

Lilypad Coding Guide

Introduction to Coding Concepts for Young Learners

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What is Coding?

Coding is giving instructions to a computer. Just like following a recipe, computers need step-by-step directions to know what to do!

Basic Coding Concepts

- * Sequence: Steps in order
- * Loops: Repeating actions
- * Conditionals: If/then decisions
- * Variables: Storing information
- * Functions: Reusable code blocks

Unplugged Activity 1: Human Robot

One person is the 'robot', another is the 'programmer'. The programmer gives step-by-step instructions to make the robot move around the room.

Unplugged Activity 2: Algorithm Recipes

Write an algorithm (step-by-step instructions) for making a sandwich. Be very specific - robots need exact details!

Unplugged Activity 3: Debugging

Find the 'bugs' (mistakes) in these instructions:

1. Put on socks
2. Put on shoes
3. Tie laces
4. Put on pants

What's wrong? How do you fix it?

Introduction to Scratch Jr

Scratch Jr is a visual programming language perfect for ages 5-7. Download the free app and start creating!

Your First Program

Make a character move across the screen:

1. Choose a character
2. Add a 'move right' block
3. Add a 'repeat' loop
4. Press the green flag to run!

Next Steps

After mastering Scratch Jr, try:

- * Scratch (ages 8+)
- * Code.org courses
- * Hour of Code activities
- * Tynker
- * Python for kids

For more resources, visit www.dallaswthompson.com