

COMPUTING · GRADES 2–5

Scratch — Your First Three Projects

Step-by-step starter guide

Before you start

You'll need access to Scratch — free at scratch.mit.edu. Works in any browser. No installation needed. If your school blocks online Scratch, the offline version is also free. Each project takes 30–45 minutes. They build on each other — do them in order.

Project 1 — Hello World cat (30 min)

GOAL: Click the cat. It says 'Hello!' and meows. **STEPS:** 1. Open Scratch. The cat sprite is already there. 2. From the EVENTS palette (yellow), drag 'when this sprite clicked' into the code area. 3. From the LOOKS palette (purple), drag 'say Hello! for 2 seconds' underneath. Snap them together. 4. From the SOUND palette (pink), drag 'play sound Meow until done' underneath. 5. Click the cat. It speaks and meows! **LEARNED:** Events trigger code. Code runs from top to bottom. Blocks snap together like Lego.

Project 2 — Sprite chase game (45 min)

GOAL: Press arrow keys to move the cat. Touch the apple to score. **STEPS:** 1. Click the SPRITE button to add an APPLE sprite. Position it elsewhere on the stage. 2. ON THE CAT — add four 'when [arrow] key pressed' blocks. Each one moves the cat 10 steps in a direction (use 'change x by 10' for right, etc.). 3. ADD A SCORE — click VARIABLES (orange), make a variable called 'score'. 4. ADD COLLISION — when cat touches apple, change score by 1, apple goes to a random position. 5. PLAY! **LEARNED:** Multiple events. Variables. Conditional logic (when touching). Random values.

Project 3 — Interactive name story (45 min)



GOAL: The cat asks your name. The cat then tells a personalised mini-story. **STEPS:** 1. From **SENSING** (light blue), drag 'ask What's your name? and wait'. The user's typed answer goes into a variable called 'answer' automatically. 2. From **LOOKS**, drag 'say (join Hello, answer)'. This greets them by name. 3. Build a story: 'say (join answer, 'walks into a forest...')', then 'say (join answer, 'finds a dragon!')', etc. 4. **EXTENSION:** Ask their favourite colour, favourite food, etc. Use these in the story. **LEARNED:** User input. Joining strings. Building interactive narratives.

Where to go next

After these three, children are ready for: making their own scrolling games, simple animations, drawing programs, simple maths quizzes, and music sequencers. Scratch's tutorial library has guided projects for each.

