



Your Family Code Night

“Big Ideas”

The Code.org puzzles you completed include 6 “Big Ideas” in coding for kids – ideas that real programmers use every day!

1. A **Program** is a list of instructions you create to tell a computer what to do.

When you write a program, you create what you see on the screen. If you learn computer science, you can create nearly anything you can imagine (all puzzles).

2. A **Repeat Loop** repeats any block or blocks you put inside it, as many times as you say, or until a goal is reached.

Repeat Loops let you write programs faster (Puzzle #6).

3. **Code Efficiency** means using as few blocks as possible to solve the puzzle.

View each puzzle’s Code Efficiency numbers! (all Puzzles).

4. **There are no Mistakes in Coding** – just de-bug to fix it!

If your code doesn’t work right, you just find out why, and fix it – it’s called “debugging” or “bug-fixing.” Programmers are bug-fixing all the time, it’s part of the fun (all puzzles)!

5. A **Conditional** is an “if-then” statement in your code.

Conditionals let your code see and react: if there is a path forward, then move one step forward.

You use conditionals all the time: if it’s raining, then take an umbrella (Puzzle 14)!

6. An **If-Else** statement lets your code decide things.

If-Else makes conditionals even smarter: if one thing, do this; if not, do something else (Puzzle 16)