Scratch and Robotics Curriculum

At Firefly Coders, we teach kids to **think like creators, not just consumers** of technology. Through small, in-person classes (max 4:1 ratio), students build games and program robots while learning the fundamentals of computer science - all in a fun, supportive environment.

Scratch Programming (Ages 6-13)

Students learn core coding concepts - like loops, conditionals, and variables - by building and customizing games such as Pong, Snake, and Breakout. They explore animation, storytelling, and interactive design, developing both **technical and creative confidence**.

- **Beginner**: Intro to coding, simple games and stories
- **Intermediate**: Multi-level games, scorekeeping, user interaction
- **Advanced**: Complex game systems, custom blocks, final portfolio

Students use MIT's free Scratch platform and can continue projects at home.

Robotics (Ages 7-13)

Using robots like **Sphero** and **MBot**, students bring their code to life with real-world movement, sensors, and sound. From drawing shapes to navigating mazes, they learn engineering logic, precision, and creative problem solving.

- **Beginner**: Robot basics, movement, lights, sound
- **Intermediate**: Sensors, obstacle navigation, decision-making
- **Advanced**: Multi-sensor logic, autonomous robots, final showcase

Robotics makes abstract coding concepts real and exciting.

What Parents Love:

- Safe, productive screen time that builds **future-ready skills**
- Projects evolve with each child's pace and creativity
- Taught using the **Socratic method**: your child thinks, tries, and discovers
- **Certificates** awarded at each level