

Introduction to Drones: Take Flight!

Designed for learners in Grades K-2



Course Description:

Take STEM education to the skies in our hands-on K-2 Drones course! Students will learn key concepts around safety, lift, balance, and drag as they operate real drones through a variety of challenges. Additionally, students will explore the programming side of drones as they use Scratch Jr. to create autonomous flight simulations!

Equipment, Curriculum, and Training Available:

- Classroom set of Scoot Drones
- 15 Lesson Hours
- Curriculum and supporting materials
- Ongoing product and curriculum support
- Professional development
- Facilitation by a trained STEM instructor (optional)

Lesson	Learning Target Examples
1. Introduction to Drones	Identify the key components and functions of a drone.
2. Exploring Propellers	Explore how propellers make drones and helicopters fly.
3. Parachute Experiments	Learn about drag and design fall-slowing parachutes.
4. Relay Race	Make a plan to move the drone from one student to the next.
5. Drone Cargo	Evaluate how weight affects a drone's flight.
6. Drone Stamina	Observe how flight length and battery charge affect a drone's performance.
7. Flight Height	Use a string and other measuring tools to evaluate a drone's flight height.
8. Messenger Drone	Use drones to send and receive secret messages.
9. Bird's Eye View	Create maps of how the drone sees the room from above.
10. Camouflage	Decorate the drone so it blends into its environment.
11. Designing a Drone	Discuss the pros, cons, and key design requirements of a drone.
12. Simple Drone Simulation	Use Scratch Jr. to program a simple drone flight simulation.
13. Drone Navigation	Use Scratch Jr. to create a "map" and program the drone to navigate it.
14. Drone Pickup	Use Scratch Jr. to program a drone to pick up and move an object.
15. Drone Delivery	Use Scratch Jr. to program a drone to drop off a package at a location.