



What Scratch Is and Why Children Learn to Code

KS2 COMPUTING

Ages 8-12 ⌚ 3 min read

What Is Scratch?

Scratch is a free online platform created by **MIT** (a famous American university) that teaches children how to code. Instead of typing complicated instructions like a traditional programmer, you build programs by dragging colourful blocks and stacking them together. Each block contains an instruction, and when you connect them, they work like a recipe — one step after another.

The program is named after the **Scratch programming language**, and it uses a friendly orange cat mascot called the **Scratch Cat**. When you click 'Run', your creation comes to life on screen.

Think of it like building with LEGO. Instead of typing instructions to build a tower, you have coloured blocks shaped like different actions. You snap them together in order, and the tower builds itself exactly how you designed it.

Why Do Children Learn With Scratch?

Scratch makes coding fun and visual. Young learners don't need to memorise complex text commands or worry about spelling mistakes. If a block doesn't fit another block, it simply won't connect — so you get immediate feedback about whether your code is correct.

It teaches real coding skills. Scratch uses genuine programming concepts like **loops** (repeating actions), **conditionals** (if-then decisions), and **variables** (storing information). These are the same ideas used in professional coding languages like **Python** and **JavaScript**.

Children can create anything they imagine. You can make animated stories, games, interactive art, or even control robots. This creative freedom keeps learners excited and motivated.

Think of it like learning to cook. Instead of reading a complicated French recipe, you follow simple picture cards that show each step. Once you understand the steps, you

can follow any recipe.

Why Is It So Popular in Schools?

Scratch is free and works on any computer with an internet connection. Teachers can use it without expensive software. It's also designed specifically for **ages 8-16**, so it matches how children think and learn at each stage.

Over **100 million projects** have been created by Scratch users worldwide, and the community is incredibly supportive. Children can share their work and learn from each other.

By learning Scratch early, children develop **computational thinking** — the ability to break big problems into small steps and solve them logically. This skill is useful far beyond coding.