Pong Game Cards

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

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

Bounce Around

Make a ball move around the Stage.
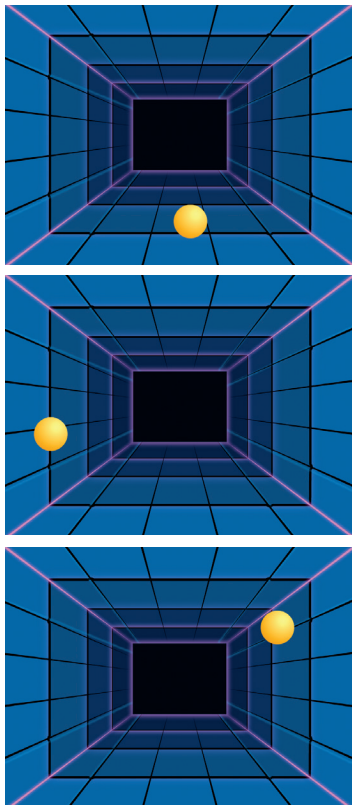
SCRATCH

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 🏳 clicked
turn ↻ 15 degrees
forever
    move 15 steps
    if on edge, bounce
```

Type a bigger number to move faster.

TRY IT

Click the green flag to start. 🏳 🔴

Move the Paddle

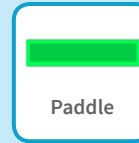## Control a paddle by moving your mouse pointer.
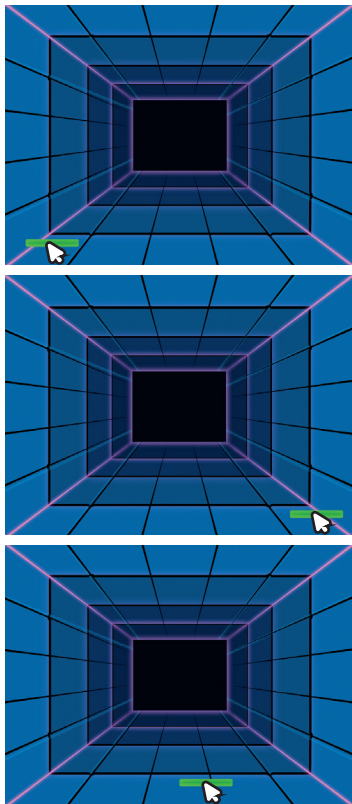
Pong Game **2** SCRATCH

Move the Paddle

scratch.mit.edu/pong

GET READY

Choose a sprite for hitting the ball, such as Paddle

New sprite: 🐱 ✏ 📤 📷

Paddle

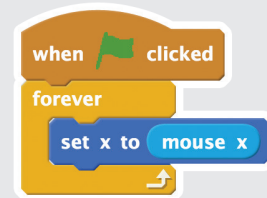Then, drag your paddle to the bottom of the Stage.

ADD THIS CODE

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

set x to (mouse x)

when 🏳 clicked
forever
   set x to (mouse x)

TRY IT

Click the green flag to start.

🏳 🔴

Move your mouse pointer to move the paddle.

TIP

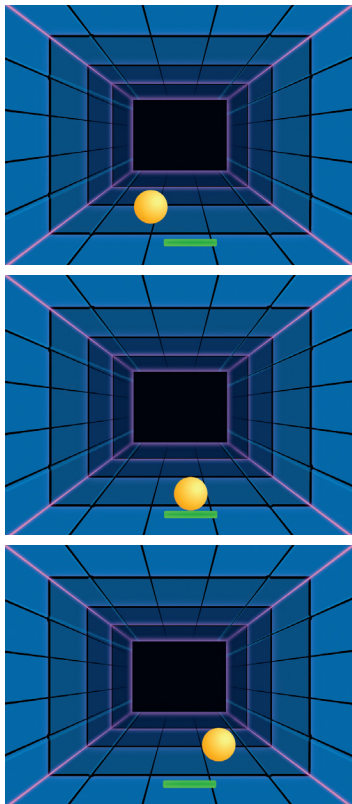You can see the **x** position change as you move the mouse across the Stage.

go
gli

x: 166   y: -153

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.

Sprites
Ball   Paddle

ADD THIS CODE

```
when 🏴 clicked
forever
    if  touching Paddle ? then
        turn ↻ 180 degrees
        move 15 steps
        wait 0.5 secs
```
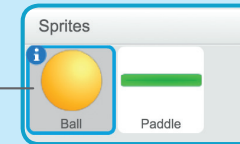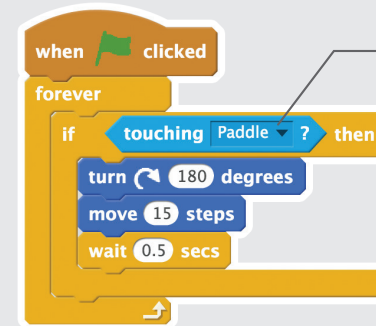
Choose the **Paddle** sprite from the menu.

TRY IT

Click the green flag to start.

TIP

Want the ball to turn randomly? Insert a **pick random** block into the turn block:

```
turn ↻ pick random 170 to 190
```

Type in numbers around 180.

Game Over

Game Over

scratch.mit.edu/pong

Stop the game if the ball hits the red line.
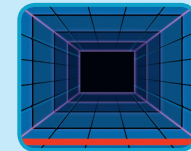

GET READY

Choose a sprite called Line.

New sprite: 👆 / 📤 📷
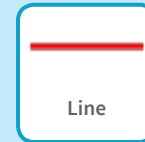
Line

Drag the Line to the
bottom of the Stage.

ADD THIS CODE

```
when 🏳 clicked
go to x: 0 y: -170
forever
    if  touching  Ball ▾ ? then
        stop all ▾
```

Choose the **Ball** sprite
from the menu.

TRY IT

Click the green flag to start. → 🏳 🔴

Pong Game   **4**   SCRATCH

Score Points

Add a point each time you hit the ball with the paddle.
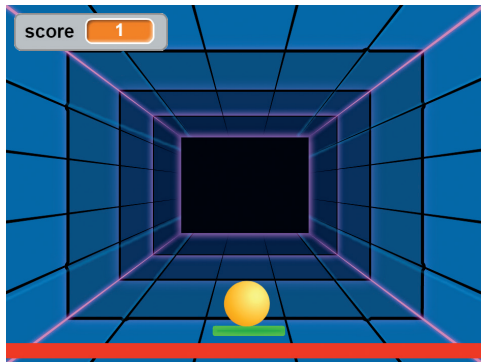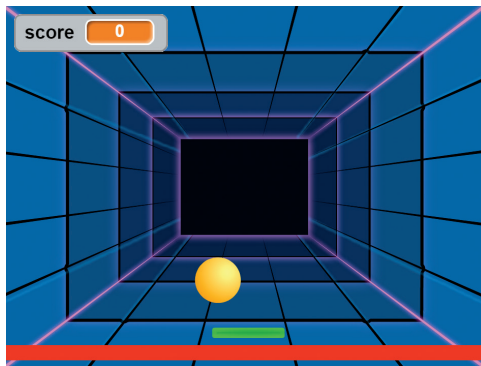
score	0

score	1

Score Points

scratch.mit.edu/pong

GET READY

Looks	Control
Sound	Sensing
Pen	Operators
Data	More Blocks

Make a Variable

Make a List

New Variable

Variable name: score

⦿ For all sprites   ◯ For this sprite only

☐ Cloud variable (stored on server)

OK   Cancel

Choose **Data**.
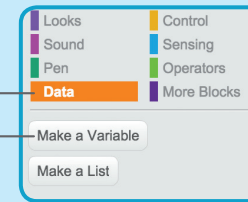
Click the **Make a Variable** button.

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

ADD THIS BLOCK

Click to select the **Ball** sprite.

Stage 2 backdrops   Ball

```
when [flag] clicked
forever
    if < touching Paddle ? > then
        change score by 1
        turn ↻ 180 degrees
        move 15 steps
        wait 0.5 secs
```
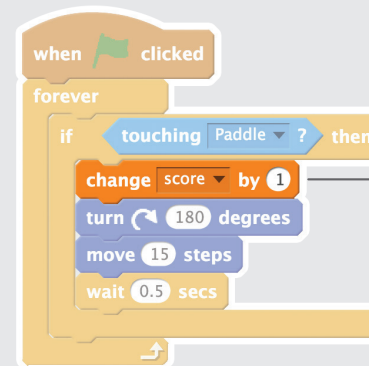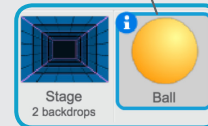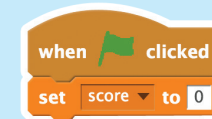
Add this block to increase the score.

TIP

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

```
when [flag] clicked
set score to 0
```
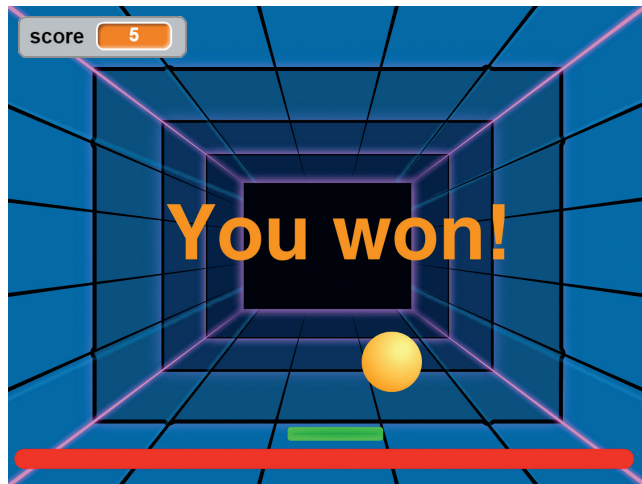
Win the Game

When you score enough points, display a winning message!

score **5**

You won!

Pong Game   **6**   *Scratch*

Win the Game

scratch.mit.edu/pong

GET READY

Click the paintbrush to draw a new sprite.

New sprite: ✏️ 📤 📷

Click the **Convert to vector** button.
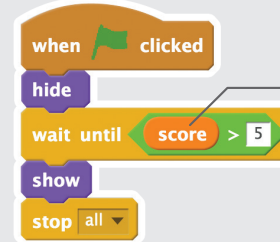
Bitmap Mode
Convert to vector

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

You won! T

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

ADD THIS CODE

Click the Scripts tab.

```
when 🏳 clicked
hide
wait until ( score > 5 )
show
stop all ▾
```

Insert the **score** block.

TRY IT

Click the green flag to start.

🏳 🔴

Play until you score enough points to win!