

CoderDojo Athenry

"Above all, be cool"



Every week:

- ✓ Sign in at the door

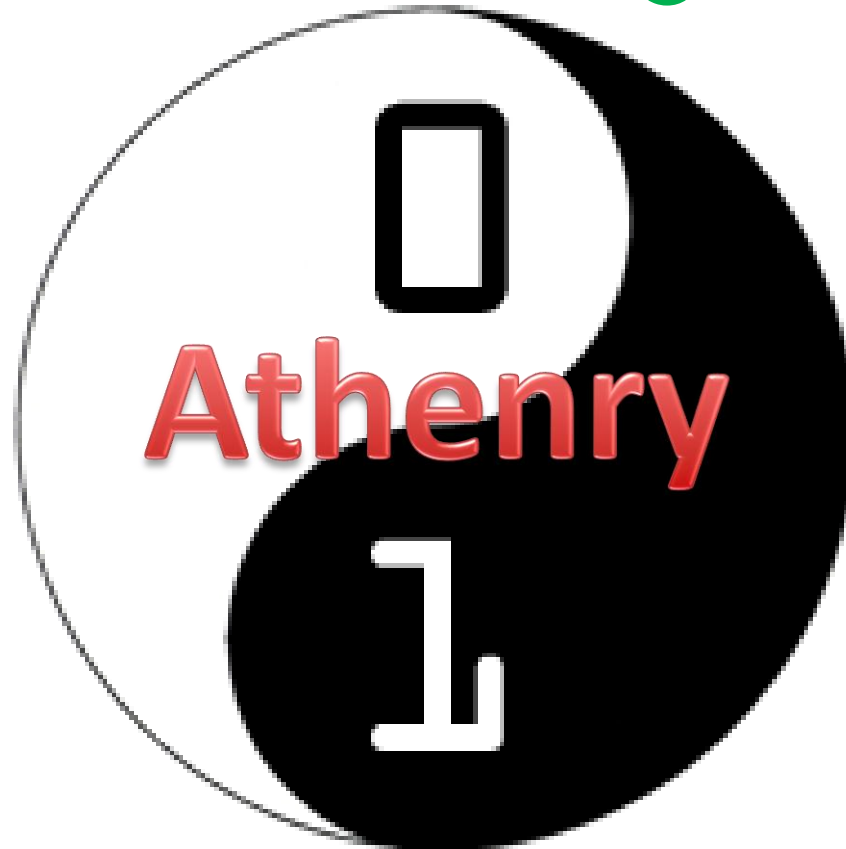
If you are new:

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

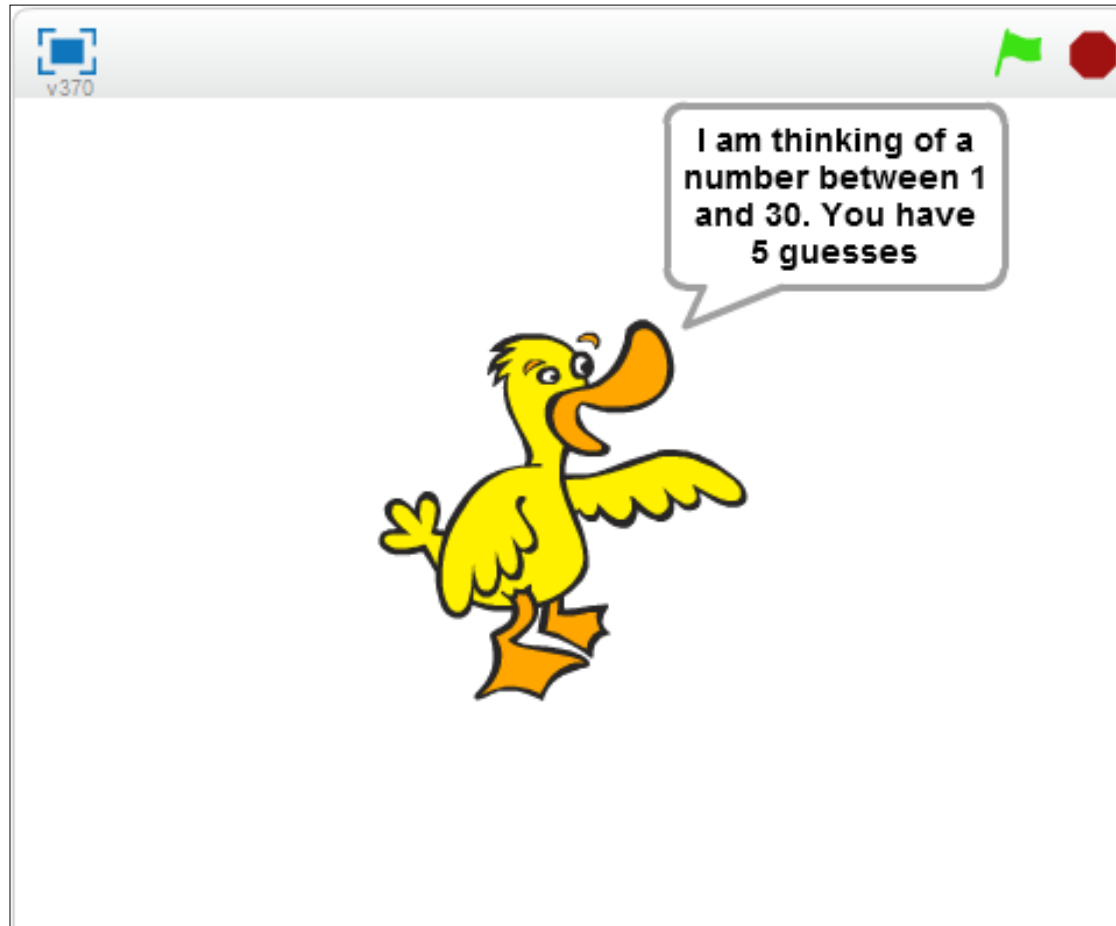
Make sure you are on the Athenry Parents/Kids Google Group: email coderdojoathenry@gmail.com

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SCRATCH Beginners



Today's Ninja Challenge: Write a **Number Guessing** Game!

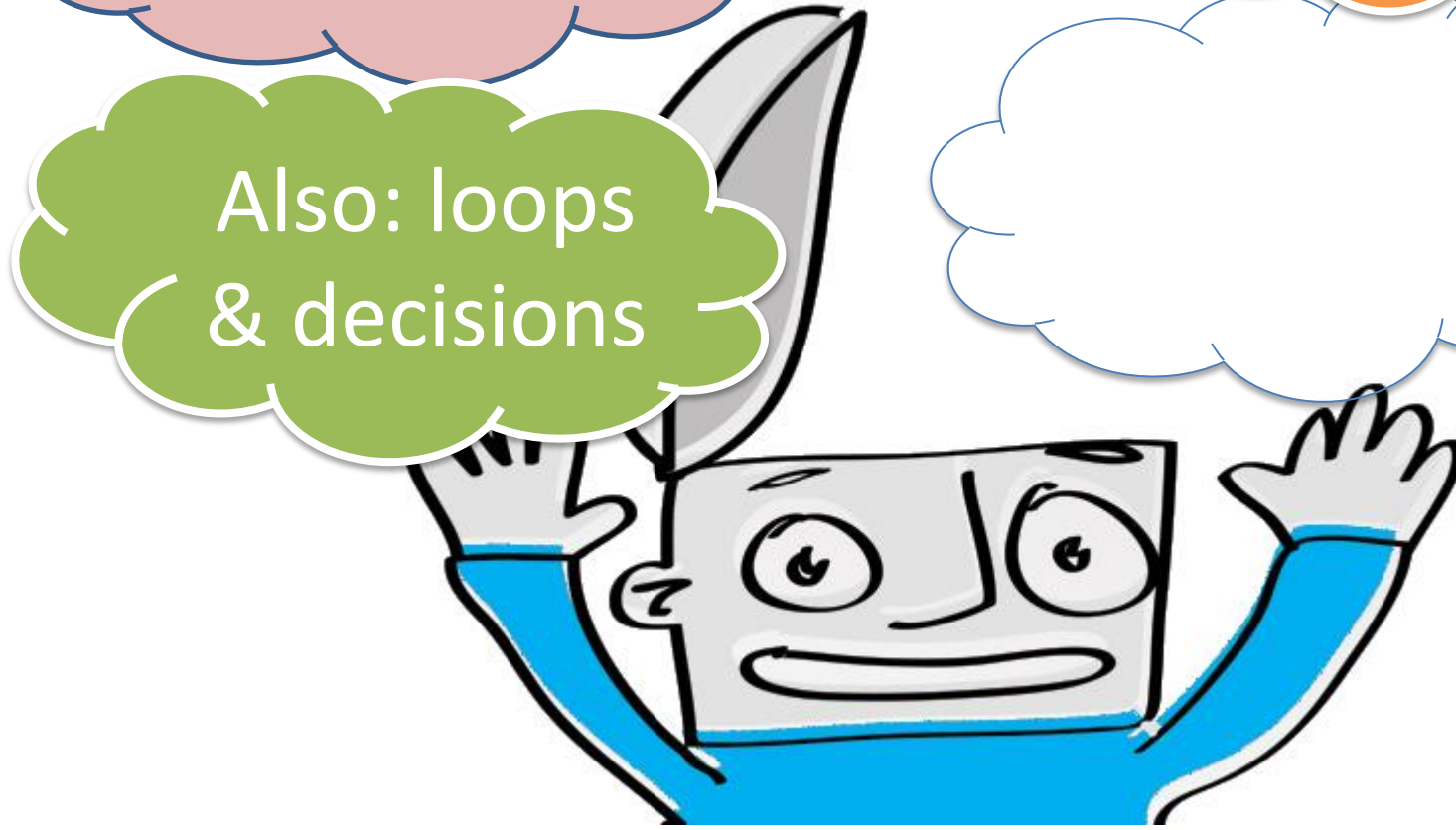


Today's **Big** Ideas

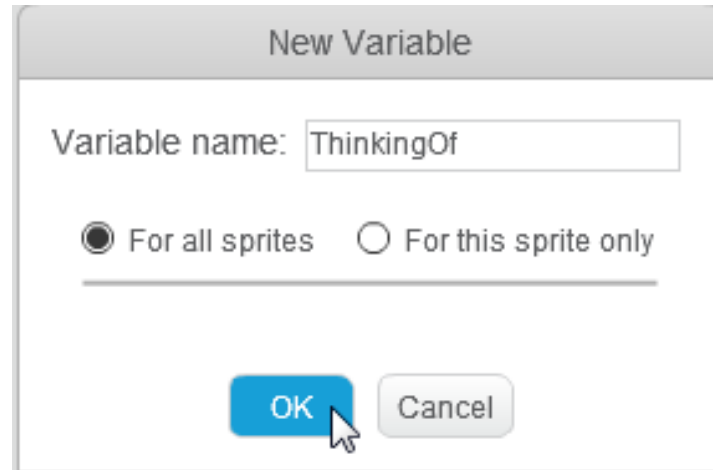
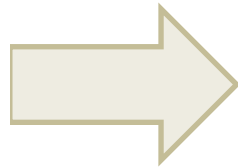
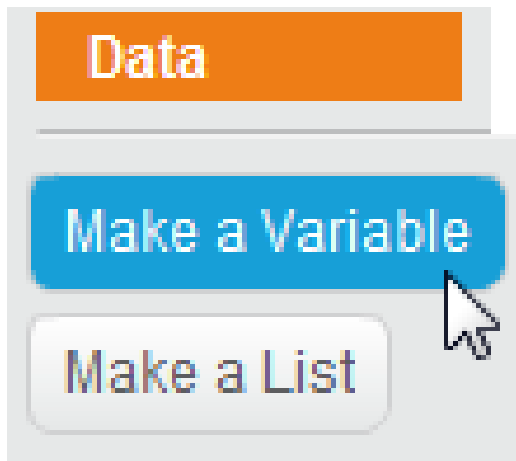
Input &
Output

Variables

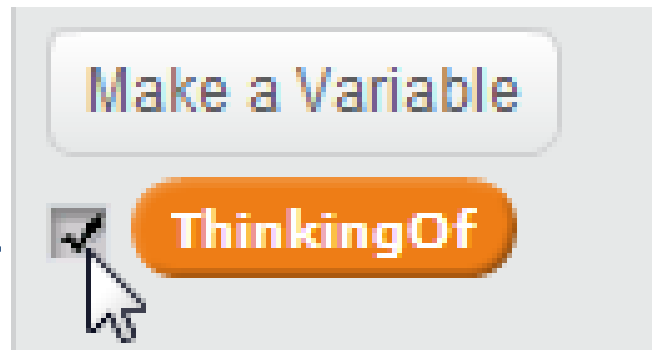
Also: loops
& decisions



Create a Variable to Hold a Random Number



Tip:
Clear this checkbox
so it is not shown
on screen



When Flag is Clicked:
Pick Random Number,
Display "I am thinking of ..."



I am thinking of a
number between 1
and 30. You have
5 guesses



When Flag is Clicked:
Pick Random Number,
Display "I am thinking of ..."

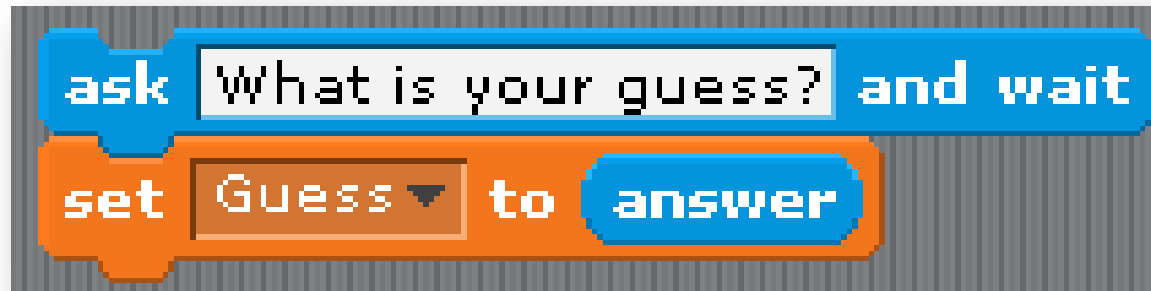


Ask Player to Guess It,
Store Answer



Ask Player to Guess It, Store Answer

Need another variable!
I've called it **Guess**.



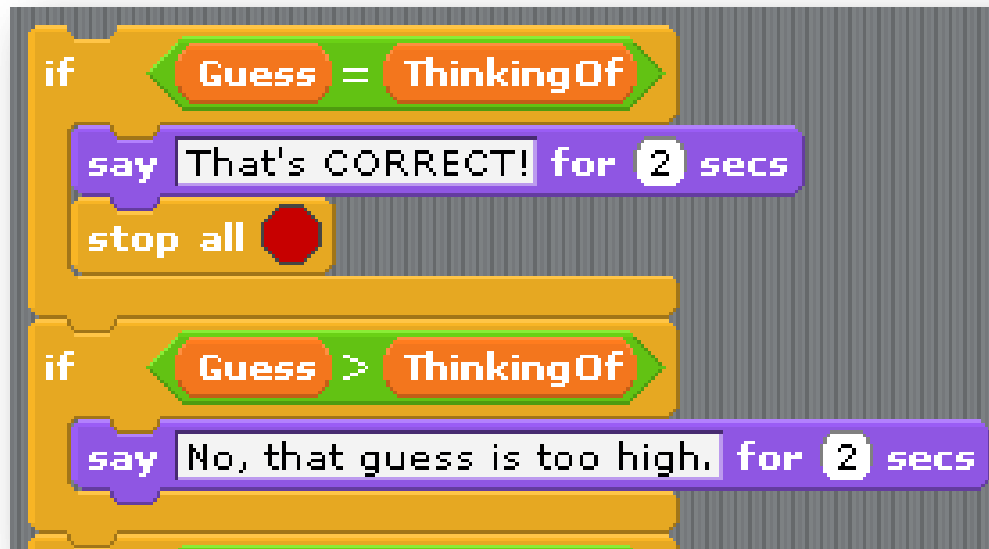
Test whether Guess is Right, Too High, Too Low



Greater than 

Less than 

Test Whether Guess is Right, Too High, Too Low



You need to complete this ...

Give **Player** Five Guesses



Give Player Five Guesses

```
when clicked
  set ThinkingOf to pick random 1 to 30
  say I am thinking of a number between 1 and 30. You have 5 guesses. for 30 secs
  repeat 5
    ask What is your guess? and wait
    set Guess to answer
    if Guess = ThinkingOf
      say That's CORRECT! for 2 secs
      stop all
    if Guess > ThinkingOf
      say No, that guess is too high. for 2 secs
    if Guess < ThinkingOf
      say No, that guess is too low. for 2 secs
  say join Game over. The right answer was ThinkingOf for 2 secs
```

The image shows a Scratch script for a number guessing game. The script starts with a 'when clicked' event, followed by a 'set' block for a variable 'ThinkingOf' to a random number between 1 and 30. A 'say' block displays the number range and the number of guesses. A 'repeat' loop with 5 iterations contains an 'ask' block, a 'set' block for 'Guess', and three 'if' blocks for correct, too high, and too low guesses. A 'stop all' block is placed after the correct guess. A final 'say' block uses a 'join' block to display the correct answer. Annotations include a yellow callout pointing to the 'stop all' block and a blue callout pointing to the 'join' block. Green arrows point to the 'repeat' loop and the final 'say' block.

Stop the script so that it won't ask for more guesses.

Use **Join** to put a variable value in a message

More Things to Try ...

1. Add sound effects!

Hint:

*Go to sprite's Sound tab, import sounds
Add commands to play sounds*

2. Add a timer!

Hint:

Add another variable called Timer.

Add another block:

When flag is clicked, set it to 60

*Repeat until 0: change by -1, wait a
second*

Time up: stop all scripts.

3. Other ideas? - Animation

At the End ...

Upload your project to the Scratch Website
user: [cdathenry](#) password: [athenry](#)

Access it
from home



Improve it



Show your
friends!



For next week...

Please download
Paint.net

www.getpaint.net

