



Elective Virtual Learning

6th Grade Intro to Gateways

Intro to Cryptology Through Micro:bit

May 22, 2020



7th & 8th Grade Multimedia Lesson: May 22, 2020

**Objective/Learning Target:
I can code a Virtual Micro:Bit**

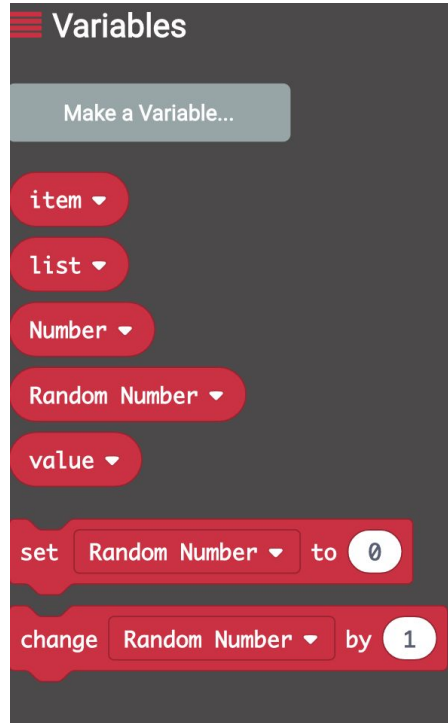
Warm-Up

Quick Draw

Did you figure out the block to use to tell a random number to equal a statement?

Go to [MakeCode](#)
and take a look at this code:

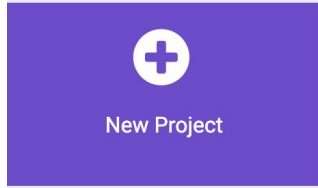
If you go to Variable & Make a Variable
You can call your New Variable: Random
Number. You can see that I did this.
You can combine this code with the code
You learned in the last lessons to have the
Variable match a number.



Let's See this work on the next slide

Lesson Introduction/Background Information:

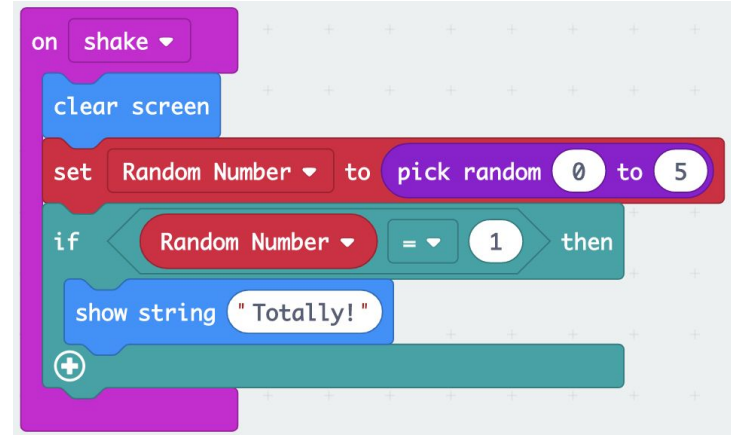
Make sure you are in [MakeCode](#) &
You have clicked on
With this you will have
All the code blocks.



Start by making your variable as on the
previous slide. Next you will want to have
the ON START have the Title of your 8 Ball
with something like this



NEXT you will want to set up your
ON SHAKE commands. Look at the code
on the right and put those pieces inside
The ON SHAKE.

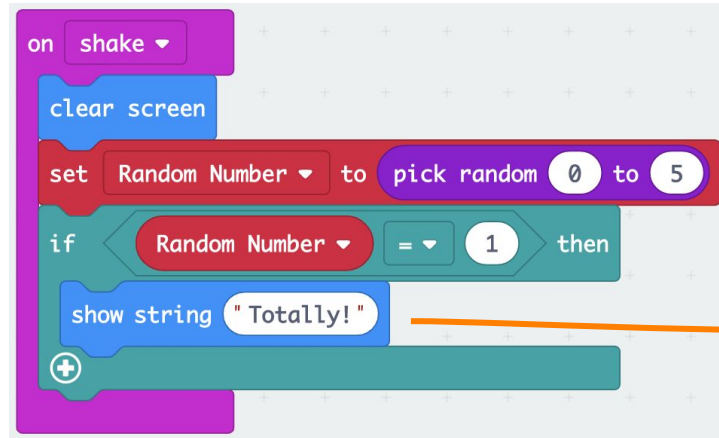


Practice:

1. NOW you need to finish the code by repeating the If command section until you have given all a response for all the numbers in your random.
1. I put 0 to 5 so there would be 6 responses. You can make it less by changing the random number (i.e. 1-3 would be only 3 responses) How many will you do?

TIP:
Keep your responses short,
since they scroll across the
screen. They will be quicker
and easier to read!

Below is the code again. Think it through & make an algorithm or plan



```
on shake
  clear screen
  set Random Number to pick random 0 to 5
  if Random Number = 1 then
    show string "Totally!"
  +
```

Continued Practice:

Did you do it? Now you can create almost anything!

Take time to practice throughout the summer so you don't lose your coding skills! Feel free to ask me questions anytime.



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Self-Assessment:

- ❑ What did you create? Share it with someone in your house
- ❑ Feel free to download and share the code with me and I will send you a video of it in action on the physical micro:bit