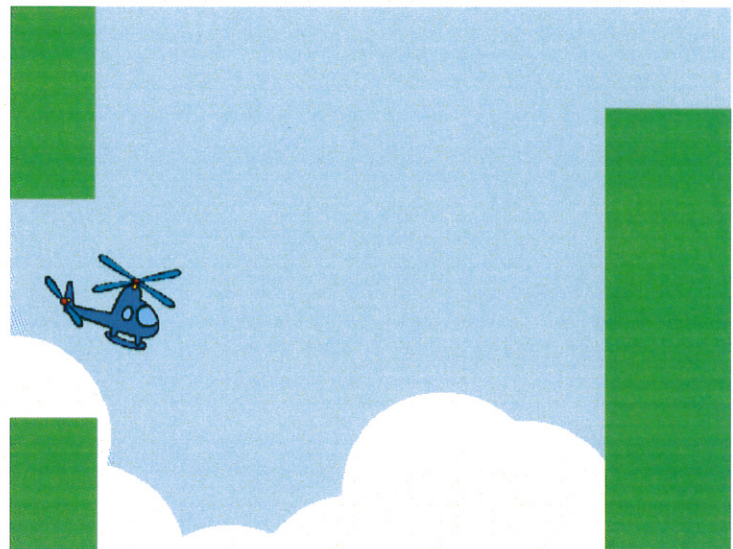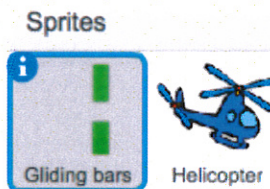# SCROLLING

HOW CAN YOU USE SCRATCH TO BUILD AN INTERACTIVE GAME?

In this project, you will create a game. This game includes interactions between sprites, score, and levels. The game is similar to Flappy Bird, where the goal is to keep an object from falling to the ground or touching certain objects.

START HERE

☐ Create two sprites: one for the player to control (helicopter) and one to avoid (gliding bars).

☐ Make the helicopter interactive.

☐ Bring your game to life by adding scripts to make the gliding bars scroll across the stage!

THINGS TO TRY

☐ How do you add difficulty to your game? Creating different levels, using a timer, or keeping score are a few examples of things you could do.

☐ Experiment with changing the look of your game by editing the backdrops!

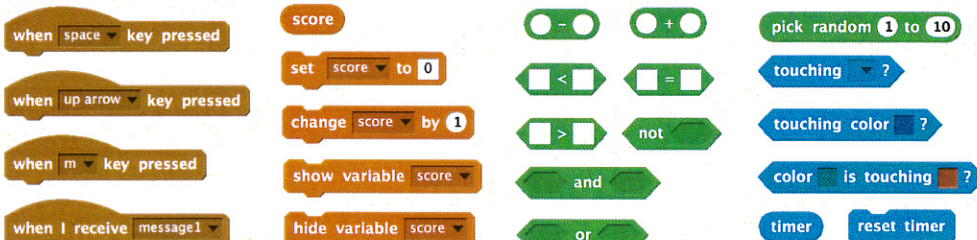☐ Explore using different key presses to control your sprites!

Sprites

Gliding bars   Helicopter

```
when space ▾ key pressed
change y by 20
```
Controls sprite movement

```
when 🏳 clicked
hide
forever
    wait 5 secs
    create clone of myself ▾
```

This creates clones, which are used in the script below to make the bars scroll across the screen:

```
when I start as a clone
switch costume to pick random 1 to 3
go to x: 240 y: 0
show
glide 8 secs to x: -240 y: 0
delete this clone
```

```
when 🏳 clicked
go to x: 0 y: 0
set size to 30 %
wait 2 secs
forever
    change y by -2
```
Causes sprite to constantly fall downward

```
when 🏳 clicked
forever
    if   touching color ▨ ? then
        stop all ▾
```
Specifies when the game ends

BLOCKS TO PLAY WITH

```
when space ▾ key pressed
when up arrow ▾ key pressed
when m ▾ key pressed
when I receive message1 ▾
```

```
score
set score ▾ to 0
change score ▾ by 1
show variable score ▾
hide variable score ▾
```

```
(  -  )     (  +  )
[  <  ]     [  =  ]
[  >  ]     not
    and
    or
```

```
pick random 1 to 10
touching ?
touching color ?
color is touching ?
timer     reset timer
```

FINISHED?

+ Add your project to the Games Studio: http://scratch.mit.edu/studios/487504

+ Swap games with a partner and walk each other through your creations.