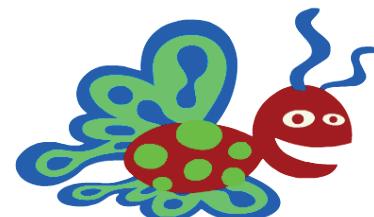


# Change Color

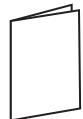
Press a key to change the color of a sprite.



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SCRATCH

# Make A Card



- ## 1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

# Change Color



GET READY

New sprite:    

**Choose a sprite** Or, paint a new one.  
from the library.

## TRY THIS CODE

**when space key pressed**

**change** color ▾ **effect** by 25

DO IT!

Press the space bar to change colors.

#### **EXTRA TIP**

You can choose a different effect from the menu:

**change color** effect by 25

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

To clear the effects, click the stop sign.



# Move to a Beat

Start dancing to a drum beat.



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SCRATCH



GET READY

New sprite:

Choose a dancer or other image.

TRY THIS CODE

```
when green flag 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.



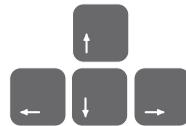
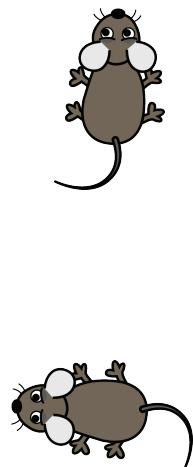
2. Put glue on the back.



3. Cut along the dashed line.

# Key Moves

Use the arrow keys to move your sprite.



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SCRATCH

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.



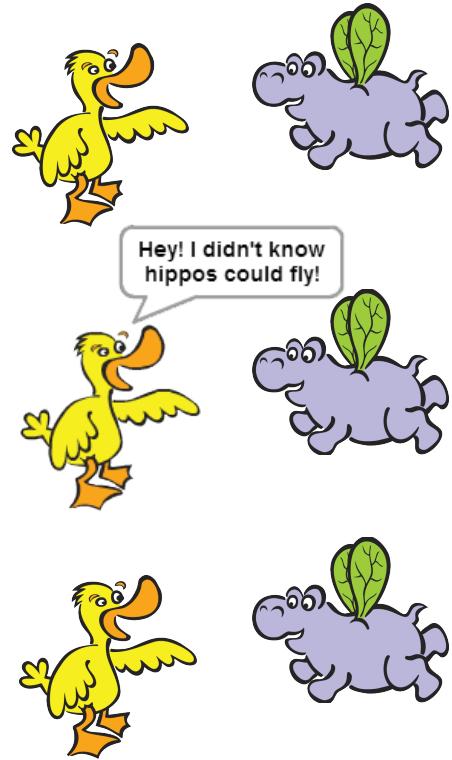
2. Put glue on the back.



3. Cut along the dashed line.

# Say Something

What do you want your sprite to say?

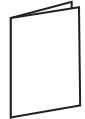


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SCRATCH

Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

# Say Something



GET READY

New sprite: /

Select a sprite.

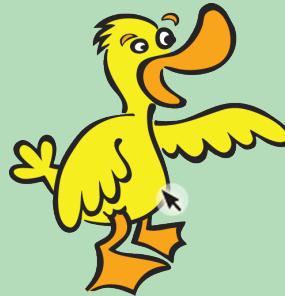
TRY THIS CODE

when this sprite clicked

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

Type in any words.

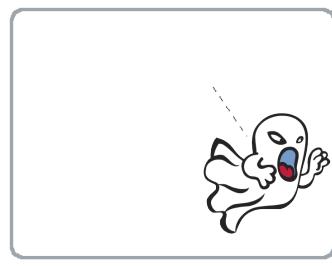
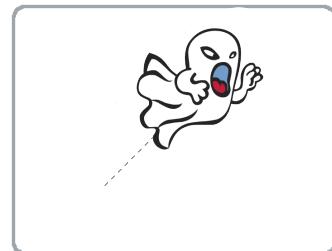
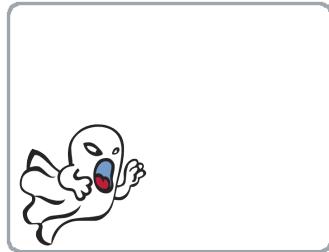
DO IT!



Click on the sprite to start.

# 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 green flag 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
```

how long

horizontal position

vertical position

Try different numbers.



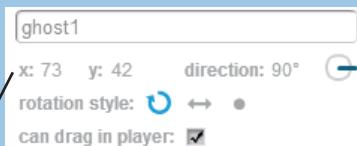
DO IT!

Click the green flag to start.

To see a sprite's current x y position:



Click the .

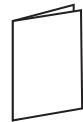


The x y position  
is shown here.

x:-240 y: 180      x: 240 y: 180  
x:-240 y:-180      x: 0 y: 0  
                        x: 240 y: -180

Here are the x and y  
positions on the Stage.

Make A Card



1. Fold the card in half.



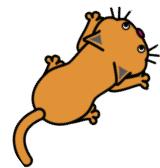
2. Put glue on the back.



3. Cut along the dashed line.

# Follow the Mouse

Follow the mouse pointer.



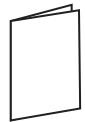
<http://scratch.mit.edu>

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SCRATCH



Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

# Follow the Mouse

GET READY

New sprite: /

Choose the cat or  
another costume.

TRY THIS CODE

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

DO IT!



Click the green flag to start.



# Dance Twist

Play a sound clip and do a body twist.



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SCRATCH



Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

# Dance Twist

GET READY

New sprite:



Choose an image of a person ready to dance.

New sound:



Choose or record a sound clip.  
Keep it short!

TRY THIS CODE

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

Choose whirl from the menu.

D

Press the key to start.

DO IT!

# Interactive Whirl

Whirl a photo by moving the mouse.



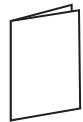
<http://scratch.mit.edu>

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SCRATCH



Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

# Interactive Whirl



GET READY

New sprite:

Choose the squirrel or other photo to whirl.

when green flag clicked

forever

set whirl effect to [mouse x]

Choose whirl from the menu.

TRY THIS CODE



DO IT!

Click the green flag to start.

EXTRA TIP

Notice how the numbers change as you move the mouse.

X: 150 y: -100

New sprite:



# Animate It

Make a simple animation.



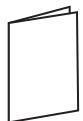
<http://scratch.mit.edu>

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SCRATCH



Make A Card



1. Fold the card in half.

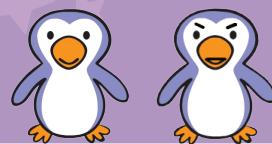


2. Put glue on the back.



3. Cut along the dashed line.

# Animate It

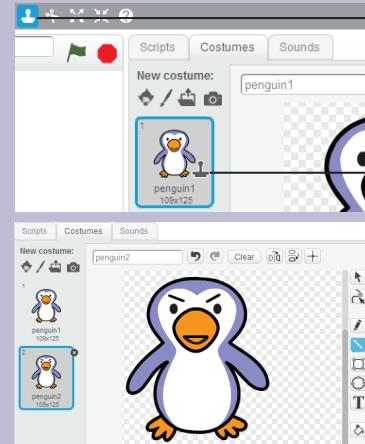


## GET READY

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

```
when green flag clicked
forever
  switch costume to [penguin1 v]
  wait (0.5) secs
  switch costume to [penguin2 v]
  wait (0.5) secs
```

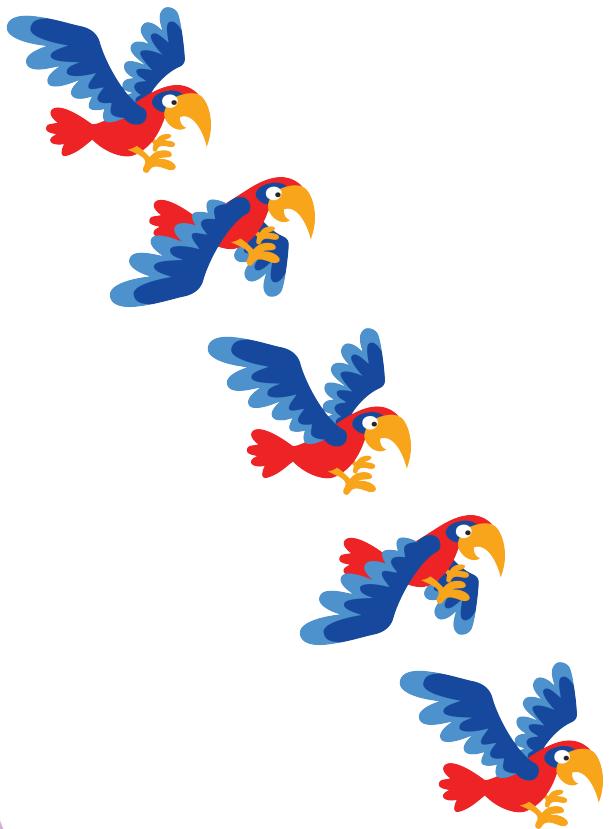


## DO IT!

Click the green flag to start.

# Moving Animation

Animate a character as it moves.



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SCRATCH

GET READY

# Moving Animation



New sprite:

Click to open the sprite library.



Parrot  
Costumes: 2

Choose a sprite that has 2 or more costumes.

TRY THIS CODE

```
when green flag clicked
forever
  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.



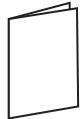
Parrot  
x: -31 y: 24 direction: 90°  
rotation style: all around left-right don't rotate  
can drag in player:

Click the .

all around left-right don't rotate

EXTRA TIP

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.



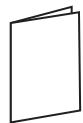
<http://scratch.mit.edu>

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SCRATCH



Make A Card



1. Fold the card in half.



2. Put glue on the back.



3. Cut along the dashed line.

# 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



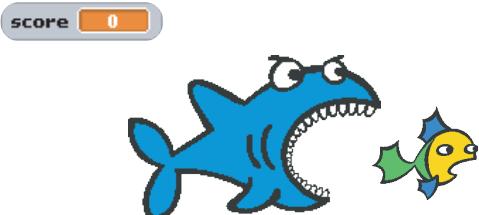
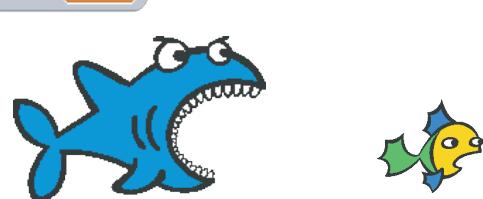
DO IT!

Click to see (and hear) what it does.



# Keep SCORE

Add a scoreboard to your game.



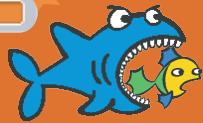
<http://scratch.mit.edu>

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SCRATCH

# Keep SCORE

score 1



Scripts Costumes Sounds

Motion Events  
Looks Control  
Sound Sensing  
Pen Operators  
**Data** More Blocks

Make a Variable

New Variable

Variable name: **score**

For all sprites  For this sprite only

Cloud variable (stored on server)

OK Cancel

GET READY

Choose Data

Click

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 -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.

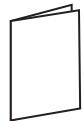
Increases the score by 1.



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.