

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

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SCRATCH Beginners

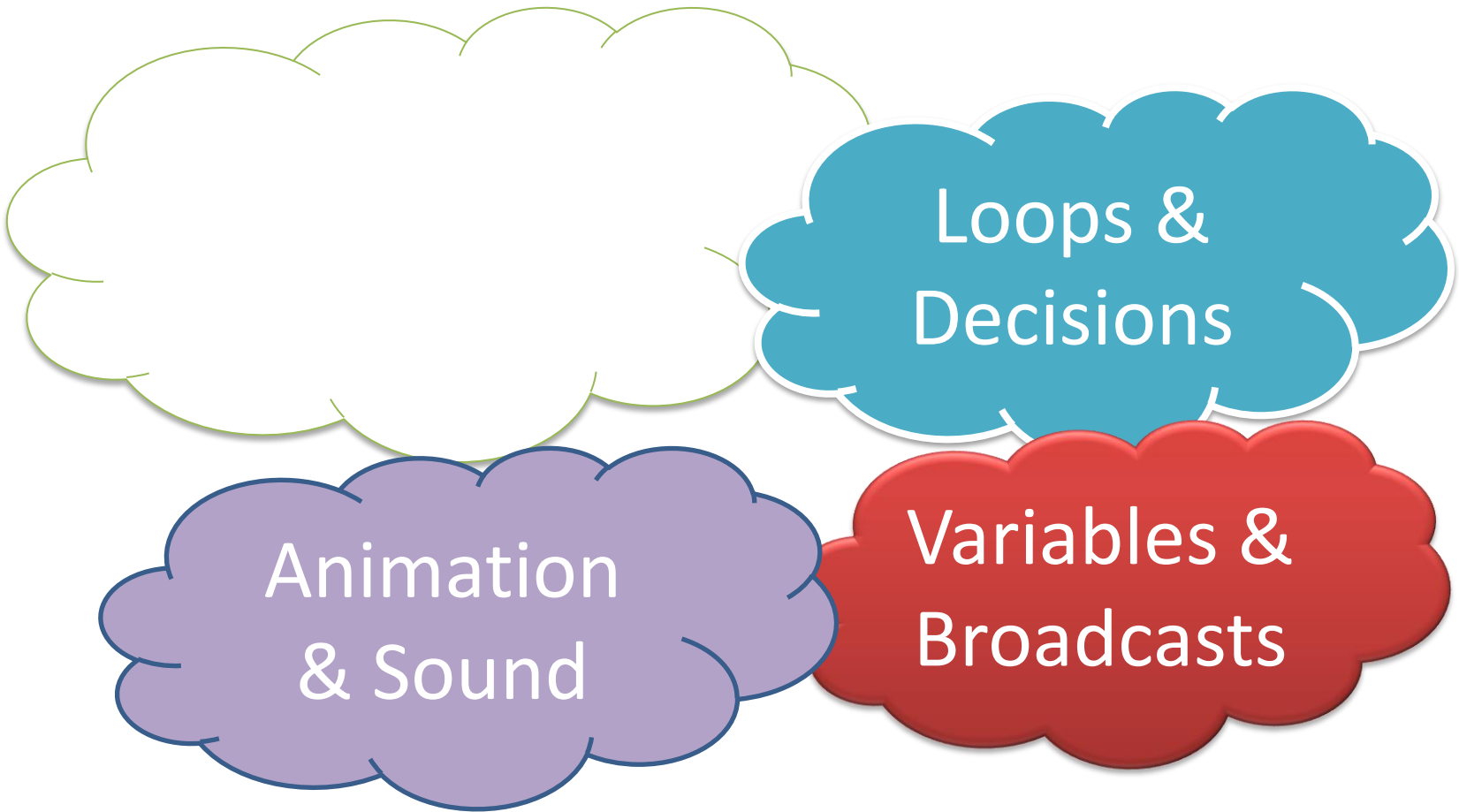


Code and notes by Martha Fahy

Today's Ninja Challenge: Make a Game **Maths Game**



Use **Big Ideas** that You Should Understand to Get a Yellow Belt

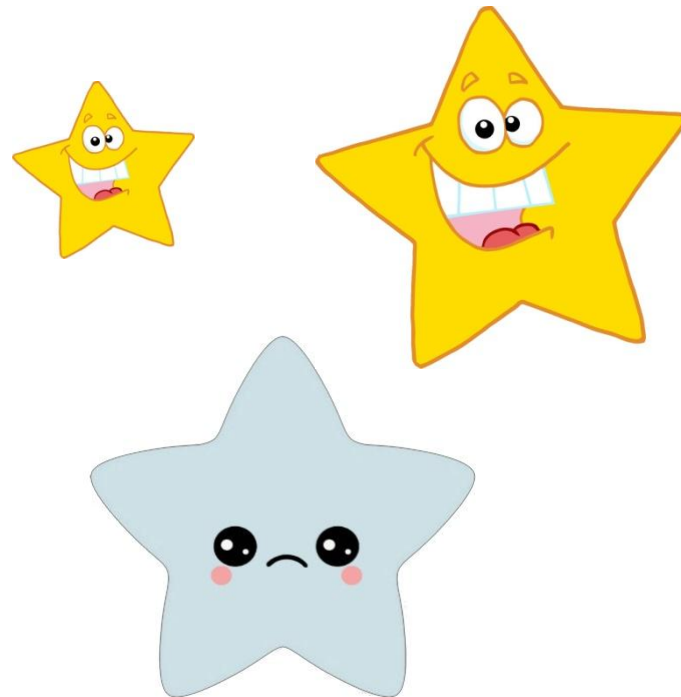


Design your Sprites

First Sprite will ask
the questions



Second Sprite will
grow/change
depending on answer



Select your Backgrounds

Scripts Backdrops Sounds

New backdrop:

school2
480x360

beach malibu
480x360

school2

Clear Import

school2

Clear Import

school2
480x360

beach malibu
480x360

school2

Clear Import

school2

Create First Two Variables

Score

Level



Code for Sprite 1 to **ASK** Questions....



```
when green flag clicked
  go to x: -140 y: -43
  set score to 0
  set level to 1
  say lets play a math game for 2 secs
  ask What level do you want, enter 1 or 2 and wait
  set level to answer
```


Code for Sprite 1 to Set Math Questions....



```
if level = 1 then
  set number1 to pick random 1 to 10
  set number2 to pick random 1 to 10
else
  set number1 to pick random 1 to 100
  set number2 to pick random 1 to 100
ask join join number1 + number2 and wait
```

Code for Sprite 1 when it receives **Right/Wrong** answers..



```
if answer = number1 + number2 then
  say You got it right, yay! for 2 secs
  broadcast correct answer
else
  say Sorry, that is wrong for 2 secs
  broadcast wrong answer
```

Note: repeat by 5....why?

Code for Sprite 2 ...



❖ Switch Costume

❖ Set Size

❖ React to Right or Wrong answer



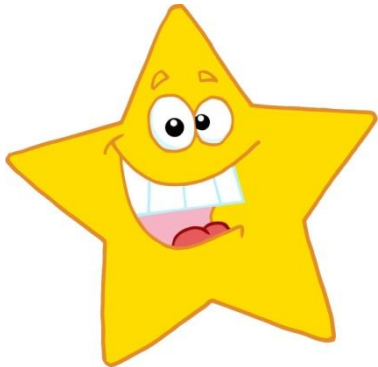
Code for Sprite 2 ...



```
when clicked
  switch costume to jpg_0790-Happy-Yellow-Star-Smiling2
  set size to 10 %

when I receive correct answer
  change score by 1
  change size by 25

when I receive wrong answer
  switch costume to sad_star
  stop all
```



Code for Backgrounds...

The image shows the Scratch interface with the 'Backdrops' tab selected. The 'New backdrop:' panel on the left shows two backdrops: 'school2' (480x360) and 'beach malibu' (480x360). The main workspace contains a script with the following blocks:

- when green flag clicked
- switch backdrop to school2
- wait until score = 5
- switch backdrop to beach malibu
- stop all

The script is highlighted with a yellow glow. The 'school2' backdrop is selected in the 'New backdrop:' panel, and the 'score' variable is set to 5 in the 'wait until' block.

At the End ...

Upload your project to the Scratch Website

user: **cdathenry**

password: **xxxxxxx**

Access it
from home



Improve it



Show your
friends!



Uploading to Scratch Website

