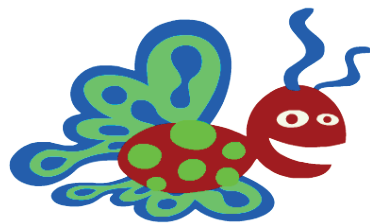
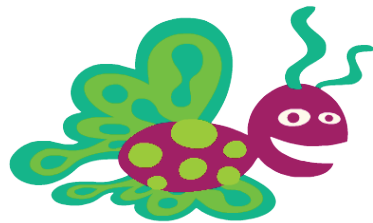
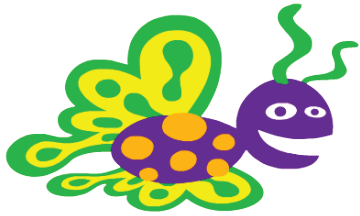


# Change COLOR

Press a key to change the color of a sprite.



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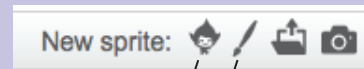
1

SCRATCH

# Change COLOR



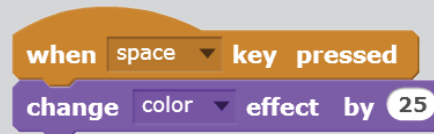
GET READY



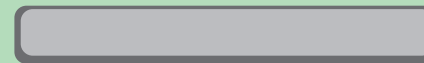
Choose a sprite from the library.

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:

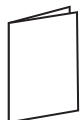


Or, type in a different number. Then press the space bar again.

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.



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2

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# Move to a Beat

GET READY

New sprite:

Choose a dancer or other image.

TRY THIS CODE

```
when clicked
  forever
    move 30 steps
    play drum 1 for 0.25 beats
    move -30 steps
    play drum 2 for 0.25 beats
```

Type in this number.

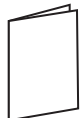
Click to choose a drum sound.

DO IT!



Click the green flag to start.

Make A Card



1. Fold the card in half.



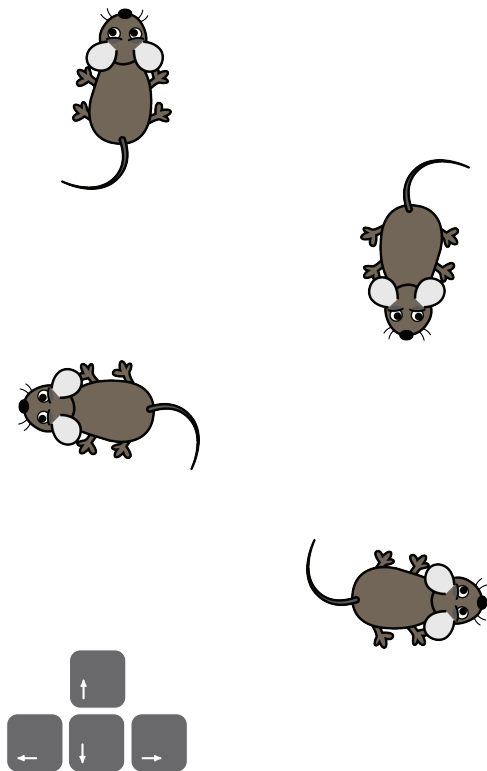
2. Put glue on the back.



3. Cut along the dashed line.

# Key Moves

Use the arrow keys to move your sprite.



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3

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# 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!

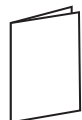
Does your sprite look upside-down?  
You can change its rotation style.

EXTRA TIP

```
set rotation style all around
```

- all around
- left-right
- don't rotate

Make A Card



1. Fold the card in half.



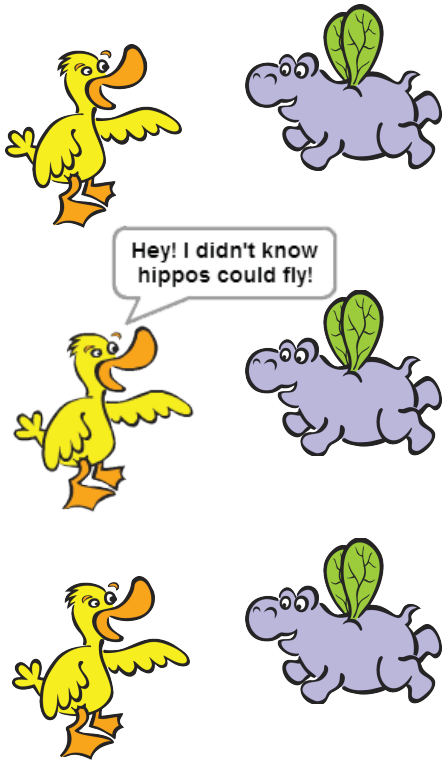
2. Put glue on the back.



3. Cut along the dashed line.

# Say something

What do you want your sprite to say?



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4

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

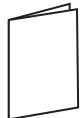
Type in any words.

DO IT!



Click on the sprite to start.

Make A Card



1. Fold the card in half.



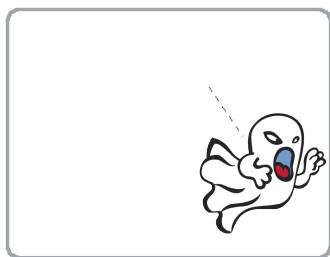
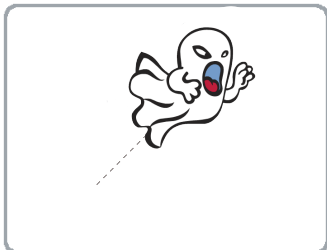
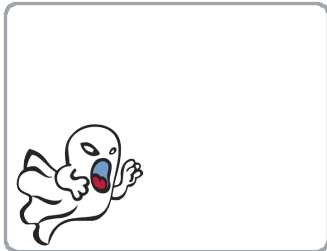
2. Put glue on the back.



3. Cut along the dashed line.

# Glide

Move smoothly from one point to another.



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5

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# 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

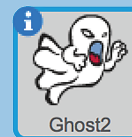
DO IT!



Click the green flag to start.

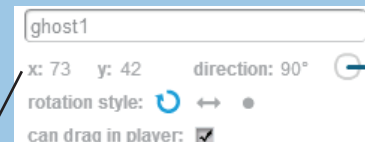
To see a sprite's current x y position:

EXTRA TIP



Click the **i**.

The x y position is shown here.



x: -240 y: 180

x: 240 y: 180

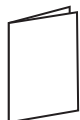
x: 0 y: 0

x: -240 y: -180

x: 240 y: -180

Here are the x and y positions on the Stage.

Make A Card



1. Fold the card in half.



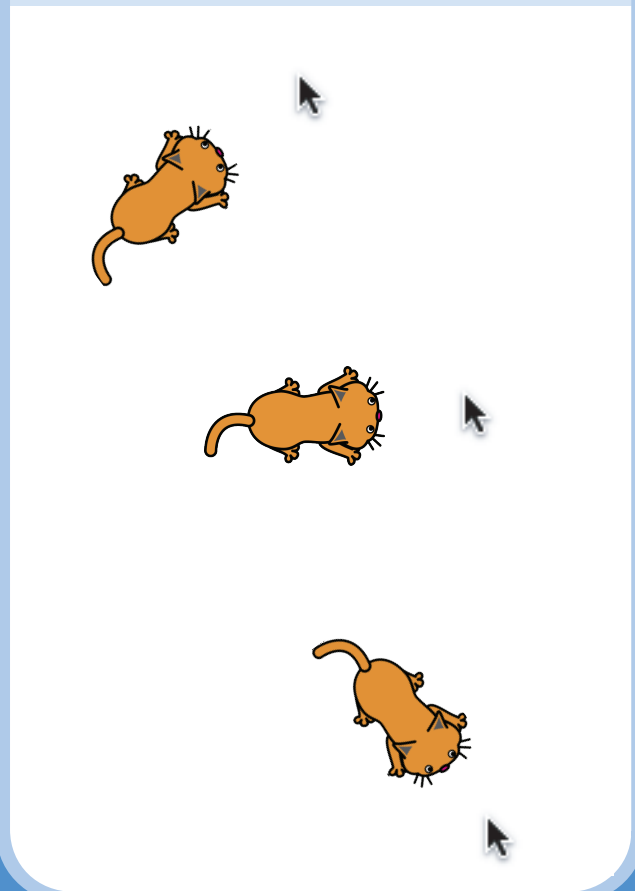
2. Put glue on the back.



3. Cut along the dashed line.

# Follow the Mouse

Follow the mouse pointer.



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6

SCRATCH

# Follow the Mouse



GET READY

New sprite:

Choose the cat or another costume.

TRY THIS CODE

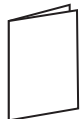
```
when green flag clicked
  forever loop
    point towards mouse-pointer
    move 3 steps
```

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.



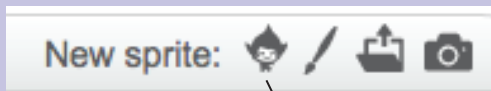
<http://scratch.mit.edu>

7

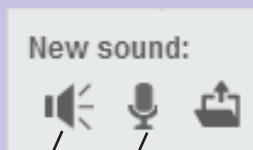
SCRATCH

# 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
```

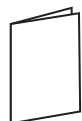
Choose whirl from the menu.

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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8

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# 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!

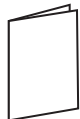
EXTRA TIP

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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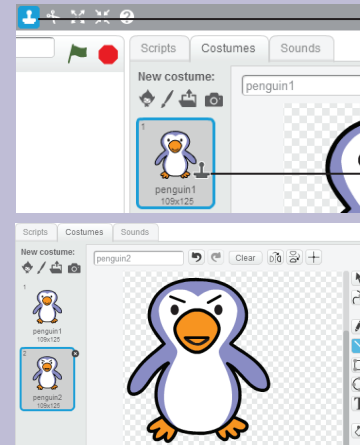
9

SCRATCH

# Animate It



## GET READY

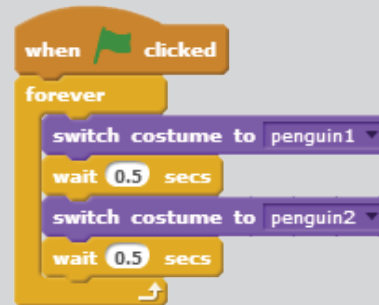


Click for duplicate (stamper) tool.

Click the sprite to duplicate the costume.

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

## TRY THIS CODE

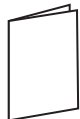


## DO IT!



Click the green flag to start.

## Make A Card



1. Fold the card in half.



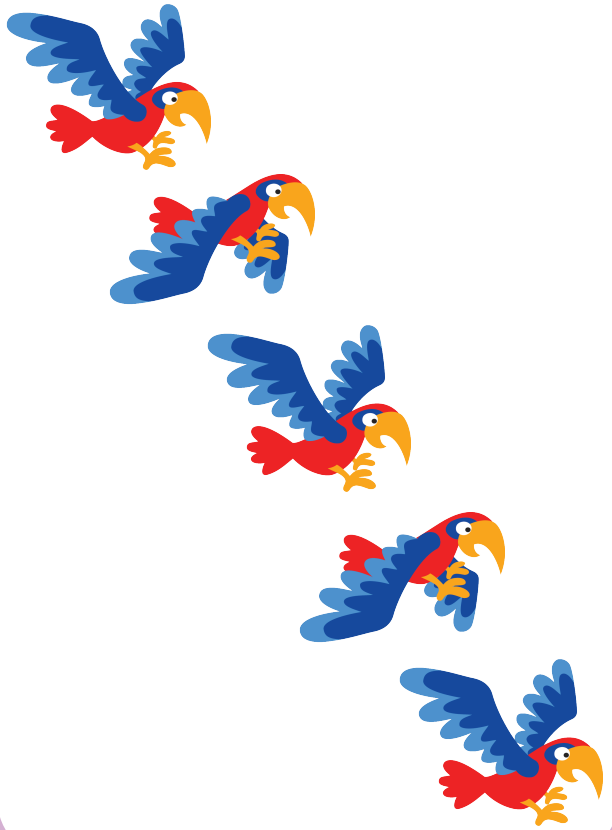
2. Put glue on the back.



3. Cut along the dashed line.

# Moving Animation

Animate a character as it moves.



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10

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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

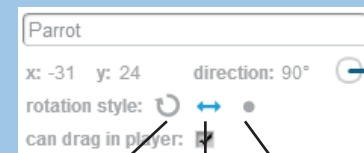
```
when green flag clicked
  forever loop
    next costume
    wait 0.5 secs
    move 5 steps
    if on edge, bounce
```

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

EXTRA TIP

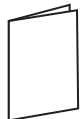


Click the .



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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11

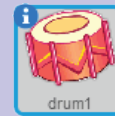
SCRATCH

# 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
```

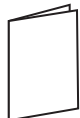
Insert the **PICK RANDOM** block

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.

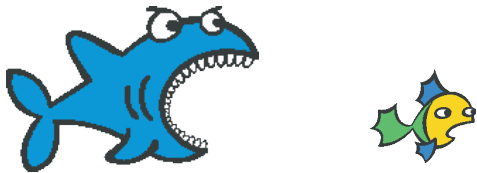


3. Cut along the dashed line.

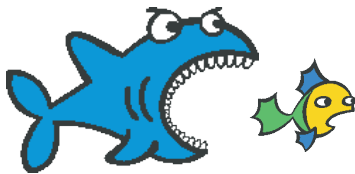
# Keep Score

Add a scoreboard to your game.

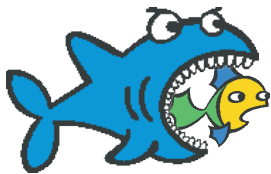
score 0



score 0



score 1



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12

SCRATCH

# Keep Score

score 1



## GET READY

Scripts Costumes Sounds

Make a Variable

New Variable

Variable name:

For all sprites  For this sprite only

Cloud variable (stored on server)

OK Cancel

Choose Data

Click

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

## TRY THIS CODE

```
when clicked
set score to 0
forever
  turn pick random -30 to 30 degrees
  move 5 steps
  if touching Fish1 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.

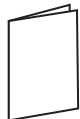
Increases the score by 1.

## 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.