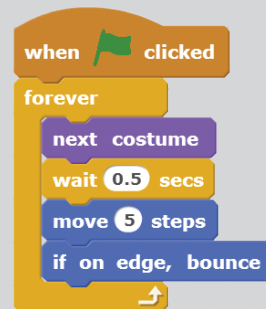
New sprite:    

Click to open the sprite library.



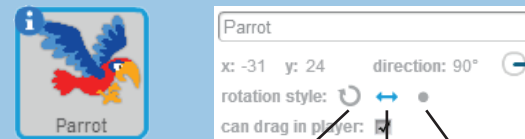
Choose a sprite that has 2 or more costumes.


TRY THIS CODE



Does your sprite look upside-down?
You can change its rotation style.

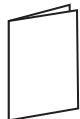
EXTRA TIP



Click the .

all around left-right don't rotate

Make A Card



1. Fold the card in half.



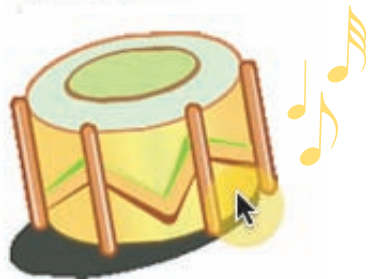
2. Put glue on the back.



3. Cut along the dashed line.

Surprise Button

Make your own button.



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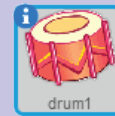
Surprise Button



GET READY

New sprite:

Choose a drum (from the Things category).



drum button
x: 66 y: 14 direction: 90°
rotation style:

Click the .

You can change the name of your sprite.

TRY THIS CODE

```
when this sprite clicked
  change color effect by 25
  play drum pick random 1 to 18 for 0.2 beats
  change color effect by -25
```

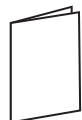
Insert the **PICK RANDOM** block.

DO IT!



Click to see (and hear) what it does.

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

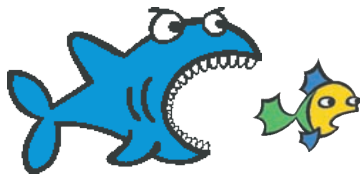
Keep Score

Add a scoreboard to your game.

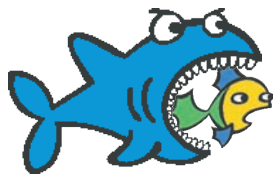
score 0



score 0



score 1



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SCRATCH

Keep Score

score 1



Scripts Costumes Sounds

Motion Looks Sound Pen Data Events Control Sensing Operators More Blocks

Make a Variable

New Variable

Variable name:

For all sprites For this sprite only

Cloud variable (stored on server)

OK Cancel

GET READY

Choose Data

Click **Make a Variable**

Type "score" for the variable name and then click OK.

TRY THIS CODE

```
when green flag clicked
set score to 0
forever
  turn pick random 1 to 10 degrees
  move 5 steps
  if touching Fish2 then
    change score by 1
    play sound Chomp until done
    move -100 steps
```

Use the pull-down menu to select the sprite you're chasing.

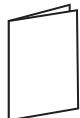
Increases the score by 1.

DO IT!



Click the green flag to start.

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.