

Make a Card



1. Fold the card in half

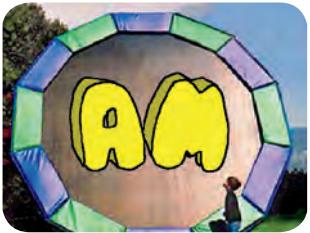


2. Glue the backs together



3. Cut along the dashed line

Animate Your Name Cards



Animate the letters of your name, initials, or favorite word.

Animate Your Name Cards

Try these cards in any order:

- Color Clicker
- Spin
- Play a Sound
- Dancing Letter
- Change Size
- Press a Key
- Glide Around

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Color Clicker

Make a letter change color
when you click it.



Animate Your Name

1

SCRATCH

Color Clicker

scratch.mit.edu/name

GET READY



Choose a backdrop.



Choose a letter from
the Letters category.



ADD THIS CODE

when this sprite clicked
change color ▾ effect by 25

Try different numbers.

TRY IT

Click your letter.



Make a Card



1. Fold the card in half



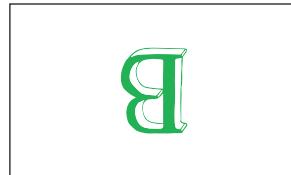
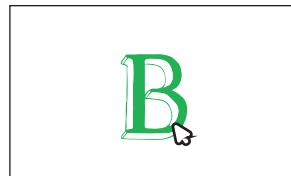
2. Glue the backs together



3. Cut along the dashed line

Spin

Make a letter turn when you click it.



Animate Your Name

2

SCRATCH

Spin

scratch.mit.edu/name

GET READY

Choose a letter from the Letters category.

New sprite:



ADD THIS CODE

```
when this sprite clicked  
repeat (10)  
  turn (18 degrees)
```

Try different numbers.

TRY IT

Click your letter.



TIP

Click this block to reset the sprite's direction.

point in direction (90°)

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Play a Sound

Click a letter to play a sound.



Animate Your Name

3

SCRATCH

Play a Sound

scratch.mit.edu/name

GET READY

New backdrop:



Choose a backdrop.



boardwalk

Choose a letter from the Letters category.

New sprite:



Click the Sounds tab.

New sound:



Choose a sound.

ADD THIS CODE

Click the Scripts tab.

when this sprite clicked
play sound [guitar strum v]

TRY IT

Click your letter.

Make a Card



1. Fold the card in half



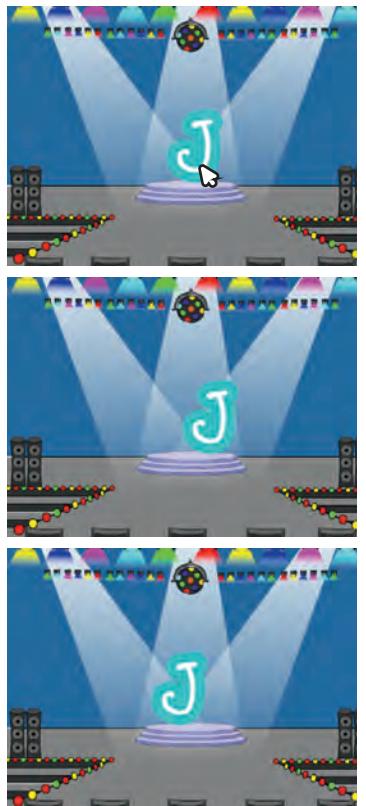
2. Glue the backs together



3. Cut along the dashed line

Dancing Letter

Make a letter move to the beat.



Animate Your Name

4

SCRATCH

Dancing Letter

scratch.mit.edu/name

GET READY

New backdrop:

Choose a backdrop.



spotlight-stage

Choose a letter from
the Letters category.

New sprite:



ADD THIS CODE

when this sprite clicked

move 10 steps

Type a positive number
to move forward.

play drum 1 for 0.25 beats

move -10 steps

Type a negative number
to move back.

play drum 1 for 0.25 beats

TIP

You can choose any drum from the menu.

play drum 1 for 0.25 beats

- (1) Snare Drum
- (2) Bass Drum
- (3) Side Stick

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Change Size

Make a letter get bigger and then smaller.



Animate Your Name

5

SCRATCH

Change Size

scratch.mit.edu/name

GET READY

Choose a letter from
the Letters category.

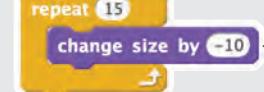
New sprite:



ADD THIS CODE



Type a positive number
to get bigger.



Type a negative number
to get smaller.

TRY IT

Click your letter.

TIP

Click this block to reset the size.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Press a Key

Press a key to make your letter change.



Animate Your Name

6

SCRATCH

Press a Key

scratch.mit.edu/name

GET READY

New backdrop:

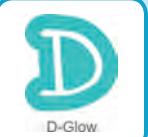


Choose a backdrop.

New sprite:



Choose a letter from the Letters category.



ADD THIS CODE

```
when space key pressed  
turn (90) degrees  
change color by (25)
```

Try different numbers.

TRY IT

Press the **space** key.

TIP

You can choose a different key from the menu. Then press that key!

```
when space key pressed  
space  
up arrow  
down arrow  
right arrow  
left arrow  
any
```

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Glide Around

Make a letter glide smoothly
from place to place.



Animate Your Name

7

SCRATCH

Glide Around

scratch.mit.edu/name

GET READY

New backdrop:

Choose a backdrop.



Choose a letter from
the Letters category.



New sprite:

ADD THIS CODE

when this sprite clicked

glide 1 secs to x: 10 y: 100
glide 1 secs to x: 127 y: -75
glide 1 secs to x: 10 y: 100

Try different numbers.

TRY IT

Click your letter to start.

TIP

Drag your sprite to where you want it and
then add a **glide** block to your script.



When you drag a sprite,
its x and y position will
update in the Blocks palette.

Make a Card



1. Fold the card in half

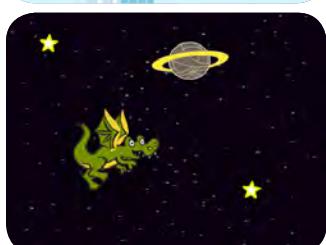
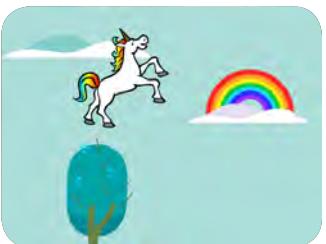
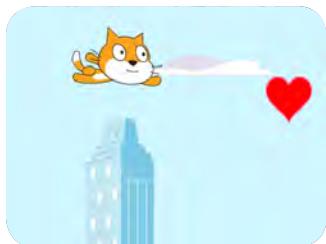


2. Glue the backs together



3. Cut along the dashed line

Make It Fly Cards



Choose any character and make it fly!

scratch.mit.edu/fly

Make It Fly Cards

Use these cards in this order:

- 1 Choose a Character**
- 2 Start Flying**
- 3 Switch Looks**
- 4 Make It Interactive**
- 5 Floating Clouds**
- 6 Flying Hearts**
- 7 Collect Points**

scratch.mit.edu/fly

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Choose a Character

Choose a character to fly.



Time to fly!

Make It Fly

1

SCRATCH

Choose a Character

scratch.mit.edu/fly

GET READY

New backdrop:



Choose a backdrop.



blue sky2

New sprite:

Choose a sprite from
the Flying theme.



Cat1 Flying

ADD THIS CODE



Type what you want
your sprite to say.

TRY IT

Click the green flag to start



Make a Card



1. Fold the card in half



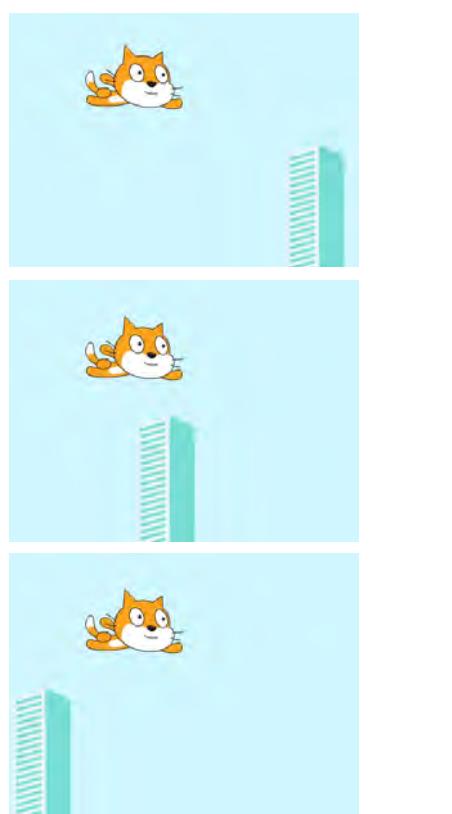
2. Glue the backs together



3. Cut along the dashed line

Start Flying

Move the scenery so your character looks like it's flying.



Make It Fly

2

SCRATCH

Start Flying

scratch.mit.edu/fly

GET READY

New sprite:

Choose a sprite to fly by,
such as Buildings.



ADD THIS CODE



when green flag clicked

forever

set x to 250

repeat 100

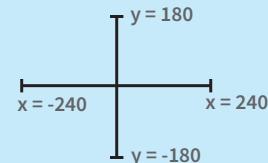
change x by -5

Start from the right
end of the stage.

Type a negative
number to move left.

TIP

x is the position on the Stage from left to right.



Make a Card



1. Fold the card in half



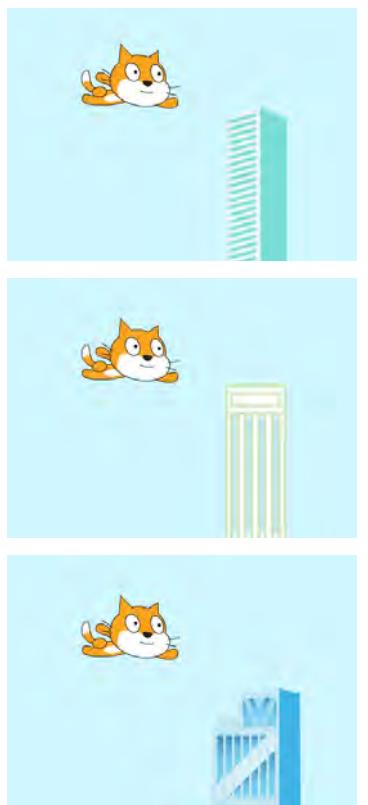
2. Glue the backs together



3. Cut along the dashed line

Switch Looks

Add variety to your scenery.



Make It Fly

3

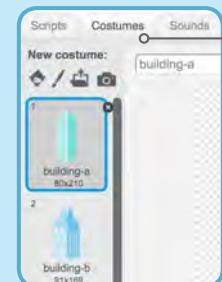
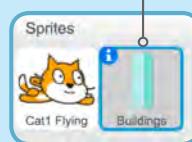
SCRATCH

Switch Looks

scratch.mit.edu/fly

GET READY

Click to select the **Buildings** sprite.

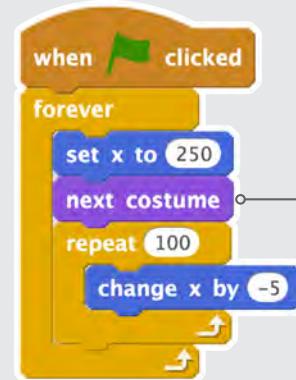


Then, click the **Costumes** tab to see different costumes.

ADD THIS CODE



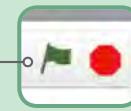
Click the **Scripts** tab.



Add this block to switch costumes.

TRY IT

Click the green flag to start



Make a Card



1. Fold the card in half



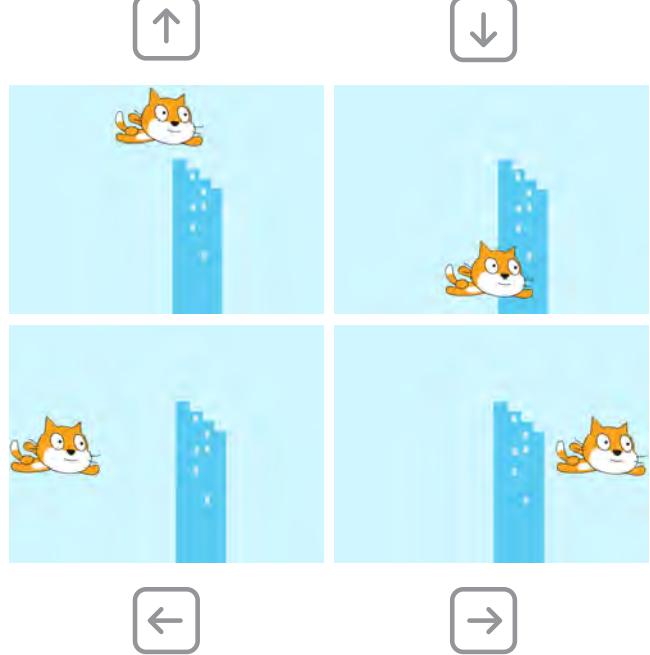
2. Glue the backs together



3. Cut along the dashed line

Make It Interactive

Make your character move
when you press a key.



Make It Fly

4

SCRATCH

Make It Interactive

scratch.mit.edu/fly

GET READY

Click to select your flying sprite.



ADD THIS CODE

when up arrow key pressed
change y by 10

when down arrow key pressed
change y by -10

when left arrow key pressed
change x by -10

when right arrow key pressed
change x by 10

TRY IT

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

Make a Card



1. Fold the card in half



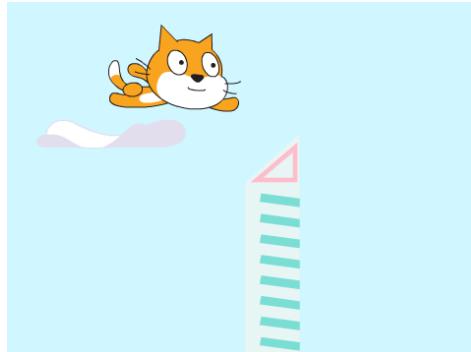
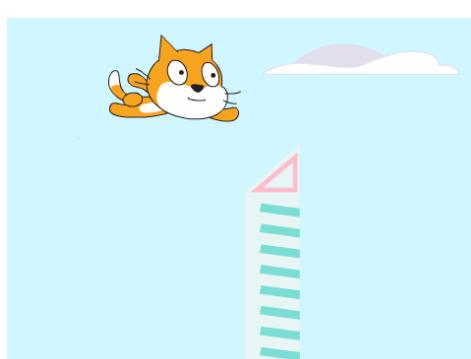
2. Glue the backs together



3. Cut along the dashed line

Floating Clouds

Make clouds float by in the sky!



Make It Fly

5

SCRATCH

Floating Clouds

scratch.mit.edu/fly

GET READY

New sprite:

Choose Clouds from the library.



Clouds

ADD THIS CODE

Drag the pick random block into the set y to block.

Drag the pick random block into the set y to block.

Type 180 to keep Clouds in top half.

when green flag clicked

forever

set y to [pick random 1 to 180]

set x to 250

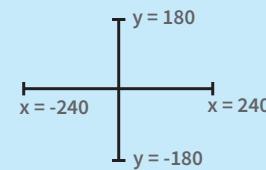
next costume

repeat (50)

change x by -10

TIP

y is the position on the Stage from top to bottom.



Make a Card



1. Fold the card in half



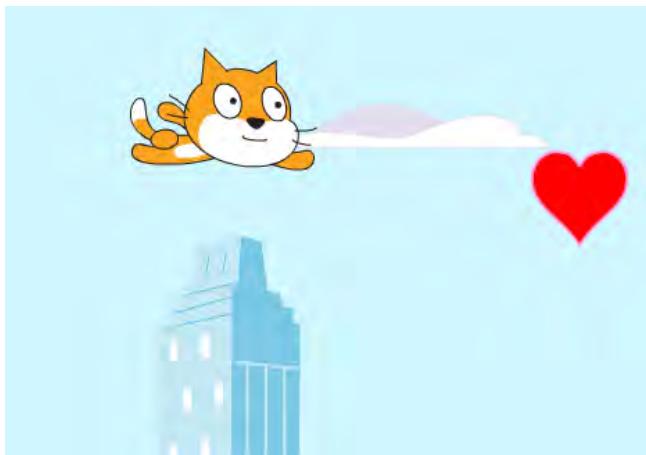
2. Glue the backs together



3. Cut along the dashed line

Flying Hearts

Add hearts or other floating objects to collect.



Make It Fly

6

SCRATCH

Flying Hearts

scratch.mit.edu/fly

GET READY

New sprite:

Choose a sprite, such as Heart.



Choose a sprite, such as Heart.

ADD THIS CODE

go to mouse-pointer
mouse-pointer
random position

Choose random position
from the menu.

when green flag clicked
forever
[go to random position, set x to 250, repeat (32) [change x by (-15)]]

TRY IT

Click the green flag to start



Make a Card



1. Fold the card in half



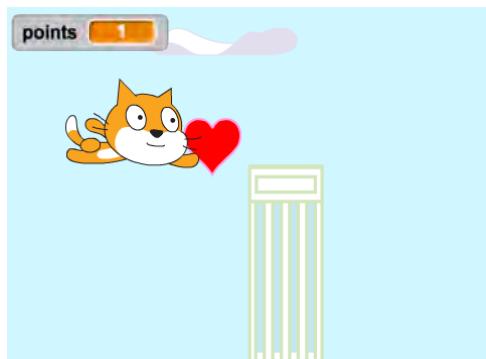
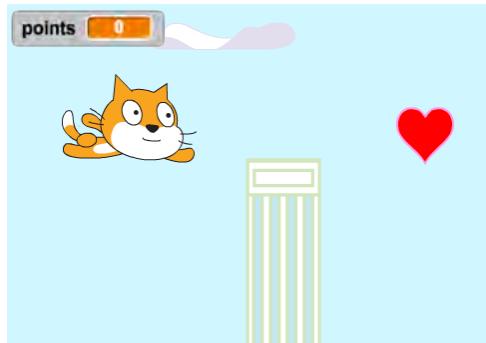
2. Glue the backs together



3. Cut along the dashed line

Collect Points

Add a point each time you touch a heart or other object.



Make It Fly

7

SCRATCH

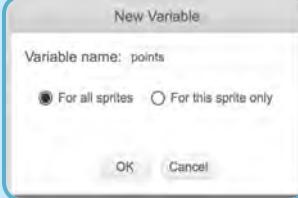
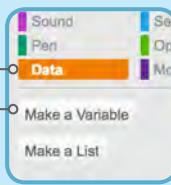
Collect Points

scratch.mit.edu/fly

GET READY

Choose Data

Click the Make a Variable button.

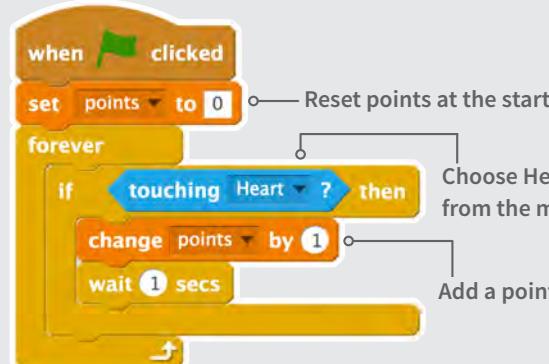


Name this variable **points** and then click OK.

ADD THIS CODE



Select your flying sprite.



Reset points at the start.
Choose Heart from the menu.
Add a point.

TRY IT

Click the green flag to start



Make a Card



1. Fold the card in half

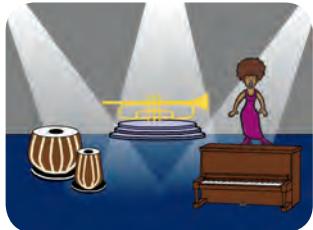


2. Glue the backs together



3. Cut along the dashed line

Make Music Cards



Choose instruments, add sounds, and press keys to play music.

Make Music Cards

Try these cards in any order:

- Play a Drum
- Make a Rhythm
- Animate a Drum
- Make a Melody
- Play a Chord
- Surprise Song
- Beatbox Sounds
- Record Sounds
- Play a Song

Make a Card



1. Fold the card in half



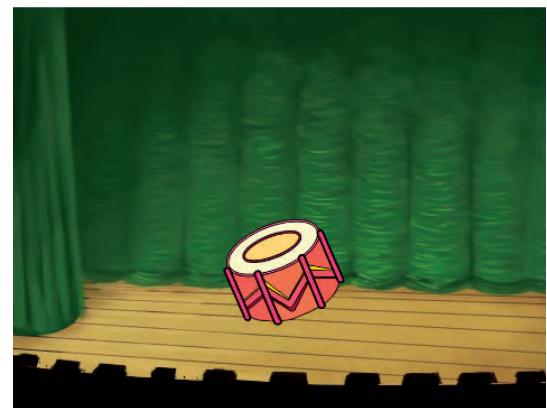
2. Glue the backs together



3. Cut along the dashed line

Play a Drum

Press a key to make a drum sound.



Make Music

1

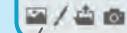
SCRATCH

Play a Drum

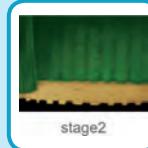
scratch.mit.edu/music

GET READY

New backdrop:



Choose a backdrop.



Choose a drum from the Music theme.

New sprite:



ADD THIS CODE

when space key pressed

play sound low tom

Select the sound you want from the menu.

TRY IT

Press the **space** key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Make a Rhythm

Play a sequence of drum sounds.



Make Music

2

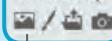
SCRATCH

Make a Rhythm

scratch.mit.edu/music

GET READY

New backdrop:



Choose a backdrop.



Choose a drum from the Music theme.



ADD THIS CODE

```
when space key pressed
repeat (3)
  play sound [hi na tabla v]
  wait (0.25) secs
  play sound [hi tun tabla v]
  wait (0.25) secs
```

Type how many times you want to repeat.

Try different numbers to change the rhythm.

TRY IT

Press the **space** key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Animate a Drum

Switch between costumes to animate.



Make Music

3

SCRATCH

Animate a Drum

scratch.mit.edu/music

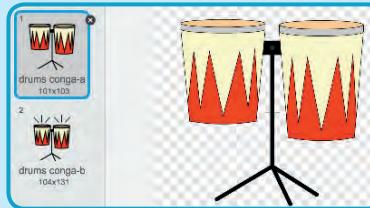
GET READY

Choose a drum from the Music theme.

New sprite: ♦ / 🎤 / 🎶 / 📸



Click the Costumes tab to see the costumes.



You can use the paint tools to change colors.

ADD THIS CODE

Click the Scripts tab.

```
when left arrow key pressed
repeat (4)
  play sound [high conga v]
  next costume
  wait (0.25) secs
  play sound [low conga v]
  next costume
  wait (0.25) secs
```

TRY IT

Press the left arrow key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Make a Melody

Play a series of notes.



Make Music

4

SCRATCH

Make a Melody

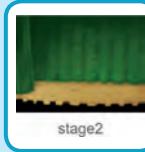
scratch.mit.edu/music

GET READY

New backdrop:



Choose a backdrop.



stage2

Choose an instrument from the Music theme.



Saxophone

ADD THIS CODE

```
when up arrow key pressed
  play sound [C2 sax v]
  wait [0.25 secs]
  play sound [G sax v]
  wait [0.25 secs]
  play sound [E sax v]
```

Choose up arrow (or another key).

Choose different sounds.

TRY IT

Press the up arrow key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Play a Chord

Play more than one sound at a time to make a chord.



Make Music

5

SCRATCH

Play a Chord

scratch.mit.edu/music

GET READY

New backdrop:

Choose a backdrop.



Choose an instrument from the Music theme.

New sprite:



ADD THIS CODE

when **down arrow** key pressed
play sound **F trumpet**
play sound **A trumpet**
play sound **C2 trumpet**

Choose **down arrow** (or another key).

Choose different sounds.

TIP

Use the **play sound** block to make sounds play at the same time.

Use **play sound until done** to play sounds one after another.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Surprise Song

Play a random sound from a list of sounds.



Make Music

6

SCRATCH

Surprise Song

scratch.mit.edu/music

GET READY

Choose an instrument from the Music theme.

New sprite:



Click the **Sounds** tab to see all the sounds of your instrument.



ADD THIS CODE

Click the **Scripts** tab.

Choose right arrow.
Insert a pick random block.
Type the number of sounds in your instrument.

TRY IT

Press the **right arrow** key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Beatbox Sounds

Play a series of vocal sounds.



Make Music

7

SCRATCH

Beatbox Sounds

scratch.mit.edu/music

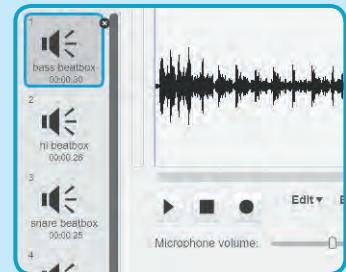
GET READY

Choose the Microphone.

New sprite: / /



Click the **Sounds** tab to see all the beatbox sounds.



ADD THIS CODE

Click the **Scripts** tab.

```
when [b] key pressed
repeat (4)
  play sound [bass beatbox v]
  wait (0.25) secs
  play sound [pick random 1 to 10 v]
  wait (0.25) secs
```

Choose **b** (or another key).

Insert a **pick random 1 to 10** block.

TRY IT

Press the **B** key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Record Sounds

Make your own sounds to play.



Make Music

8

SCRATCH

Record Sounds

scratch.mit.edu/music

GET READY



Choose a backdrop.



beach malibu

Choose any sprite you want.



Beachball

Click the **Sounds** tab.



Click this icon. (You'll need a microphone.)



Click to record a short sound, like "boing" or "bop."

ADD THIS CODE

Click the **Scripts** tab.



Choose c (or another key).

TRY IT

Press the C key to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Play a Song

Add a music loop as background music.



Make Music

9

SCRATCH

Play a Song

scratch.mit.edu/music

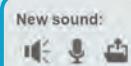
GET READY

Choose a sprite,
like Speaker.

New sprite:



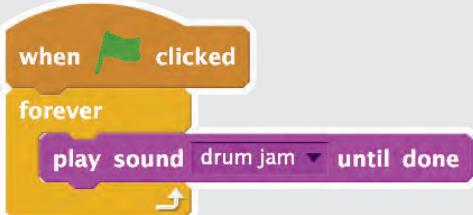
Click the **Sounds** tab.



Select a sound from the
Music Loops category.

ADD THIS CODE

Click the **Scripts** tab.



TIP

Make sure to use **play sound [drum jam v] until done** (not **play sound [drum jam v]**)
or else the music will interrupt itself.

Make a Card



1. Fold the card in half

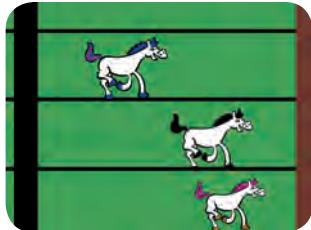


2. Glue the backs together



3. Cut along the dashed line

Race to the Finish Cards



Make a game where two characters race each other.

scratch.mit.edu/racegame

SCRATCH

Race to the Finish Cards

Use these cards in this order:

- 1 Start the Race**
- 2 On Your Mark**
- 3 Reach the Finish Line**
- 4 Choose a Racer**
- 5 Add a Sound**
- 6 Animate the Run**
- 7 Race the Computer**

scratch.mit.edu/racegame

SCRATCH

Make a Card



1. Fold the card in half



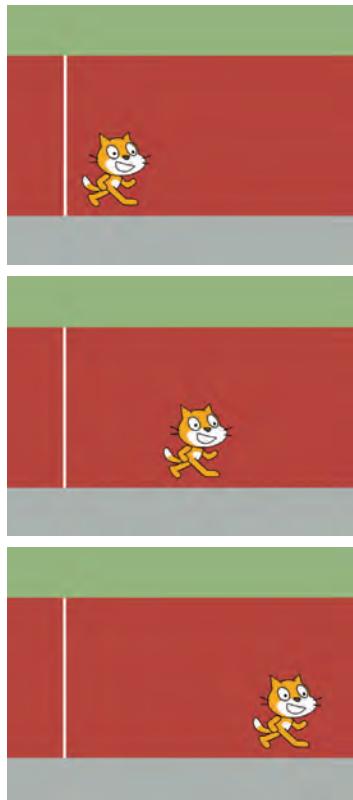
2. Glue the backs together



3. Cut along the dashed line

Start the Race

Make your sprite move on a racetrack.



Race to the Finish

1

SCRATCH

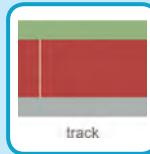
Start the Race

scratch.mit.edu/racegame

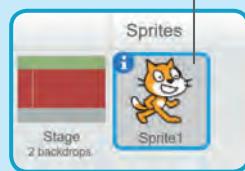
GET READY



Choose a backdrop.



Click to select the cat.



ADD THIS CODE

Click the **Scripts** tab.

when space key pressed

move (5) steps

Try different numbers to change the speed.

TRY IT

Press the **space** key to move the sprite.

Make a Card



1. Fold the card in half



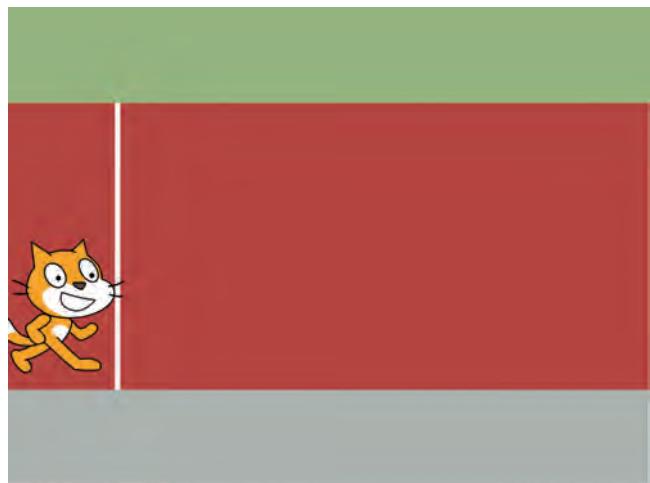
2. Glue the backs together



3. Cut along the dashed line

On Your Mark

Choose a starting point for your sprite.



Race to the Finish

2

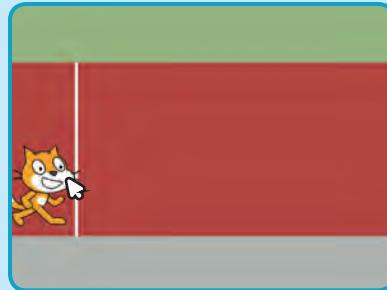
SCRATCH

On Your Mark

scratch.mit.edu/racegame

GET READY

Drag your sprite to where you want it on the Stage.



ADD THIS CODE



when clicked
go to x: -200 y: -45

— Set the starting position.
(Your numbers may be different.)

TRY IT

Press the **space** key
to move your sprite.

Click the green flag to reset.



Make a Card



1. Fold the card in half



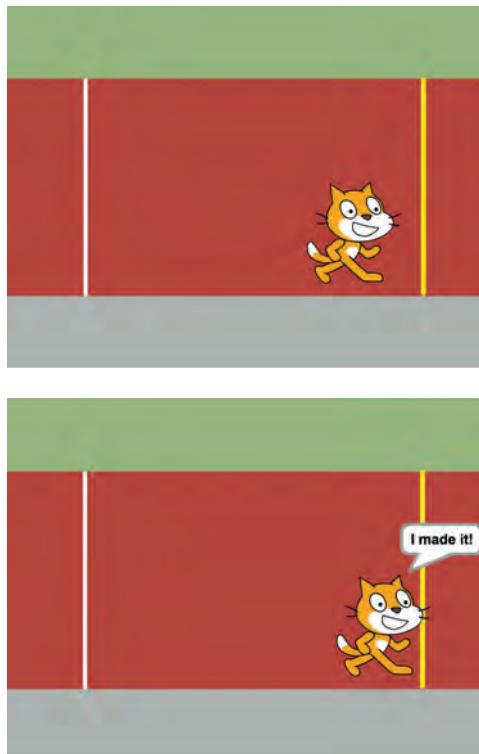
2. Glue the backs together



3. Cut along the dashed line

Reach the Finish Line

Make your sprite do something when it reaches the finish line.



Race to the Finish

3

SCRATCH

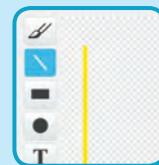
Reach the Finish Line

scratch.mit.edu/racegame

GET READY

Click the paintbrush to draw a new sprite.

New sprite:



Choose the **Line** tool and draw a line.

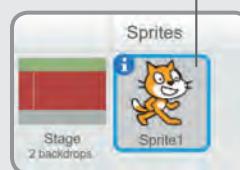
To make a straight line, hold down the Shift key while drawing.

Drag the line (Sprite2) to where you want it on the Stage.



ADD THIS CODE

Click to select the cat.



Click the **Scripts** tab.



Choose **Sprite2**.

Add these blocks.

Click the green flag to start.



Keep pressing the **space** key until you cross the finish line!



Make a Card



1. Fold the card in half



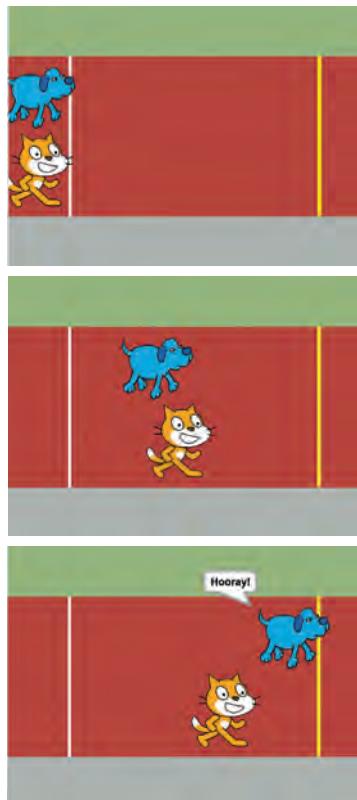
2. Glue the backs together



3. Cut along the dashed line

Choose a Racer

Add another sprite so you can have a race.



Race to the Finish

4

SCRATCH

Choose a Racer

scratch.mit.edu/racegame

GET READY

Choose a sprite to be the second racer.

New sprite:



ADD THIS CODE

Drag your sprite to where you want it to start.

when green flag clicked
go to x: -200 y: 60

Choose right arrow or a different key.

when right arrow key pressed
move (5) steps
if touching [Sprite2] then
say [Hooray!] for (2) secs

TRY IT

Click the green flag to start.



Press the **space** key and the **right arrow** key to make your sprites race.

Make a Card



1. Fold the card in half



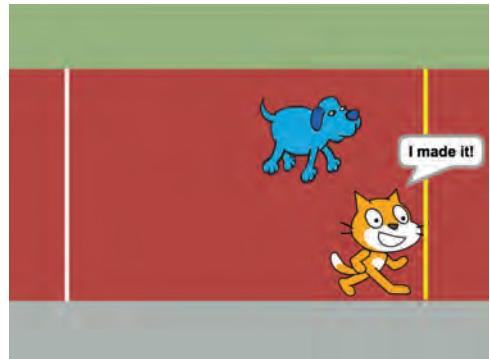
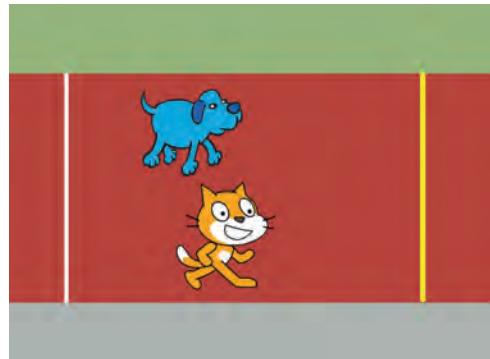
2. Glue the backs together



3. Cut along the dashed line

Add a Sound

Play a sound when you win the race.



Race to the Finish

5

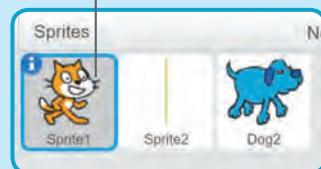
SCRATCH

Add a Sound

scratch.mit.edu/racegame

GET READY

Click to select the cat.



Click the Sounds tab.



Then choose a sound from the Sound library, like cheer.

ADD THIS CODE

Click the Scripts tab.

```
when space key pressed
  move (5) steps
  if touching [Sprite2] then
    say [I made it!] for (2) secs
    play sound [cheer v] until done
```

Add this block to play the sound.

Click the green flag to start.



Press the space key until you cross the finish line!



Make a Card



1. Fold the card in half



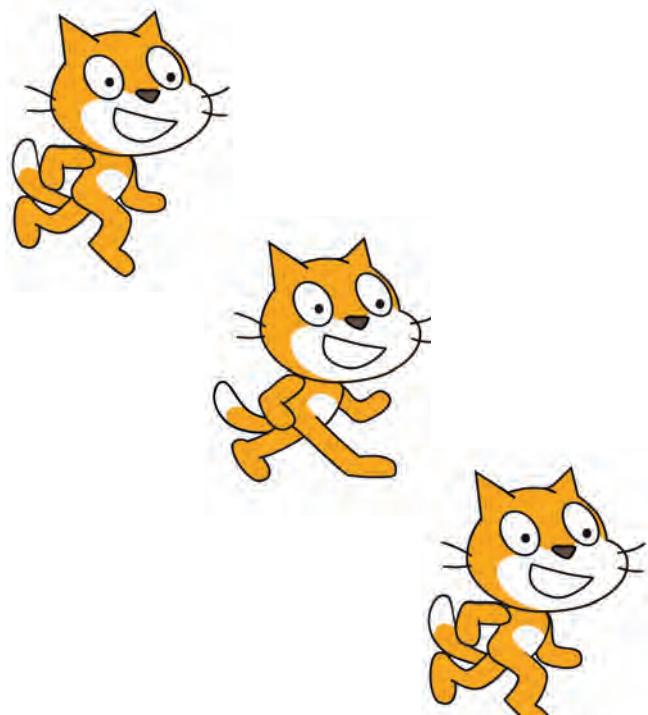
2. Glue the backs together



3. Cut along the dashed line

Animate the Run

Switch costumes to make your sprite look like it's running.



Race to the Finish

6

SCRATCH

Animate the Run

scratch.mit.edu/racegame

GET READY

Click the **Costumes** tab to see your sprite's costumes.



ADD THIS CODE

Click the **Scripts** tab.



```
when space key pressed
move (5) steps
next costume
if touching [Sprite2 v] then
  say [I made it!] for (2) secs
  play sound [cheer v]
```

Add this block to switch between costumes.

TRY IT

Press the **space** key.

TIP

You can animate any sprite that has more than one costume.

Make a Card



1. Fold the card in half



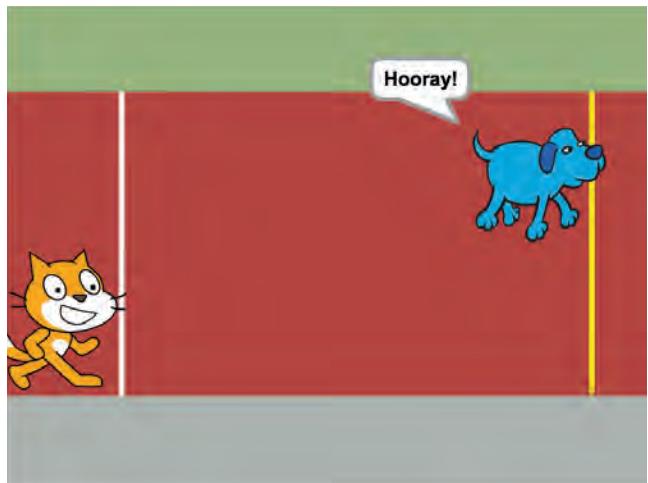
2. Glue the backs together



3. Cut along the dashed line

Race the Computer

Race against a sprite that moves automatically.



Race to the Finish

7

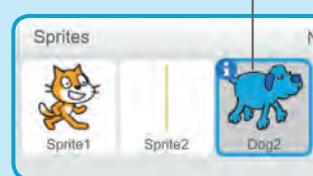
SCRATCH

Race the Computer

scratch.mit.edu/racegame

GET READY

Choose the sprite you want to move automatically.



ADD THIS CODE

```
when green flag clicked
  go to x: -200 y: 60
  glide (7 secs) to x: 140 y: 60
  say [Hooray!] for (2 secs)
```

Type a smaller number of seconds to go faster.

Click the green flag to start.



Press the space key to move the other sprite.

TRY IT

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Hide and Seek Cards



Make a hide-and-seek game with characters that appear and disappear.

Hide and Seek Cards

Use these cards in this order:

- 1 Disappear**
- 2 Click and Say**
- 3 Surprise Timing**
- 4 Go Random!**
- 5 Click for Points**
- 6 Hiding Place**

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Disappear

Make a sprite disappear and appear again.



Hide and Seek

1

SCRATCH

Disappear

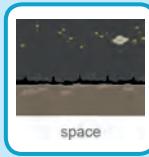
scratch.mit.edu/hide

GET READY

New backdrop:



Choose a backdrop.



Choose a sprite to hide.

New sprite:



ADD THIS CODE



```
when green flag clicked
  forever
    hide
    wait [1 sec]
    show
    wait [1 sec]
```

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Click and Say

Make a sprite speak when you click it.



Click and Say

scratch.mit.edu/hide

GET READY

Click to select your sprite.



Click the **Sounds** tab.



Then choose a sound from the Sound library.

ADD THIS CODE

Click the **Scripts** tab.

```
when this sprite clicked
play sound [hey v]
say [You found me!] for [1] secs
```

Type what you want your sprite to say.

TRY IT

Click your sprite.



Make a Card



1. Fold the card in half



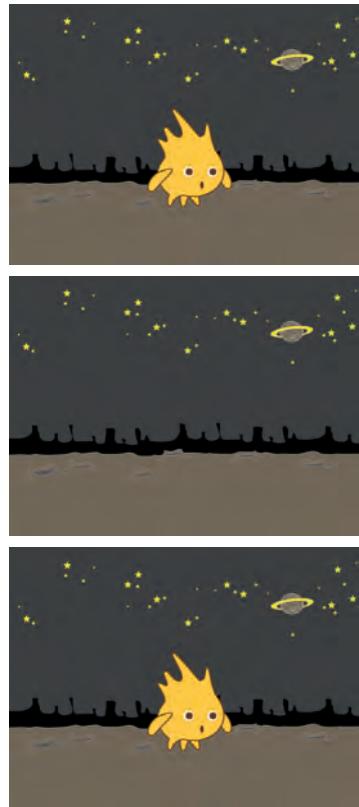
2. Glue the backs together



3. Cut along the dashed line

Surprise Timing

Make a sprite wait for a random amount of time before appearing again.



Hide and Seek

3

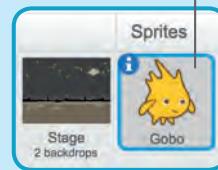
SCRATCH

Surprise Timing

scratch.mit.edu/hide

GET READY

Click to select your sprite.

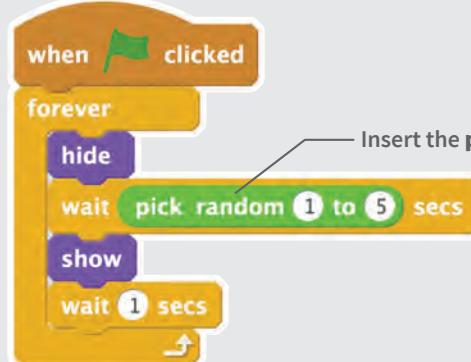


Click the **Costumes** tab and choose the costume you want.



ADD THIS CODE

Click the **Scripts** tab.



TIP

Play with the timing! Try typing in a different range of numbers.

`wait [pick random 0.5 to 1.5] secs`

Make a Card



1. Fold the card in half



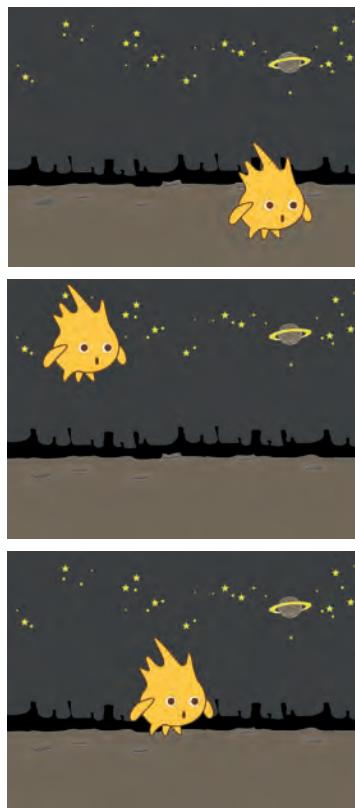
2. Glue the backs together



3. Cut along the dashed line

Go Random!

Make a sprite jump to random spots on the Stage.



Hide and Seek

4

SCRATCH

Go Random!

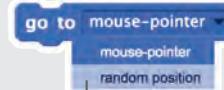
scratch.mit.edu/hide

GET READY

Click to select your sprite.



ADD THIS CODE



Choose **random position** from the menu.



TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



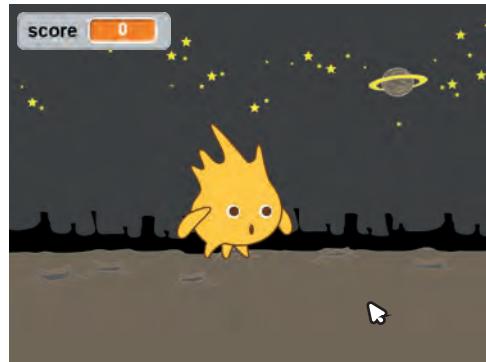
2. Glue the backs together



3. Cut along the dashed line

Click for Points

Add a point each time you click a sprite.



Click for Points

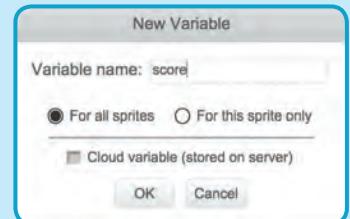
scratch.mit.edu/hide

GET READY

Choose Data.



Click the Make a Variable button.



Name this variable **score** and then click **OK**.

ADD THIS CODE



```
when this sprite clicked
play sound hey
say You found me! for 1 secs
change score by 1
```

Add this block.

TIP

Add this script to make the score reset to 0 when you click the green flag.

```
when green flag clicked
set score to 0
```

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Hiding Place

Make a sprite hide behind something.



Hide and Seek

6

SCRATCH

Hiding Place

scratch.mit.edu/hide

GET READY

Choose a sprite to be a hiding place, like Rocks.

New sprite:



Then choose another sprite who will hide.



ADD THIS CODE



when green flag clicked
go to front



```
when green flag clicked
forever
  go to [Rocks v]
  move (pick random -100 to 100) steps
  hide
  wait (pick random 1 to 5) secs
  show
  wait (1) secs
```

Click the **Grow** or **Shrink** tool and then click the sprite to change its size.

Grow Shrink



TIP

Make a Card



1. Fold the card in half

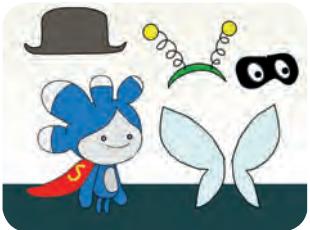


2. Glue the backs together



3. Cut along the dashed line

Fashion Game Cards



Dress up a character with different clothes and styles.

scratch.mit.edu/fashion

SCRATCH

scratch.mit.edu/fashion

SCRATCH

Fashion Game Cards

Start with the first card and then try the other cards in any order:

- Choose Your Character
- Play with Colors
- Change Styles
- Change Backdrops
- Lay Out Your Clothes
- Glide into Place
- Snap into Place

Scratch Day

Scratch Day

Scratch Day

Make a Card



1. Fold the card in half



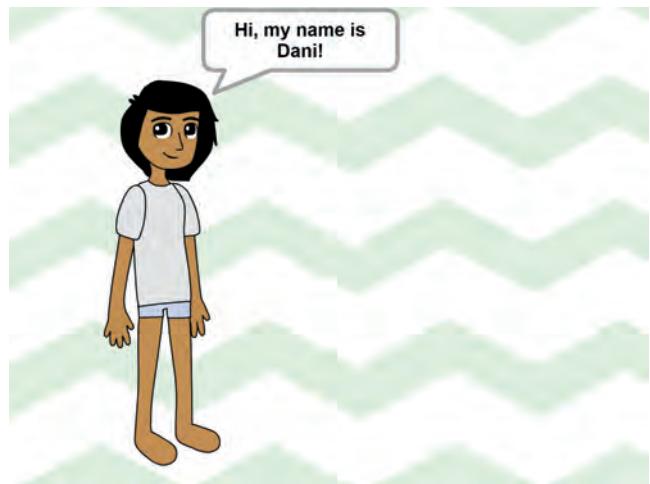
2. Glue the backs together



3. Cut along the dashed line

Choose Your Character

Choose your character and have them say something.



Fashion Game

1

SCRATCH

Choose Your Character

scratch.mit.edu/fashion

GET READY

New backdrop:

Choose a backdrop.



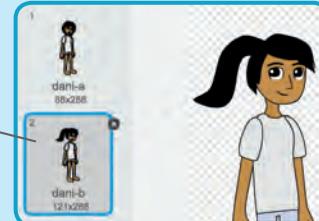
Choose a character from the Dress-Up theme.

New sprite:



Click the Costumes tab.

Then select the look you want.



You can use the paint bucket to change colors!

ADD THIS CODE

Click the Scripts tab.

```
when green flag clicked
  go to x: -120 y: 10
  say [Hi, my name is Dani!] for [2] secs
```

Set the starting position.

Type what you want your character to say.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



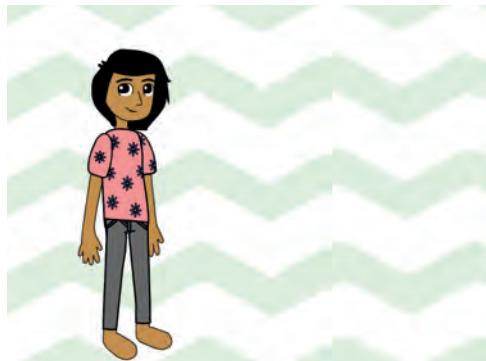
2. Glue the backs together



3. Cut along the dashed line

Play with Colors

Click to change the color of clothing.



Fashion Game

2

SCRATCH

Play with Colors

scratch.mit.edu/fashion



GET READY

Choose a piece of clothing, like Shirt2.

New sprite:



Drag the clothing onto your character.



ADD THIS CODE



when this sprite clicked
change color ▾ effect by 25

TRY IT

Click your clothing to make it change color.



Make a Card



1. Fold the card in half



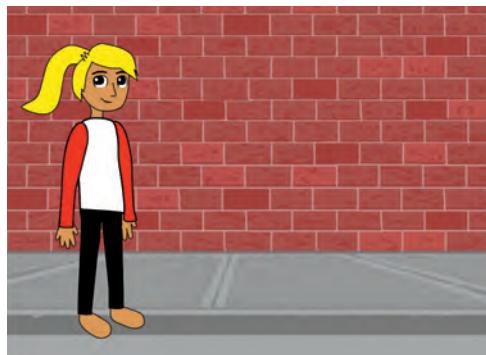
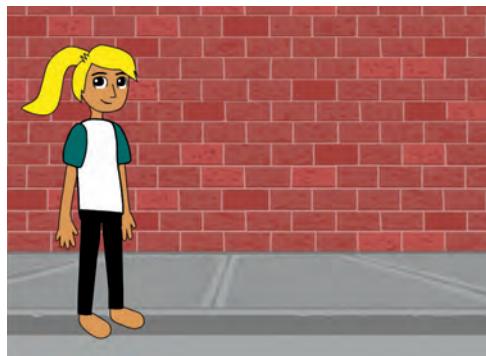
2. Glue the backs together



3. Cut along the dashed line

Change Styles

Press a key to switch costumes.



Fashion Game

3

SCRATCH

Change Styles

scratch.mit.edu/fashion



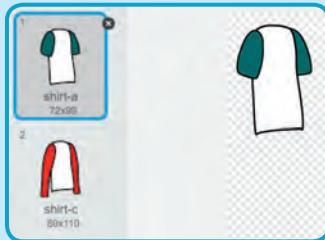
GET READY

Choose a piece of clothing, like Shirt.

New sprite:



Click the Costumes tab.



ADD THIS CODE

Click the Scripts tab.



Switch between costumes.



Keep the shirt in front of your character.

TRY IT

Click the green flag to start.



Press the **space** key to switch between styles.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Change Backdrops

Click a button to switch backdrops.



Fashion Game

4

SCRATCH

Change Backdrops

scratch.mit.edu/fashion



GET READY



Choose two backdrops.



bedroom1



clothing store

Choose a button sprite, like Arrow1.



Arrow1

ADD THIS CODE



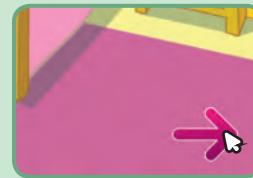
when this sprite clicked

switch backdrop to next backdrop ▾

Choose next backdrop from the menu.

TRY IT

Click your button to switch backdrops.



Make a Card



1. Fold the card in half



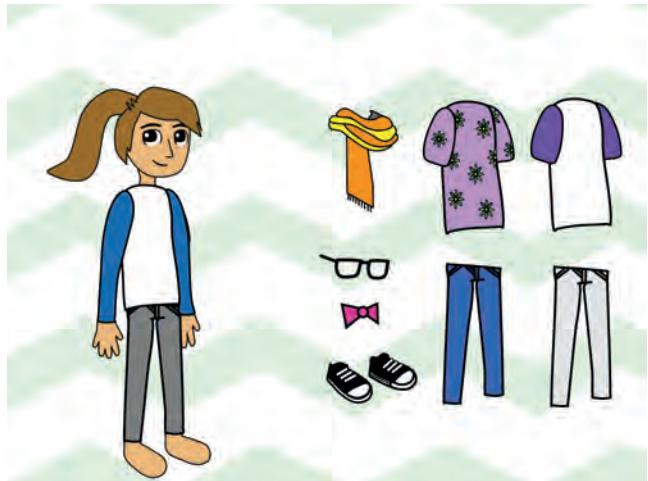
2. Glue the backs together



3. Cut along the dashed line

Lay Out Your Clothes

Set out your clothes in their starting positions.



Fashion Game

5

SCRATCH

Lay Out Your Clothes

scratch.mit.edu/fashion

GET READY

Choose some clothes and accessories.

New sprite: ♀ ♂ 🎨 📸

Arrange them next to your character.

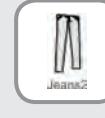


ADD THIS CODE

Set the starting position for each piece of clothing.
(Your numbers may be different.)



when green flag clicked
go to x: 170 y: 70
go to front



when green flag clicked
go to x: 170 y: -20
go to front

TRY IT

Drag the clothes onto your character.

Click the green flag to reset.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Glide into Place

Make accessories glide to the right place.



Fashion Game

6

SCRATCH

Glide into Place

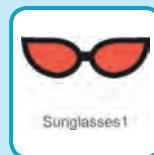
scratch.mit.edu/fashion



GET READY

Choose a piece of clothing or an accessory, like Sunglasses1.

New sprite: 🎨 🎭 🎩 📸



ADD THIS CODE

Set the starting position.

```
when green flag clicked  
go to x: 170 y: -20  
go to front
```

Drag the sunglasses onto your character and then add the **glide** block.

```
when this sprite clicked  
glide 1 secs to x: -120 y: -60
```

Your numbers may be different.

TRY IT

Click the green flag to reset.



Click the sunglasses to make them glide to your character.



Make a Card



1. Fold the card in half



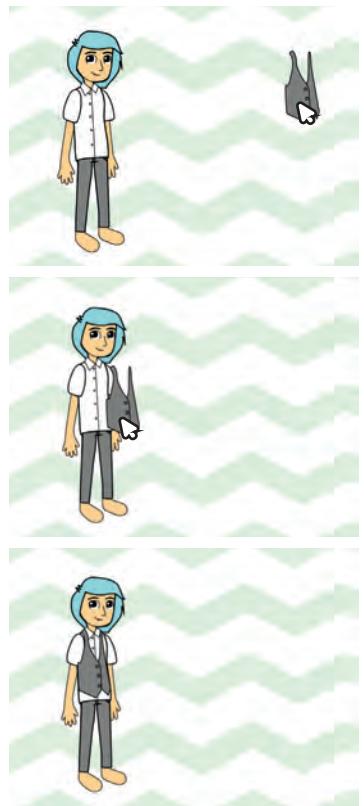
2. Glue the backs together



3. Cut along the dashed line

Snap into Place

Make clothes snap into place.



Fashion Game

7

SCRATCH

Snap into Place

scratch.mit.edu/fashion



GET READY

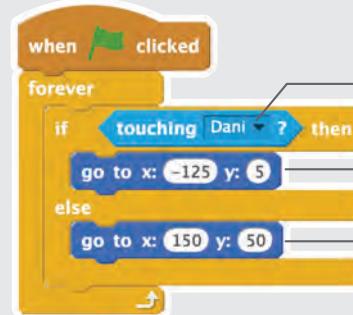
Choose a piece of clothing or an accessory, like Vest.

New sprite:



ADD THIS CODE

Drag the clothing onto your character and then add this code.



Choose your character.

Snap onto your character.

Go to starting position.

TRY IT

Click the green flag to start.



Drag the clothing onto your character. Then it will snap into place!



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Create a Story Cards



Choose characters, add conversation, and bring your story to life.

Create a Story Cards

Start with the first card and then try the other cards in any order:

- Start a Story
- Show a Character
- Make a Conversation
- Switch Scenes
- Glide to a Spot
- Appear in a Scene
- Make It Interactive
- Add Your Voice
- Click a Button

Make a Card



1. Fold the card in half



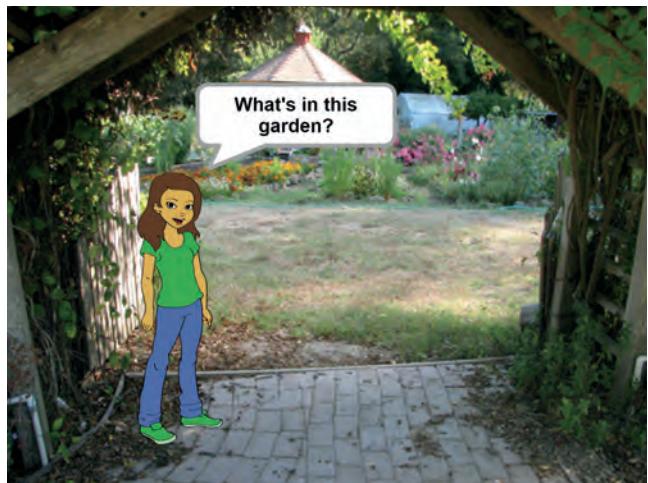
2. Glue the backs together



3. Cut along the dashed line

Start a Story

Choose a scene and introduce a character.



Create a Story

1

SCRATCH

Start a Story

scratch.mit.edu/story

GET READY

New backdrop:



Choose a backdrop.

New sprite:



Choose a character.

New sprite:



Abby

ADD THIS CODE



when green flag clicked

switch backdrop to pathway

say What's in this garden? for 2 secs

Type what you want
your character to say.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Show a Character

Make a new character appear in the scene.



Create a Story

2

SCRATCH



Show a Character

scratch.mit.edu/story

GET READY

Choose a character.

New sprite:



Click the **Sounds** tab.

New sound:

Then choose a sound,
like *fairydust*.

ADD THIS CODE

Click the **Scripts** tab.

```
when green flag clicked
  hide
  wait (3) secs
  play sound [fairydust v]
  show
```

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Make a Conversation

Make your characters talk with each other.



Create a Story

3

SCRATCH

Make a Conversation

scratch.mit.edu/story

GET READY

Choose two characters.

New sprite:



ADD THIS CODE



when green flag clicked
say [Have you seen Pearl? for 2 secs
say [I can't find her. for 2 secs
broadcast message1

Broadcast a message.



when I receive message1
say [Yes! Follow me! for 2 secs

Tell this character what to do when it receives the message.

TRY IT

Click the green flag to start.



TIP

broadcast message1
message1
new message...

You can click the drop-down menu to add a new message.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Switch Scenes

Change the backdrop and make something happen.



Create a Story

4

SCRATCH

Switch Scenes

scratch.mit.edu/story

GET READY

New backdrop:



Choose two backdrops.



winter



desert

Choose a character.

New sprite:



Tera

ADD THIS CODE



when green flag clicked

```
switch backdrop to winter
say Brrrr! It's so cold here! for 2 secs
say I miss the sun. for 2 secs
wait 1 secs
switch backdrop to desert
```

Type what you want your character to say.

Make something happen when the backdrop switches.

when backdrop switches to desert
say Ahh that's better! for 2 secs

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Glide to a Spot

Make a character glide across the screen.



Create a Story

5

SCRATCH

Glide to a Spot

scratch.mit.edu/story

GET READY

New backdrop:



Choose a backdrop.



slopes

Choose a character.

New sprite:



Dog1

ADD THIS CODE



when green flag clicked

point in direction 120

go to x: -190 y: 60

glide 1 secs to x: -20 y: -170

point in direction 90

Set a starting point.

Glide to another point.

TIP

Drag your sprite to where you want it and then add a go to or a glide block to your script.



When you drag a sprite, its x and y position will update in the Blocks palette.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Appear in a Scene

Change the backdrop and
make a new character appear.



Create a Story

6

SCRATCH

Appear in a Scene

scratch.mit.edu/story

GET READY

New backdrop:

Choose two
backdrops.



bedroom2



winter

Choose a character.

New sprite:



Bear1

ADD THIS CODE



Click the Stage
thumbnail.

New backdrop:

when green flag clicked

switch backdrop to bedroom2

wait [6 secs]

switch backdrop to winter

Switch to this scene.



when green flag clicked
hide

Hide at the beginning.

when backdrop switches to winter
show

say Hello! for [2 secs]

Appear in this scene.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



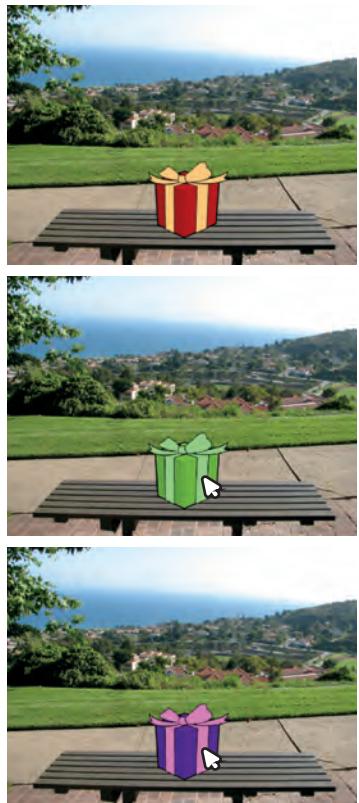
2. Glue the backs together



3. Cut along the dashed line

Make It Interactive

Click a sprite to make it do something.



Create a Story

7

SCRATCH

Make It Interactive

scratch.mit.edu/story

GET READY

Choose a sprite.

New sprite:



Click the Sounds tab.

New sound:

Then choose a sound from the Sound library.

ADD THIS CODE

Click the Scripts tab.

```
when this sprite clicked
  play sound [fairydust v]
  repeat (10)
    change color and effect by (25)
```

Choose your sound.

You can select different effects from the menu.

TRY IT

Click your sprite to start.

TIP



To clear the effect, click the stop sign.

Make a Card



1. Fold the card in half



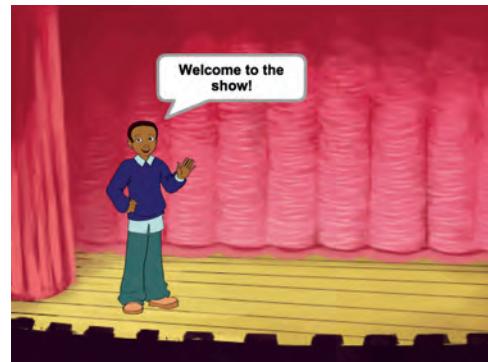
2. Glue the backs together



3. Cut along the dashed line

Add Your Voice

Record your voice to make a character talk.



Create a Story

8

SCRATCH

Add Your Voice

scratch.mit.edu/story

GET READY

Choose a character.

New sprite:



Devin

Click the Sounds tab.

New sound:

Click this icon.
(You'll need a microphone.)



Click to record
your voice.

ADD THIS CODE

Click the Scripts tab.



TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Click a Button

Click a button to switch scenes.



Create a Story

9

SCRATCH

Click a Button

scratch.mit.edu/story

GET READY

New backdrop:



Choose two backdrops.



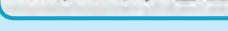
atom playground



basketball-court1-a

Choose a button sprite, like Arrow1.

New sprite:



Arrow1

ADD THIS CODE



when this sprite clicked

switch backdrop to next backdrop

hide

wait [3 secs]

show

Choose next backdrop from the menu.

Type how long to wait before showing the button.

TRY IT

Click your button to start.

TIP

Add this script to set the first scene. Then click the green flag to start.

```
when green flag clicked
switch backdrop to atom playground
hide
wait [3 secs]
show
```



Make a Card



1. Fold the card in half

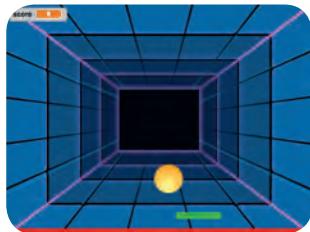


2. Glue the backs together



3. Cut along the dashed line

Pong Game Cards



Make a bouncing ball game with sounds, points, and other effects.

scratch.mit.edu/pong

SCRATCH

Pong Game Cards

Use these cards in this order:

- 1 Bounce Around**
- 2 Move the Paddle**
- 3 Bounce Off the Paddle**
- 4 Game Over**
- 5 Score Points**
- 6 Win the Game**

scratch.mit.edu/pong

SCRATCH

Make a Card



1. Fold the card in half



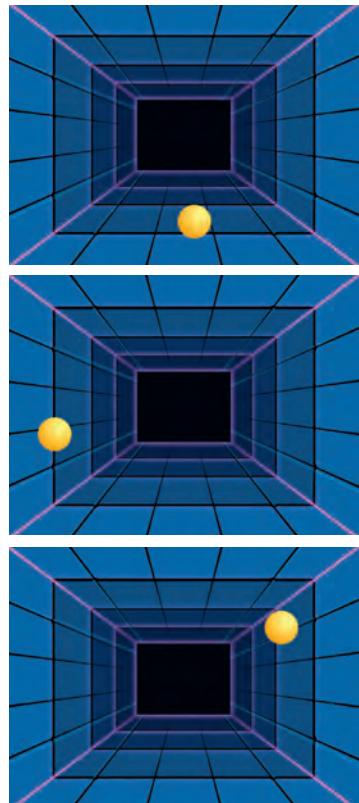
2. Glue the backs together



3. Cut along the dashed line

Bounce Around

Make a ball move around the Stage.



Pong Game

1

SCRATCH

Bounce Around

scratch.mit.edu/pong

GET READY

New backdrop:

Choose a backdrop.



neon tunnel

Choose a ball.

New sprite:



Ball

ADD THIS CODE

```
when green flag clicked
  go to x: 0 y: 160
  point in direction 45
  forever
    move (15) steps
    if on edge, bounce
```

Set the initial position.

Type the initial direction.

Type a bigger number
to move faster.

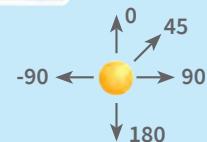
TRY IT

Click the green flag to start.



TIP

`point in direction` sets the direction of the ball.



Make a Card



1. Fold the card in half



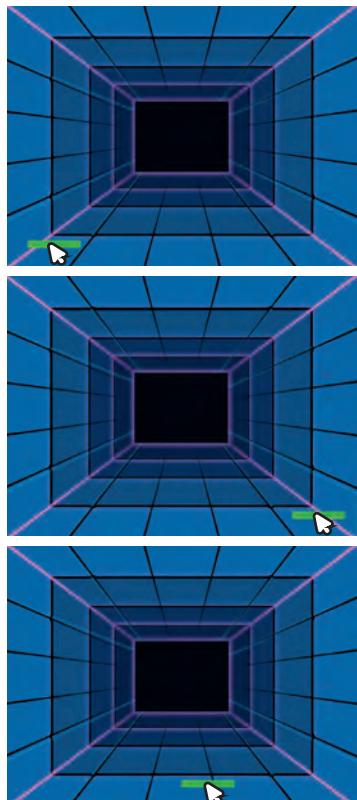
2. Glue the backs together



3. Cut along the dashed line

Move the Paddle

Control a paddle by moving
your mouse pointer.



Pong Game

2

SCRATCH

Move the Paddle

scratch.mit.edu/pong

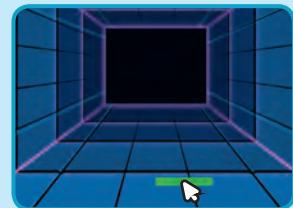
GET READY

Choose a paddle.

New sprite:

Paddle

Drag the paddle to the
bottom of the Stage.



ADD THIS CODE



Insert the **mouse x** block
in the **set x to** block.

TRY IT

Click the green
flag to start.



Move your mouse pointer
to move the paddle.

TIP

mouse x changes as you move the mouse pointer across the Stage.

Make a Card



1. Fold the card in half



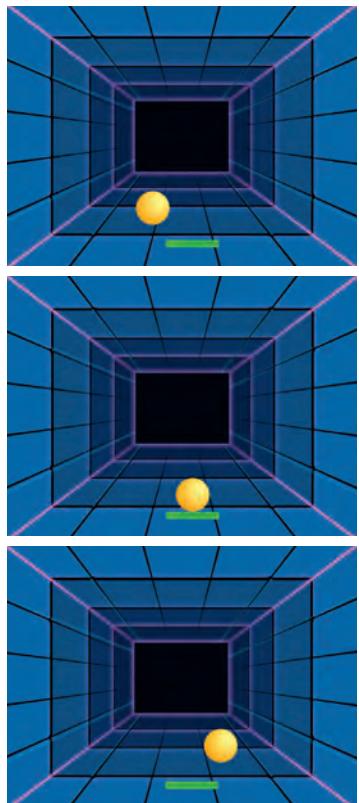
2. Glue the backs together



3. Cut along the dashed line

Bounce Off the Paddle

Make the ball bounce off the paddle.



Pong Game

3

SCRATCH

Bounce Off the Paddle

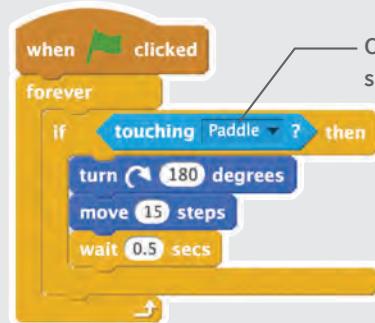
scratch.mit.edu/pong

GET READY



Click to select
the Ball sprite.

ADD THIS CODE



Choose the **Paddle**
sprite from the menu.

TRY IT

Click the green flag to start.



TIP

Insert a **pick random** block to make the ball bounce in different directions.



Use numbers around 180.

Make a Card



1. Fold the card in half



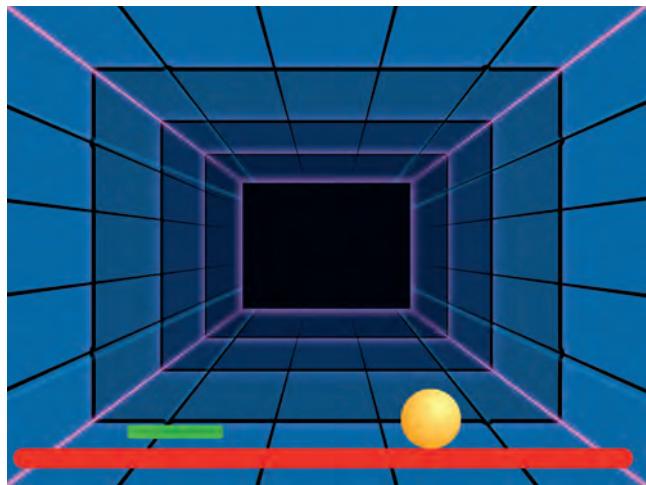
2. Glue the backs together



3. Cut along the dashed line

Game Over

Stop the game if the ball hits the red line.



Pong Game

4

SCRATCH

Game Over

scratch.mit.edu/pong

GET READY

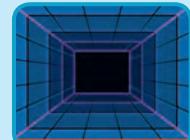
Click to select the Stage.



Then, click the Backdrops tab.



Choose the Line tool and pick the color red.



Draw a line at the bottom. (To make a straight line, hold down the Shift key while drawing.)

ADD THIS CODE

Click to select Ball.



Click the Scripts tab.



To pick the color, click this square and then click the red line on the Stage.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



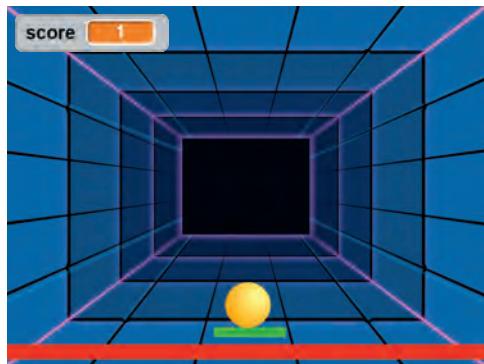
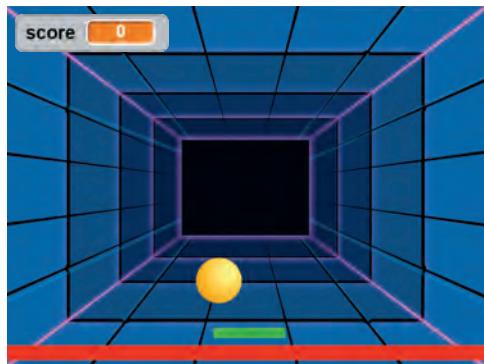
2. Glue the backs together



3. Cut along the dashed line

Score Points

Add a point each time you hit
the ball with the paddle.



Pong Game

5

SCRATCH

Score Points

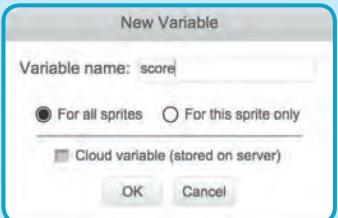
scratch.mit.edu/pong

GET READY

Choose Data.

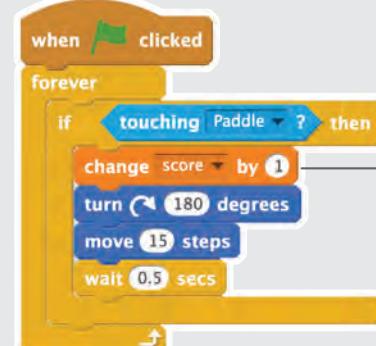


Click the Make a Variable button.



Name this variable **score**
and then click **OK**.

ADD THIS CODE



Add this block.

TIP

Use a **set score to 0** block to reset the score when you click the green flag.



Make a Card



1. Fold the card in half



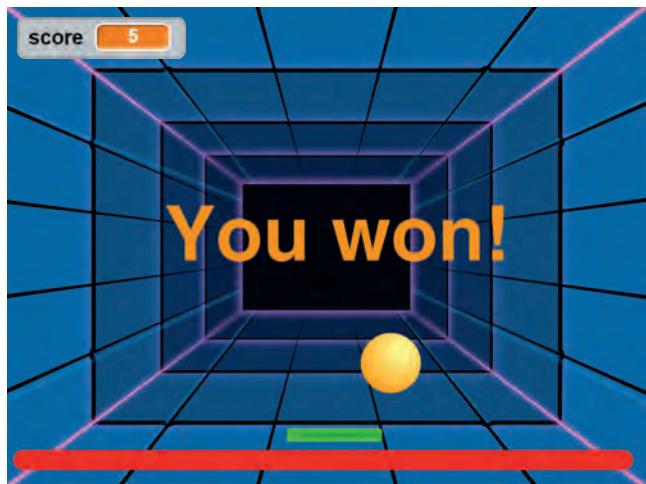
2. Glue the backs together



3. Cut along the dashed line

Win the Game

When you score enough points,
display a winning message!



Pong Game

6

SCRATCH

Win the Game

scratch.mit.edu/pong

GET READY

Click the paintbrush
to draw a new sprite.

New sprite:

Bitmap Mode
Convert to vector

Click the Convert
to vector button.

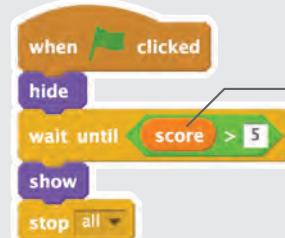
Use the Text tool to write
a message, like "You won!"

You won!

You can change the font
color, size, and style.

ADD THIS CODE

Click the Scripts tab.



Insert the score block.

Click the green
flag to start.

TRY IT

Play until you score
enough points to win!

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Let's Dance Cards



Design an animated dance scene with music and dance moves.

Let's Dance Cards

Try these cards in any order:

- Dance Sequence
- Dance Loop
- Play Music
- Take Turns
- Starting Position
- Shadow Effect
- Leave a Trail
- Color Effect
- Bop a Bit
- Interactive Dance

Make a Card



1. Fold the card in half



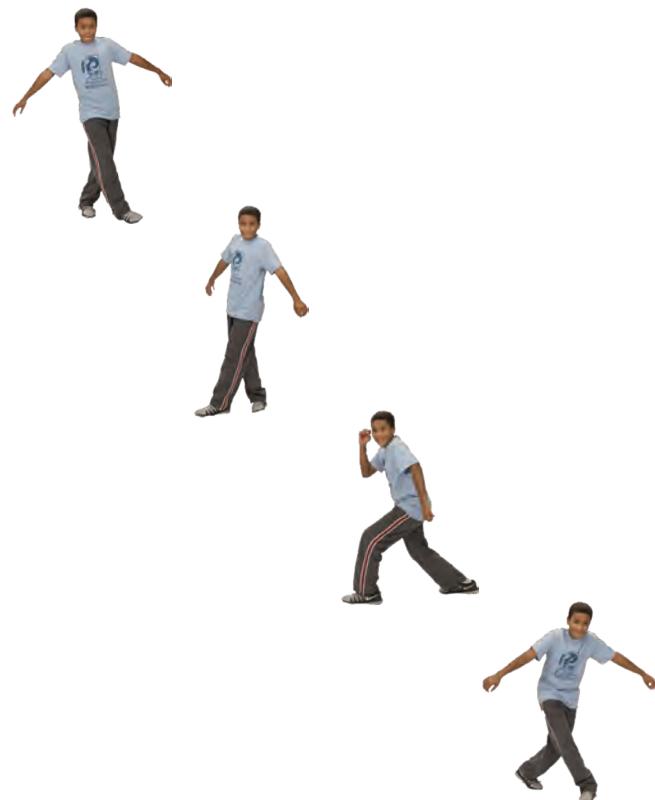
2. Glue the backs together



3. Cut along the dashed line

Dance Sequence

Make an animated dance.



Let's Dance

1

SCRATCH

Dance Sequence

scratch.mit.edu/dance

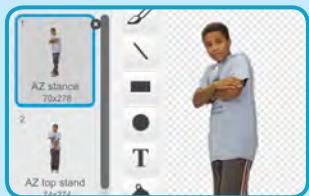
GET READY

Choose a dancer from the Dance theme.

New sprite:



Click the **Costumes** tab to see the different dance moves.



ADD THIS CODE

Click the **Scripts** tab.

```
when green flag clicked
  switch costume to [AZ top R step v]
  wait (0.5) secs
  switch costume to [AZ top L step v]
  wait (0.5) secs
  switch costume to [AZ top freeze v]
  wait (0.5) secs
  switch costume to [AZ top R cross v]
  wait (0.5) secs
```

Choose a dance move.

Type how long to wait.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



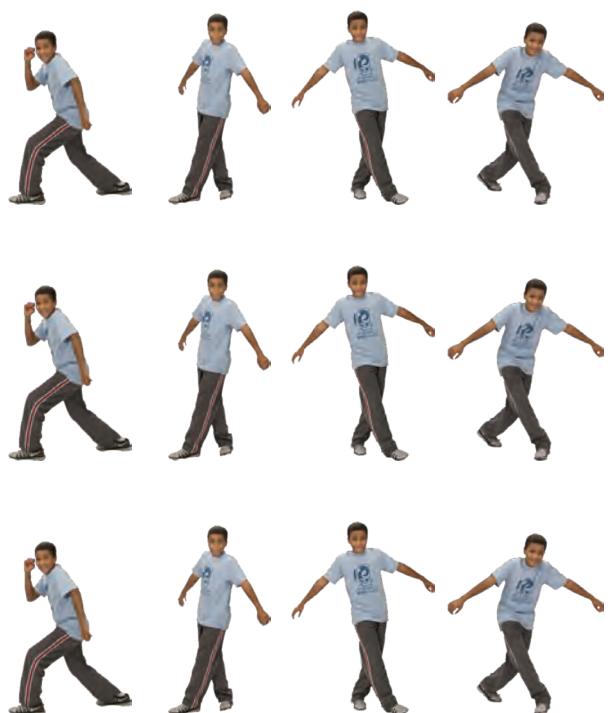
2. Glue the backs together



3. Cut along the dashed line

Dance Loop

Repeat a series of dance steps.



Let's Dance

2

SCRATCH

Dance Loop

scratch.mit.edu/dance

GET READY

Choose a dancer from
the Dance theme.

New sprite:



AZ Hip-Hop

ADD THIS CODE



Choose a dance pose.
Type how many times you want to repeat the dance.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Play Music

Play and loop a song.



Let's Dance

3

SCRATCH

Play Music

scratch.mit.edu/dance

GET READY

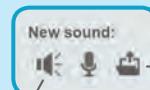


Choose a backdrop.



party room

Click the **Sounds** tab.



Choose a song from the **Music Loops** category.

Or upload an MP3 or other sound file.

ADD THIS CODE

Click the **Scripts** tab.



Type how many times you want the song to repeat.

TIP

Make sure to use **play sound [dance celebrate v] until done** (not **play sound [dance celebrate v]**) or else the music won't finish playing before it begins again.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Take Turns

Coordinate dancers so that one begins after the other.



Let's Dance

4

SCRATCH

Take Turns

scratch.mit.edu/dance

GET READY

Choose two dancers from the Dance theme.

New sprite:



AZ Hip-Hop

Anina Hip-Hop

ADD THIS CODE



when green flag clicked

switch costume to AZ top L step
wait 0.5 secs
switch costume to AZ top R step
wait 0.5 secs
switch costume to AZ stance
broadcast message1

Broadcast a message.



when I receive message1

say My turn to dance! for 2 secs
repeat (4)
next costume
wait 1 secs

Tell this dancer what to do when it receives the message.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Starting Position

Tell your dancers where to start.



Let's Dance

5

SCRATCH

Starting Position

scratch.mit.edu/dance

GET READY

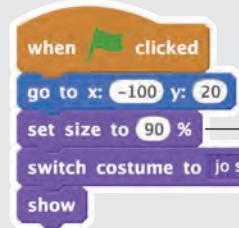
Choose a dancer that you want to start.

New sprite:



Jouvi Hip-Hop

ADD THIS CODE



Tell it where to start.

Set its size.

Choose the starting costume.

Make sure the sprite is showing (not hiding).

TIP

Use to set a sprite's position on the Stage.

You can find an x and y position by pointing with the mouse pointer.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Shadow Effect

Make a dancing silhouette.



Let's Dance

6

SCRATCH

Shadow Effect

scratch.mit.edu/dance

GET READY

Choose a dancer from
the Dance theme.

New sprite:



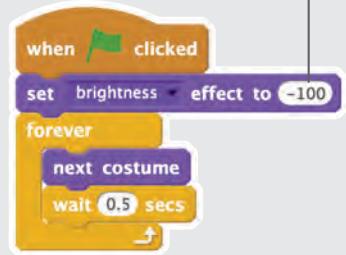
Jouvi Hip-Hop

ADD THIS CODE

Choose **brightness**
from the menu.



Set the brightness to **-100**.



TRY IT

Click the green flag to start.



Click the stop sign to stop.



Make a Card



1. Fold the card in half



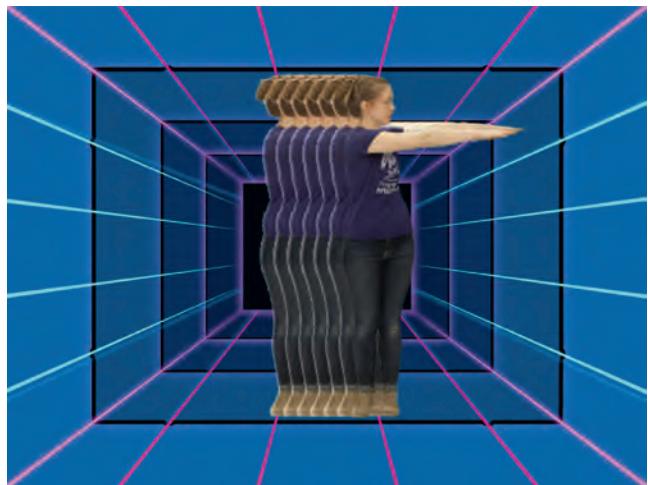
2. Glue the backs together



3. Cut along the dashed line

Leave a Trail

Stamp a trail as your dancer moves.



Let's Dance

7

SCRATCH

Leave a Trail

scratch.mit.edu/dance

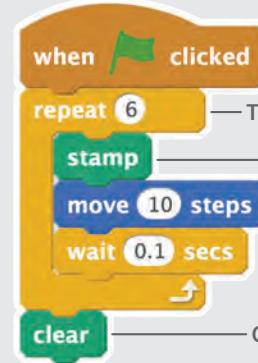
GET READY

Choose a dancer from
the Dance theme.

New sprite:



ADD THIS CODE



Type how many times to repeat.
Stamp the current costume on the Stage.

Clear all the stamps.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Color Effect

Make the backdrop change colors.



Let's Dance

8

SCRATCH

Color Effect

scratch.mit.edu/dance

GET READY

New backdrop:

Choose a backdrop.



ADD THIS CODE

Click the **Scripts** tab.



```
when green flag clicked
  forever
    change color effect by (25)
    wait (0.5) secs
```

Try different numbers.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Bop a Bit

Move your dancer up and down
a little to look lively.



Let's Dance

9

SCRATCH

Bop a Bit

scratch.mit.edu/dance

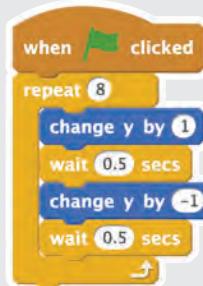
GET READY

Choose a dancer from
the Dance theme.

New sprite:

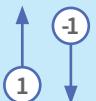


ADD THIS CODE

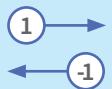


- Type a positive number to move up.
- Type a negative number to move down.

TIP



To move up or down, you can use .



To move left or right, you can use .

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Interactive Dance

Press keys to switch dance moves.



Let's Dance

10

SCRATCH

Interactive Dance

scratch.mit.edu/dance

GET READY

Choose a dancer from
the Dance theme.

New sprite:



Jouvi Hip-Hop

ADD THIS CODE

when left arrow key pressed
switch costume to jo pop left

when right arrow key pressed
switch costume to jo pop right

when up arrow key pressed
switch costume to jo top stand

when down arrow key pressed
switch costume to jo pop down

TRY IT

Press the arrow keys to make your dancer move.

Make a Card



1. Fold the card in half

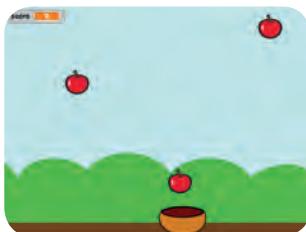


2. Glue the backs together



3. Cut along the dashed line

Catch Game Cards



Make a game where you catch things falling from the sky.

scratch.mit.edu/catch

SCRATCH

scratch.mit.edu/catch

SCRATCH

Catch Game Cards

Use these cards in this order:

- 1 Go to the Top
- 2 Fall Down
- 3 Move the Catcher
- 4 Catch It!
- 5 Keep Score
- 6 Bonus Points
- 7 You Win!

Make a Card



1. Fold the card in half



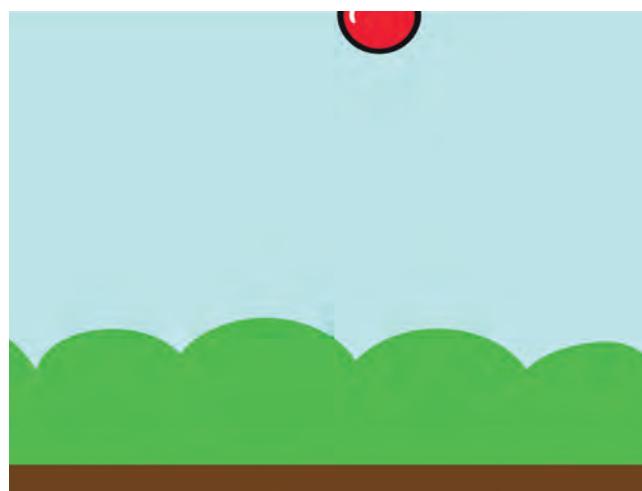
2. Glue the backs together



3. Cut along the dashed line

Go to the Top

Start from a random spot
at the top of the Stage.



Catch Game

1

SCRATCH

Go to the Top

scratch.mit.edu/catch

GET READY

New backdrop:



Choose a backdrop.

Choose a sprite, like Apple.

New sprite:



Apple

ADD THIS CODE

go to mouse-pointer
mouse-pointer
random position

Choose random position
from the menu.



when green flag clicked
go to random position
set y to 180

Type 180 to go to the
top of the Stage.

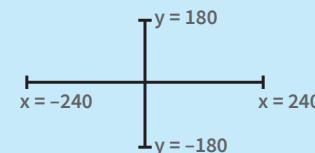
TRY IT

Click the green flag to start.



TIP

y is the position on the Stage from top to bottom.



Make a Card



1. Fold the card in half



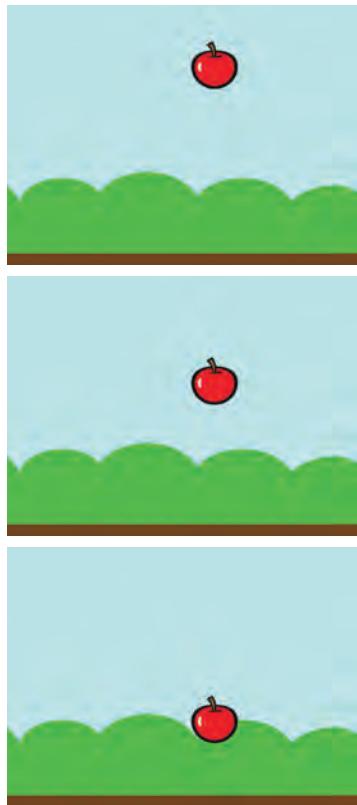
2. Glue the backs together



3. Cut along the dashed line

Fall Down

Make your sprite fall down.



Catch Game

2

SCRATCH

Fall Down

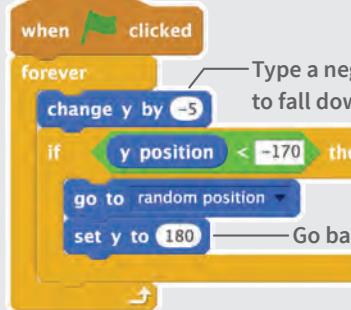
scratch.mit.edu/catch

GET READY



Click to select the Apple.

ADD THIS CODE



Type a negative number to fall down.

Check if near the bottom of the Stage.

Go back to the top of the Stage.

TRY IT

Click the green flag to start.



Click the stop sign to stop.

TIP

Use `change y by` to move up or down.

Use `set y to` to set the sprite's vertical position.

Make a Card



1. Fold the card in half



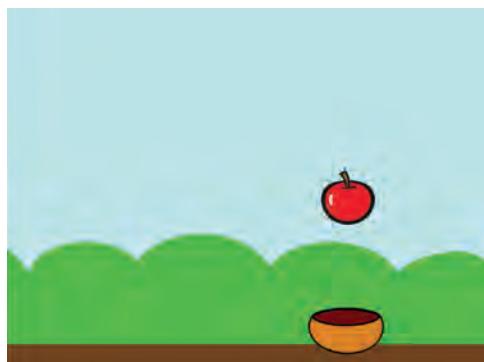
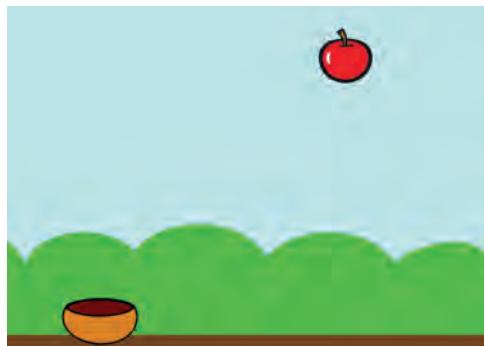
2. Glue the backs together



3. Cut along the dashed line

Move the Catcher

Press the arrow keys so that
the catcher moves left and right.



Catch Game

3

SCRATCH

Move the Catcher

scratch.mit.edu/catch

GET READY

Choose a catcher,
like Bowl.

New sprite:

Drag the Bowl to the bottom of the Stage.

ADD THIS CODE

```
when green flag clicked
forever
  if key right arrow pressed? then
    change x by 10
  end
  if key left arrow pressed? then
    change x by -10
  end
```

TRY IT

Click the green
flag to start.

Press the arrow keys to
move the catcher.

Make a Card



1. Fold the card in half



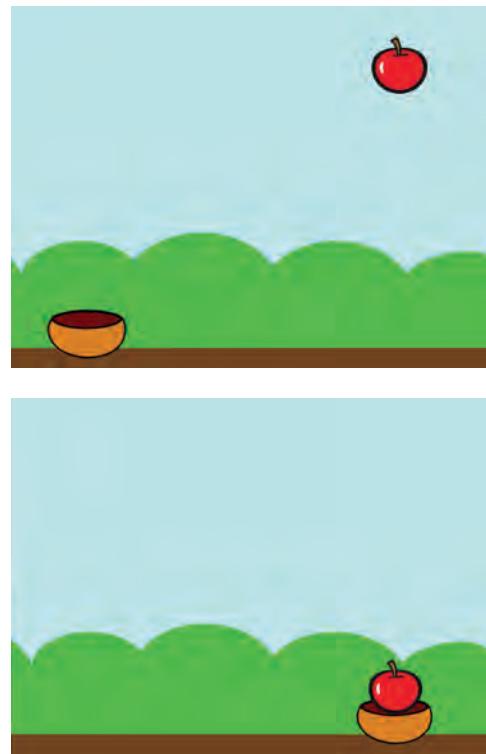
2. Glue the backs together



3. Cut along the dashed line

Catch It!

Catch the falling sprite.



Catch Game

4

SCRATCH

Catch It!

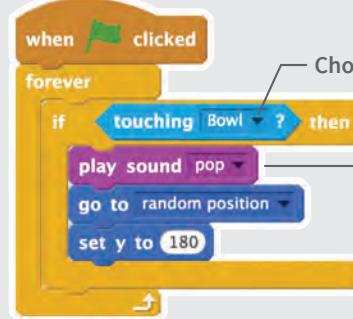
scratch.mit.edu/catch

GET READY



Click to select the Apple.

ADD THIS CODE



when green flag clicked

forever

if touching Bowl then
play sound pop
go to random position
set y to 180

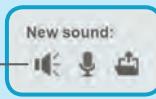
Choose Bowl from the menu.

Choose a sound.

TIP

If you want to add a different sound, click the Sounds tab.

Then choose a sound from the Sound library.



Make a Card



1. Fold the card in half



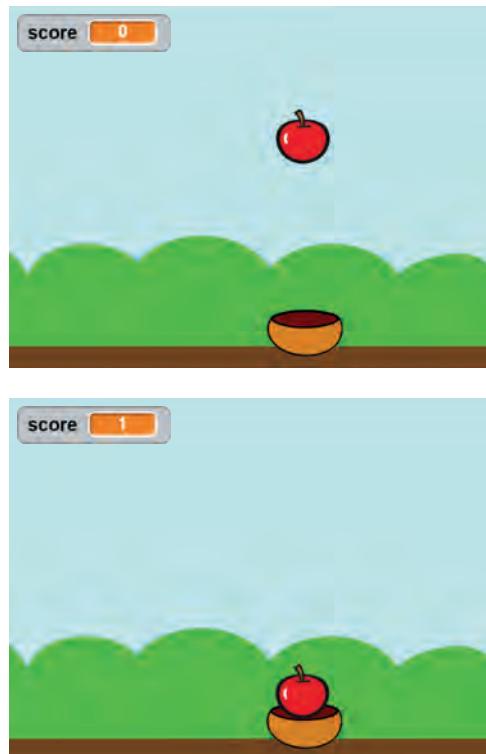
2. Glue the backs together



3. Cut along the dashed line

Keep Score

Add a point each time you catch the falling sprite.



Catch Game

5

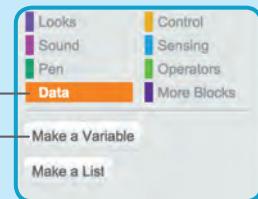
SCRATCH

Keep Score

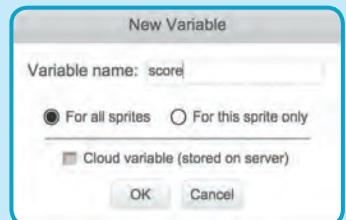
scratch.mit.edu/catch

GET READY

Choose Data.



Click the **Make a Variable** button.



Name this variable **score** and then click **OK**.

ADD THIS CODE

Add two new blocks to your script:



Add this block to reset the score.

Add this block to increase the score.

TRY IT

Catch apples to score points!

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Bonus Points

Get extra points when you catch a golden sprite.



Catch Game

6

SCRATCH

Bonus Points

scratch.mit.edu/catch

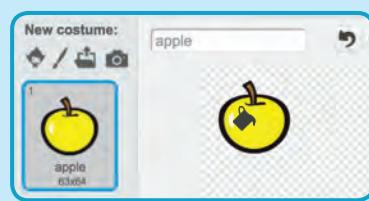
GET READY

Choose the **Duplicate tool**.



Click your sprite to duplicate it.

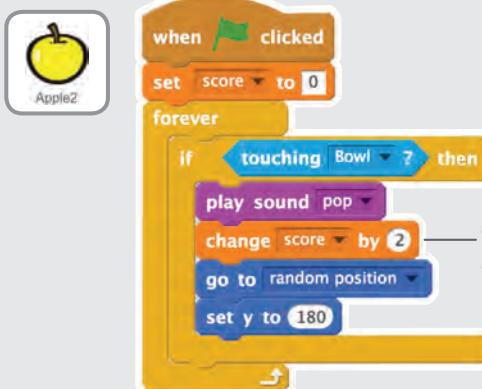
Click the **Costumes** tab.



You can use the paint tools to make your bonus sprite look different.

ADD THIS CODE

Click the **Scripts** tab.



Type how many points for the bonus sprite.

TRY IT

Catch your bonus sprite to increase your score!

Make a Card



1. Fold the card in half



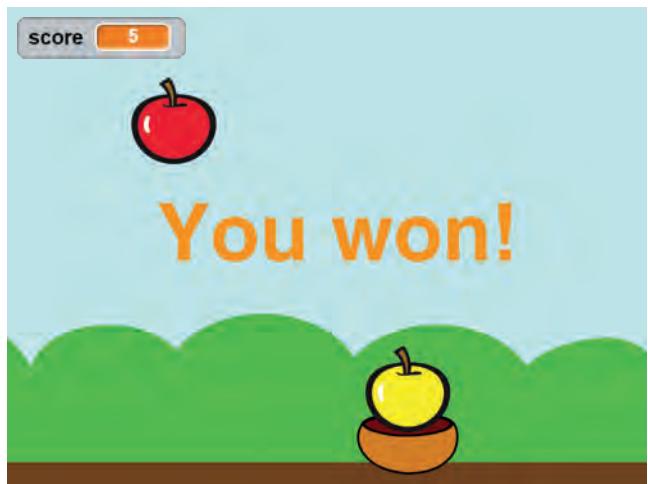
2. Glue the backs together



3. Cut along the dashed line

You Win!

When you score enough points,
display a winning message!



Catch Game

7

SCRATCH

You Win!

scratch.mit.edu/catch

GET READY

Click the paintbrush
to draw a new sprite.

New sprite:

Bitmap Mode
Convert to vector

Click the **Convert**
to vector button.

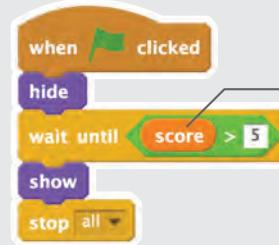
Use the **Text** tool to write
a message, like "You won!"

You won!

You can change the font
color, size, and style.

ADD THIS CODE

Click the **Scripts** tab.



Insert the **score** block.

Click the green
flag to start.



TRY IT

Play until you score
enough points to win!

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Virtual Pet Cards



Create an interactive pet that can eat, drink, and play.

Virtual Pet Cards

Use these cards in this order:

- 1 Introduce Your Pet**
- 2 Animate Your Pet**
- 3 Feed Your Pet**
- 4 Give Your Pet a Drink**
- 5 What Will It Say?**
- 6 Time to Play**
- 7 How Hungry?**

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Introduce Your Pet

Choose a pet and have it say hello.



Virtual Pet

1

SCRATCH

Introduce Your Pet

scratch.mit.edu/pet

GET READY

New backdrop:

Choose a backdrop.



garden rock

Choose a pet.

New sprite:



Monkey2

ADD THIS CODE

Drag your pet to where you want it on the Stage.

```
when green flag clicked
  go to x: -60 y: 80
  say [My name is Kiki!] for [1] secs
```

Set its position.
(Your numbers
may be different.)

Type what your pet will say.

TRY IT

Click the green flag to start.



Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Animate Your Pet

Bring your pet to life.



Virtual Pet

2

SCRATCH

Animate Your Pet

scratch.mit.edu/pet

GET READY

Click the **Costumes** tab to see your pet's costumes.



ADD THIS CODE

Click the **Scripts** tab.



— Choose a costume.

— Choose a different costume.

TRY IT

Click your pet to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Feed Your Pet

Click the food to feed your pet.



Virtual Pet

3

SCRATCH

Feed Your Pet

scratch.mit.edu/pet

GET READY



Click the Sounds tab.



Choose a sound from the Sound library, like chomp.

Choose a food sprite.

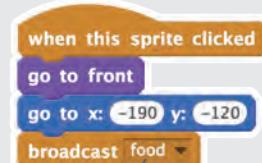
New sprite:



ADD THIS CODE

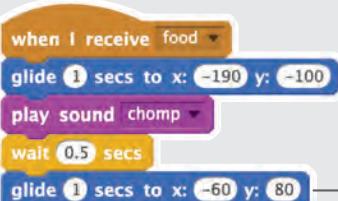


Select a new message and name it food.



Broadcast the food message.

Tell your pet what to do when it receives the message.



Glide to the food.

Glide back.

TRY IT

Click the food to start.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

Give Your Pet a Drink

Give your pet some water to drink.



1)

Virtual Pet

4

SCRATCH

Give Your Pet a Drink

scratch.mit.edu/pet

GET READY

Choose a drink sprite,
like Glass Water.

New sprite:



ADD THIS CODE



```
when this sprite clicked
  go to front
  go to x: -80 y: -120
  broadcast drink
  wait 1 secs
  switch costume to glass water-b
  play sound water drop
  wait 1 secs
  switch costume to glass water-a
```

Broadcast a new message.

Switch to the
empty glass.

Switch to the full glass.

Tell your pet what to do when it receives the message.



```
when I receive drink
  glide 1 secs to x: -80 y: -100
  wait 1 secs
  glide 1 secs to x: -60 y: 100
```

Glide to the drink.

Glide back.

TRY IT

Click the drink to start.

Make a Card



1. Fold the card in half



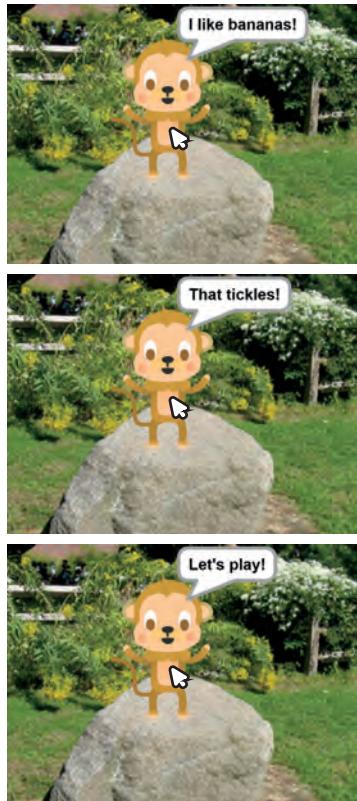
2. Glue the backs together



3. Cut along the dashed line

What Will It Say?

Let your pet choose what it will say.



Virtual Pet

5

SCRATCH

What Will It Say?

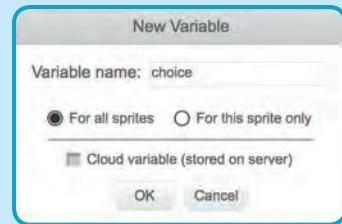
scratch.mit.edu/pet

GET READY

Choose Data.



Click the Make a Variable button.



Name this variable choice and then click OK.

ADD THIS CODE



Insert the pick random block.
Insert the choice block.
Type what you want your pet to say.

TRY IT

Click your pet to see what it says.

Make a Card



1. Fold the card in half



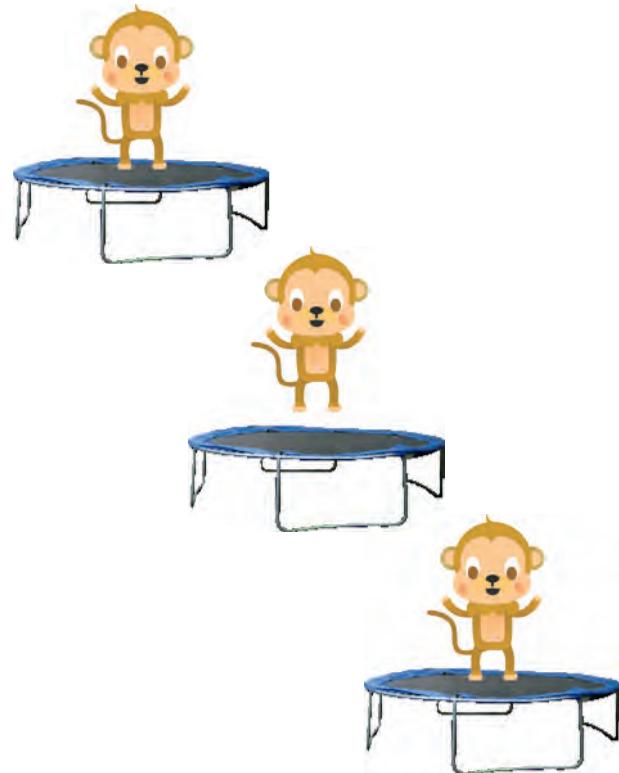
2. Glue the backs together



3. Cut along the dashed line

Time to Play

Have your pet jump on a trampoline.



Virtual Pet

6

SCRATCH

Time to Play

scratch.mit.edu/pet

GET READY

Choose the Trampoline.

New sprite:



Trampoline

ADD THIS CODE



when this sprite clicked
go to x: 130 y: -120
broadcast play



when I receive play
go to front
glide 1 secs to x: 120 y: -40
repeat (4)
change y by 20
wait 0.3 secs
change y by -20
wait 0.3 secs
glide 1 secs to x: -60 y: 100

A positive number makes your pet jump up.

A negative number brings your pet back down.

TRY IT

Click the trampoline.

Make a Card



1. Fold the card in half



2. Glue the backs together



3. Cut along the dashed line

How Hungry?

Keep track of how hungry your pet is.



Virtual Pet

7

SCRATCH

How Hungry?

scratch.mit.edu/pet

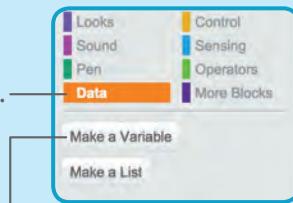
GET READY



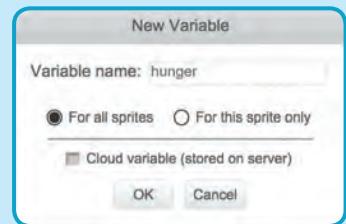
Monkey2

First, add food using the **Feed Your Pet** card.
Then, click to select your pet.

Choose Data.

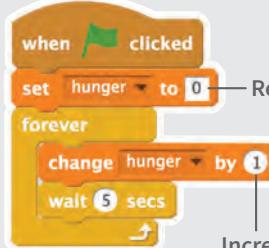


Click the **Make a Variable** button.



Name this variable **hunger** and then click **OK**.

ADD THIS CODE



Reset hunger level.

Increase hunger level.



Type a negative number to make your pet less hungry.

TRY IT

Click the green flag to start.



Then click the food.

