

Becoming a Code Creator!

Let's speak the language of computers.



1. Sequence & Algorithms

Order Matters!

An **Algorithm** is just a fancy word for a list of steps.

A **Sequence** is the specific order of those steps.

If you get the order wrong, silly things happen!

Class Activity: The Robot Sandwich

Tell your teacher how to make a sandwich. Watch out! If you don't say "Open the jar," they might try to smash it!

$$600 \times 400$$

2. Events & Actions



The Event

This is the "Trigger." It tells the code *when* to start.

Example: Clicking the Green Flag.



The Signal

The computer listens for the event like a starter pistol in a race.



The Action

This is *what* happens after the event.

Example: The cat moves 10 steps.



Class Activity: Clap to Code!

Teacher: *Claps Hands* (Event) -> Students: Shout "CODE!" (Action)

3. Repetition (Loops)

Don't Get Tired!

Computers are great at doing the same thing over and over again without complaining.

We use a **Loop** block (like "Repeat 10" or "Forever") to tell the computer to keep going.

Class Activity: Dance Loop

Stand up! Let's loop a dance move 5 times.

1, 2, 3, 4, 5... Stop!

600 × 400

4. X / Y Coordinates

Think of the screen like a giant Treasure Map.

- X is the line that goes side-to-side (Left and Right).
- Y is the line that goes up-and-down (Sky and Ground).
- (0, 0) is right in the middle!

✚ Class Activity: X-Y Yoga

Spread arms wide for X!

Jump up high for Y!

600 × 400

5. Costume Switching

How do we make cartoons move? We change their **Costumes** really fast!

600 × 400

Pose 1

600 × 400

Pose 2

600 × 400

Pose 3

 **Class Activity: Statue Freeze**

Run in place... and FREEZE in a new costume when the teacher says "Switch!"

6. Conditionals (If / Then)

Making Decisions

Computers need to know what to do **IF** something happens.

- **IF** it is raining...
- **THEN** take an umbrella.
- **ELSE** (if it's sunny)... take sunglasses!

Class Activity: Simon Says Logic

IF I touch my nose, you sit down.

ELSE stand up!

600 × 400

Putting it all together!

When we mix **Events**, **Loops**, and **Conditionals**, we can build amazing games like this!

What kind of game will YOU build?

Question Time!

What was your favorite coding superpower?



Happy Coding!

You are now ready to create your own world.

