## Objective

By the end of this lesson, you will understand the basic math and science concepts behind RC cars and be able to apply them to enhance your RC car experience.

## **Materials and Prep**

- RC car (if available)
- Paper and pencil
- Ruler
- Internet access for research

No prior knowledge required, just bring your curiosity and enthusiasm!

## Activities

- Measure the speed of your RC car by timing it over a fixed distance. Calculate its average speed.
- Research the different parts of an RC car and how they work together to make it move.
- Experiment with changing the weight distribution of your RC car to see how it affects its performance.

## **Talking Points**

• RC cars are not just toys; they involve a lot of science and math to work properly.

"Did you know that the motor in an RC car converts electrical energy into mechanical energy to make the car move?"

• Speed is an important factor in RC car racing. It's not just about going fast, but also about control.

"When we measure the speed of the RC car, we are calculating how far it travels in a certain amount of time."

• Understanding weight distribution can help you optimize your RC car's performance.

"By moving weight towards the front or back of the car, we can change how it handles turns and accelerates."