



Building a Detector

Extension activity to use after Lesson A.B.3, A.M.2, A.A.1 using the cubes they have explored with thus far.

Teams of students plan, design, and build a type of sensing-detector using Cubelets.

Allow teams of students to use any Cubelets they have been exploring with thus far to build a sensing detector. Encourage them to think beyond making a robot that senses and reacts. They need to think of a problem that their robot will solve. You may need to give them an example such as: a light on a house that lights up when someone approaches the door, allowing the person to see when they are coming in to their home at night.

Students may build a motion detector, or they may think about building a light detector - either is fine. Just remind them that their detector needs to have a specific purpose to solve a specific problem. If you have the Speaker Cubelet they could have an alarm sound, too.

Allow the students to use Legos or any other objects they may want to attach to their detector.

When they are all complete, display them somewhere in the room. Have each team demonstrate what their detector can do.

Optional: Hold a contest and have the students vote for the most creative sensing detector machine.

Be sure the students draw a picture of their detector, with proper labeling explaining how it works, in their Robotics Journal.