

CoderDojo Athenry

"Above all, be cool"



Every week:

- ✓ Sign in at the door

If you are new:

- ✓ Fill in Registration Form
- ✓ Ask a Mentor how to get started

Make sure you are on the Athenry Parents/Kids Google Group: email coderdojoathenry@gmail.com

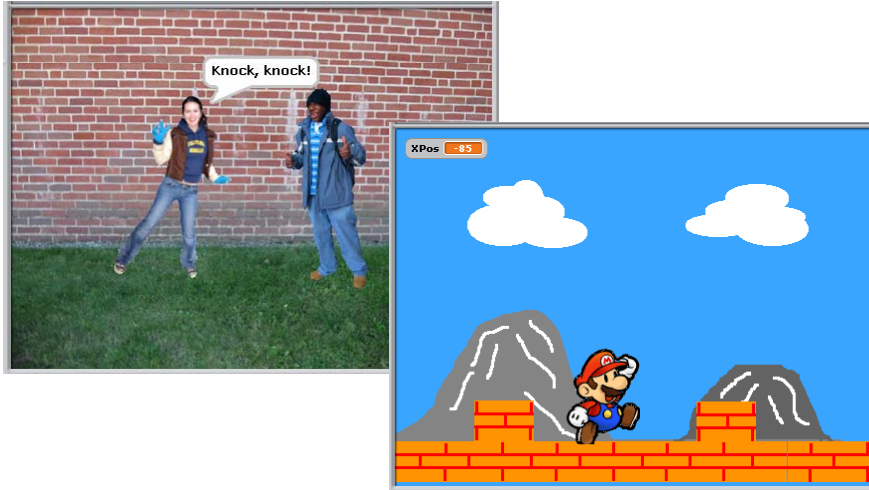
CoderDojo Athenry

Scratch Beginners



Code and notes by Michael Madden, 2012

Today's Challenge: More Animation Storytelling and Scrolling!



Today's Big Ideas

Speech
Bubbles &
Sound

Loops &
Timing

Sprites

Imagination!

Telling A Story



Your sprites can be **actors** in your own story or joke!

How To Do It



Pick some sprites

Decide what they should do & say

Use times and waits so they sync up

How To Do It: The Code

```

when clicked
go to x: -209 y: 0
glide 3 secs to x: -80 y: 0
say Knock, knock! for 2 secs
wait 2 secs
say Atch for 2 secs
wait 2 secs
say I didn't know you had a cold! for 2 secs
play sound Laugh-female until done
  
```



```

when clicked
go to x: 219 y: 0
glide 3 secs to x: 75 y: 0
wait 2 secs
say Who's there? for 2 secs
wait 2 secs
say Atch Who? for 2 secs
wait 2 secs
play sound Laugh-male1 until done
  
```

Make sure these times match

And these!

You Can Do Lots More!

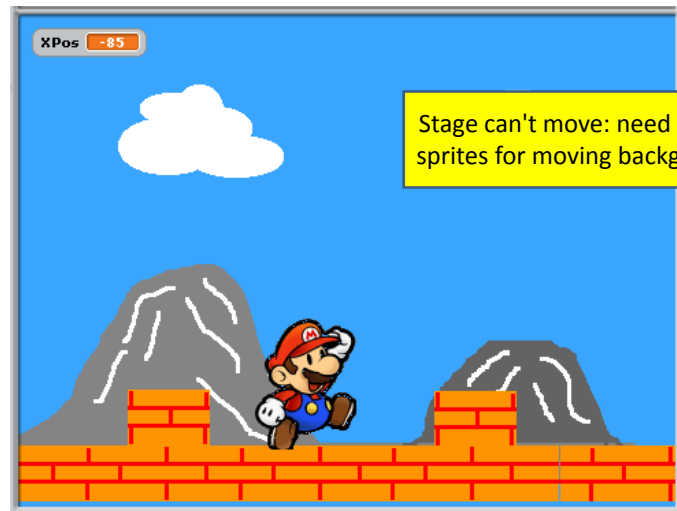
Think of new **stories** or **jokes**

Record voices on the **Sound** tab

Animate with different costumes

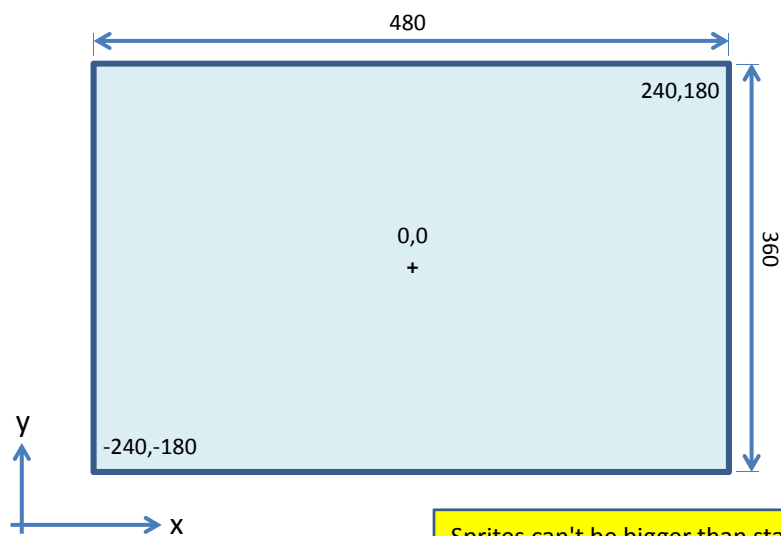
Use **Broadcasts** for more syncing

Another Challenge: Scrolling Backgrounds



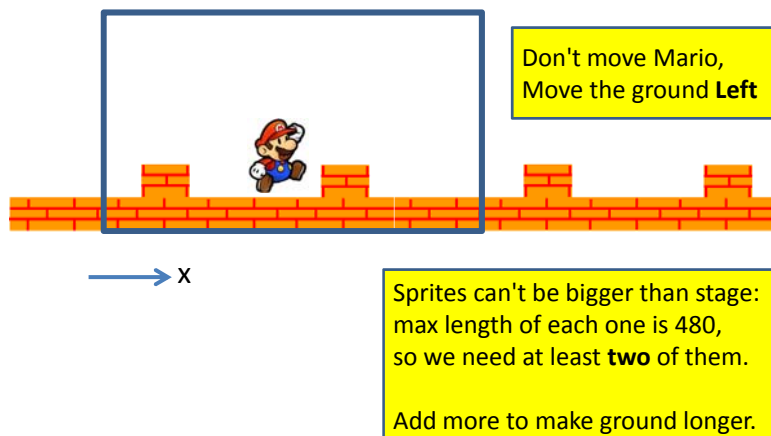
Stage can't move: need to use sprites for moving background

The Scratch Stage



Sprites can't be bigger than stage:
max length is 480 also

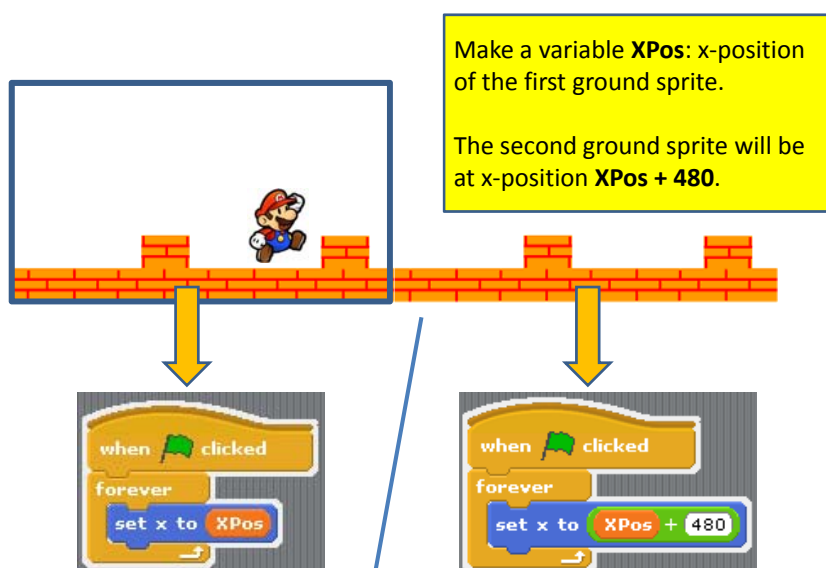
To make it look like Mario is moving Right ...



Don't move Mario,
Move the ground **Left**

Sprites can't be bigger than stage:
max length of each one is 480,
so we need at least **two** of them.
Add more to make ground longer.

How to do it, Part 1 ...



Make a variable **XPos**: x-position
of the first ground sprite.

The second ground sprite will be
at x-position **XPos + 480**.

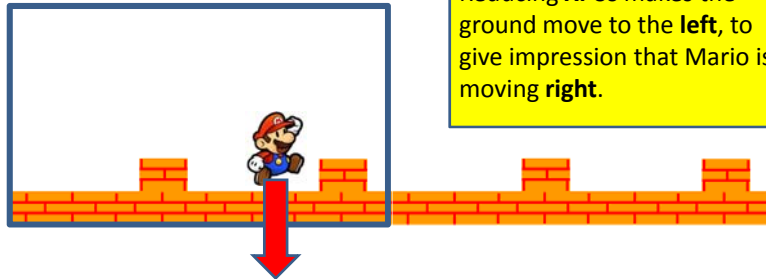
```

when clicked
  forever
    set x to XPos
  
```

```

when clicked
  forever
    set x to XPos + 480
  
```

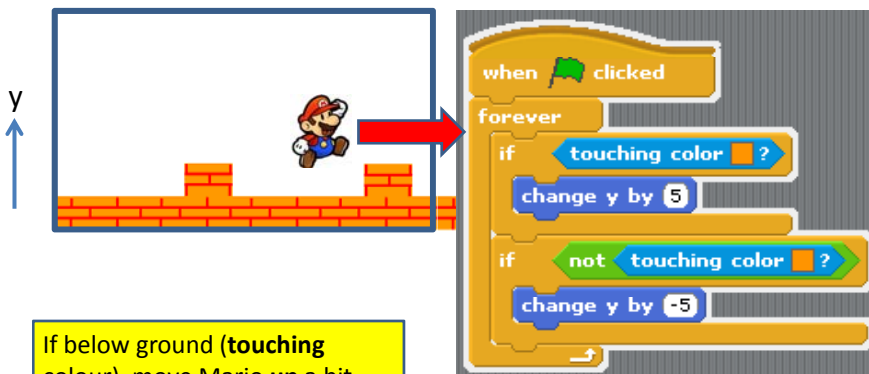
How to do it, Part 2 ...



Reducing XPos makes the ground move to the **left**, to give impression that Mario is moving **right**.

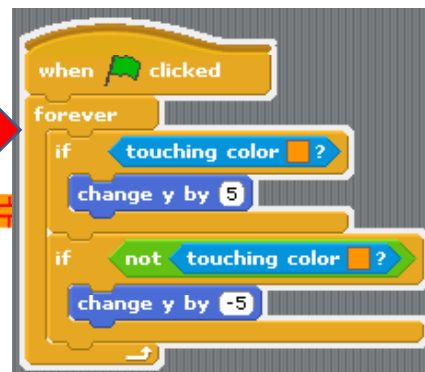


Make Mario stand on the ground ...



If below ground (**touching** colour), move Mario **up** a bit.

If above ground (**not touching** colour) move Mario **down** a bit.



Advanced Idea: Parallax Effect



Mountains appear to move more slowly, so change their XPos by a smaller amount.

Also need to consider layers: the ordering of the sprites.



At the End ...

Upload your project to the Scratch Website
user: **cdatheny** password: _____

Access it
from home

Improve it

Show your
friends!

