

# Brainstorming Mindstorms

Legos are cool. Robots are cooler. Put them together and you have the coolest Lego Mindstorms robots. What makes Mindstorms different than other Legos is the EV3 brick that allows you to connect motors, sensors, and other inputs to your Lego creations. Once you build one of the many Lego projects you can use an App or your computer to design a program that the EV3 brick uses to bring your robot to life.

Programming your robot is made simple by the drag and drop, color coded design used with Mindstorms. This is how they work:

**Flow blocks are orange.** These control the flow of your program. Every program must begin with an orange flow block.

**Action blocks are green.** These control actions such as light, sound, and motor rotation.

**Sensor blocks are yellow.** These allow for input from sensors (i.e. color or touch).

More advanced programs will use the **red data operations blocks** and the dark blue advanced blocks. Keep in mind that the yellow, red, and blue blocks are only available for use on a computer, not on the App.

Mindstorms are an excellent way to use skills you already have to help you develop new ones. They make understanding robotics and computer programming easy. With Mindstorms you have the ability to start simple and work your way toward advanced programming. The best part is...it's FUN!!