

MATH CHALLENGES

Today you are going to make your
OWN programs. I will not write
recipes for you.

Can you...

- Write a program that counts by ones?
- Write a program that counts by fives?
- Write a program that multiplies by two, and then adds one?

BUZZ CHALLENGE

- Write a program using modulus (%) to make the “BUZZ” game.
- Every time you hit enter, the computer adds one to a number.
- When the number is evenly divisible by 4, or any other number, the computer prints “BUZZ” instead of that number!
- BONUS CHALLENGE: Make the game print “Buzz” when the number is divided by 4, or another number of your choosing!

BLOCK DODGER GAME!

Let's play the block dodger game.

Thinking about the block dodger game...

- What are the rules of this game? Let's write them on the board...
- How is the game making new blocks?
- How does the game know that you have hit the block?

Instantiation!

- Instantiation is when you create an object while the game is running.
- You need to tell the computer what will be created (you set this up before), and where, and how it will be rotated. For example:
 - `Instantiate(kitten, new Vector3(1,1,1), Quaternion.identity);`
- In that code, `kitten` is what will be created, `new Vector3(1,1,1)` is WHERE, and `Quaternion.identity` is how it will be rotated.

Let's instantiate!

- Can you make it so that your computer creates blocks when you hold down the “a” key?
- Hint: You'll need to Add a rigidbody to your block “prefab”. You can do this by using Components→Physics→Rigidbody.
- Use Recipe #5!