5 STAGE

RIO SHOOT—OUT

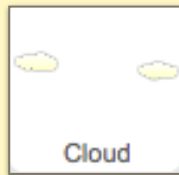| ★ Chapter Objective	The Game
Learn how to program a soccer game with target	**It's a penalty shoot-out!** You have 8 soccer balls, you must score 5 times to win and free Pele!

1 * Download file "Scratch Stage 5" → Scratch Stage 5
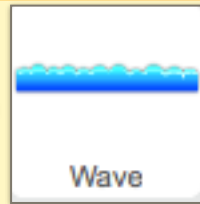
2 Click the "Cloud" → Cloud

3 Program the Cloud to move in the sky

```
when 🚩 clicked
go to x: 20 y: 30
forever
    repeat 2
        wait 0.4 secs
        change y by -1
    repeat 2
        wait 0.4 secs
        change y by 1
```

4 Click the **"Wave"** sprite →

Wave

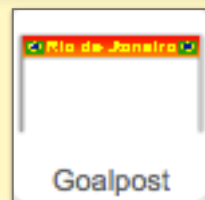**5** **Program the Waves to move,** like an ocean

```
when [flag] clicked
go to x: 0 y: 0
forever
    repeat 3
        wait 0.2 secs
        change y by -10
    repeat 3
        wait 0.2 secs
        change y by 10
```
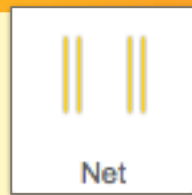
6 Click the **"Goalpost"** sprite →

Rio de Janeiro

Goalpost

7 Program a **permanent location** for the Goalpost

```
when [flag] clicked
go to x: 0 y: 70
```

8 Click the **"Net"** sprite ➡️

Net

9 Program a **permanent location** for the Net

```
when 🚩 clicked
go to x: 0 y: 70
```

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10 Click the **"Bullseye"** sprite ➡️
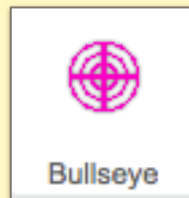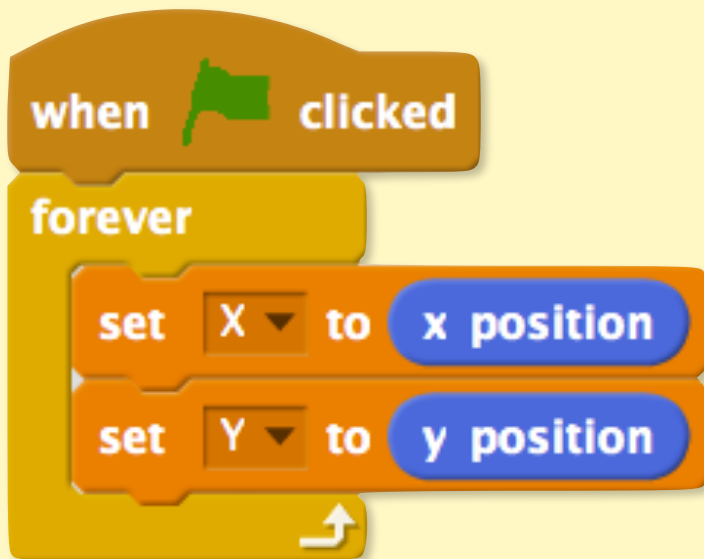
Bullseye

11 Program the Bullseye to **zig-zag across the soccer net**

```
when 🚩 clicked
set size to 100 %
show
go to x: -108 y: 78
forever
    glide 1 secs to x: 108 y: 78
    glide 1 secs to x: -108 y: 44
    glide 1 secs to x: 108 y: 44
    glide 1 secs to x: -108 y: 12
    glide 1 secs to x: 108 y: 12
    glide 0.5 secs to x: -108 y: 78
```

12 Create a program so the **ball goes to the Bullseye when clicked**
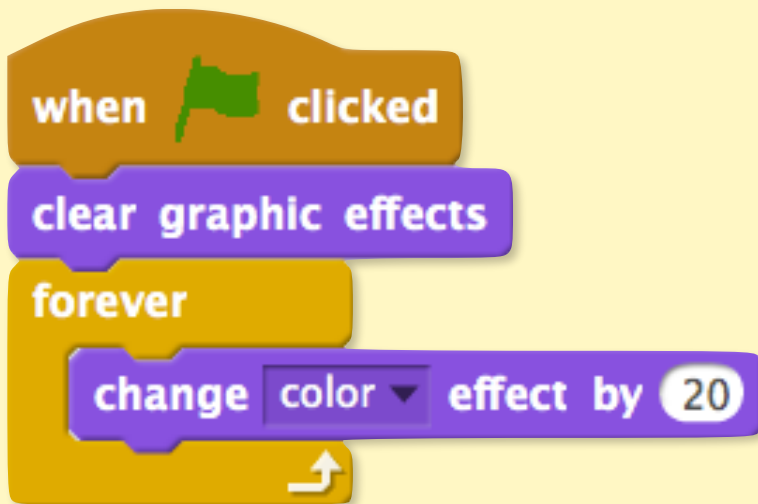
```
when [flag] clicked
forever
    set X to (x position)
    set Y to (y position)
```

13 Program the Bullseye to **continuously change colors**
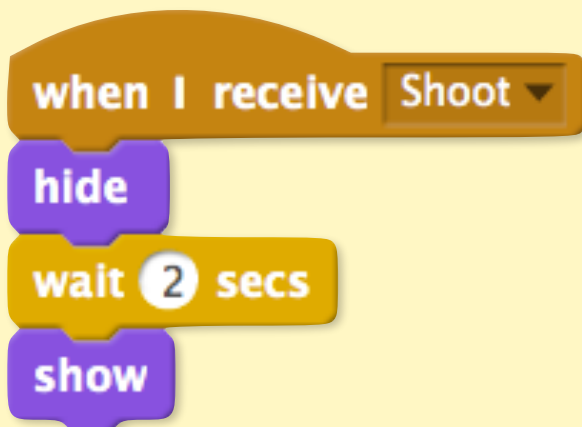
```
when [flag] clicked
clear graphic effects
forever
    change color effect by 20
```

14 Program the Bullseye to **hide when the ball is kicked**

```
when I receive Shoot
hide
wait 2 secs
show
```

15 Click the **"Keeper"** sprite ➡️

Keeper

16 Set Keeper (Pele's) **Size, Costume, Starting Point, <u>AND</u> costume change**

```
when 🚩 clicked
set size to 45 %
switch costume to Keeper1 ▼
go to x: 0 y: 20
forever
    wait 0.5 secs
    next costume
```

17 Program Keeper (Pele's) to **move to a random spot in the net**

```
when I receive Shoot ▼
glide 0.5 secs to x: pick random -90 to 90  y: pick random 20 to 70
wait 2 secs
go to x: 0 y: 20
```

18 Click the **"Ball"** sprite ➡️

Ball

19 Program the **Size, Starting Point, <u>AND</u> sound effect** of the Ball

```
when 🚩 clicked
go to front
go back 1 layers
set size to 50 %
go to x: 0 y: -80
play sound Whistle ▼ until done
```

20 Set the **Score to 0** <u>and</u> the **Soccer Ball attempts to 8** at the start of the game

```
when [flag] clicked
set Ball to 8
set Score to 0
```

21 Allow the player to shoot at net, if the **ball attempts are more than 0 and the Score is not 5**

```
when space key pressed
if < Ball > 0 and not < Score = 5 > then
    broadcast Shoot and wait
```

22 Program the **ball to shrink -2 in size**, when shot at the net

```
when I receive Shoot
repeat 12
    change size by -2
```

23 Player <u>scores</u>, if the **ball touches the Net and does not touch Keeper**
Player <u>misses</u>, if the **ball touches the Keeper**

```
when I receive Shoot
change Ball by -1
glide 0.5 secs to x: X y: Y
if < touching Net ? and not touching Keeper ? > then
    broadcast Goal and wait
if < touching Net ? and touching Keeper ? > then
    broadcast Miss and wait
```

24 When the player scores,
Change the Score by +1, say "Goal!!", and restart the ball to it's starting point

```
when I receive Goal ▼
change Score ▼ by 1
say GOAL!! for 1 secs
wait 1 secs
set size to 50 %
go to x: 0 y: -80
```

25 When the player misses,
Change the Score by 0, say "Miss!!", and restart the ball to it's starting point

```
when I receive Miss ▼
change Score ▼ by 0
say Miss!! for 1 secs
wait 1 secs
set size to 50 %
go to x: 0 y: -80
```

26 Program **Sound Effect for when the <u>ball is kicked</u>**

```
when I receive Shoot ▼
play sound Kickoff ▼ until done
```

27 Program **Sound Effect for when a <u>goal is scored</u>**

```
when I receive Goal ▼
play sound Goal ▼ until done
```

28 Program **Sound Effect for when the <u>shot is missed</u>**

```
when I receive Miss ▼
play sound Boo ▼ until done
```

29 If score equals 5,
   then, broadcast the "Won" screen

```
when I receive Goal ▼
wait 1 secs
if  < Score = 5 > then
    broadcast Won ▼ and wait
```

30 If the player has 0 balls remaining AND the score is not 5
   then, broadcast the "Lost" screen

```
when I receive Goal ▼
wait 1 secs
if < Ball = 0 and not Score = 5 > then
    broadcast Lost ▼ and wait
```
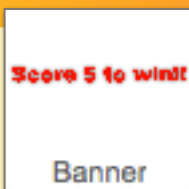
31 If the player has 0 balls remaining
   then, broadcast the "Lost" screen

```
when I receive Miss ▼
wait 1 secs
if < Ball = 0 > then
    broadcast Lost ▼ and wait
```

32 Click the **"Banner"** sprite ➡️

Score 5 to win!!

Banner

33 When the Game Starts,
broadcast the Game Instructions

```
when [green flag] clicked
go to x: 0 y: -40
go to front
switch costume to Start ▾
show
wait 0.5 secs
hide
```

34 When the player wins,
broadcast the "Won" screen and stop the game

```
when I receive Won ▾
go to x: 0 y: -55
switch costume to Won ▾
show
stop all ▾
```

35 When the player loses,
broadcast the "Lost" screen and stop the game

```
when I receive Lost ▾
go to x: 0 y: -55
switch costume to Lost ▾
show
stop all ▾
```