

## REcharge Labs Solar Cork Boats

**Objectives:** As a result of this lesson, students will understand basic electricity, know the fundamentals of solar panels and placement, be able to design a propulsion system, and design a boat to carry the weight of a solar panel.

Students will use solar panels to power a small motor and propel a boat made of cork. Students will learn basic solar circuitry to connect a motor to the solar panel, then use simple engineering design to make paddles that propel the boat as far and as fast as possible. Solar panels and motors are rugged and built for repeated classroom use.

**This kit includes:**

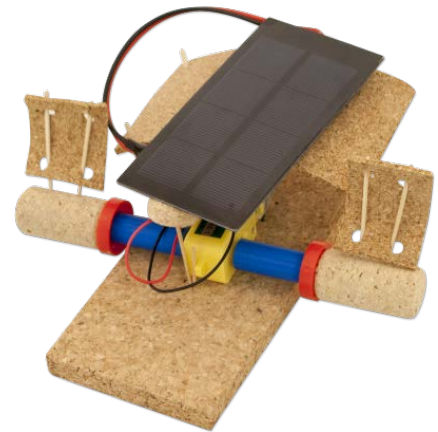
- Solar panel
- Screw hubs with acorn nuts
- Corks with holes
- Waterproof solar motors
- 48:1 double shaft motor
- Toothpicks
- Propellers (2 and 3 blades)
- Motor key adaptors
- Cork sheets
- Cork board

**NOT included:**

- Towels or rags for water spills
- Water and containers
- Paper and pencils
- Scissors
- Weights

**Additional Equipment Needed:**

- Lights (or sun)



\*Any materials that are used, lost or broken during classrooms use, must be replaced before returning the kit. Replacement parts can be bought from REcharge Labs.