

Lesson 11 Building a small car III: Assembling the car

Objectives: Students gain hands-on experience with saw, screw driver, and wrench.

Materials: Students' partially build cars with holes drilled for gearbox and front axle brackets. Screw drivers, wrenches, nuts, bolts, screws, dowels, bench hooks, saws, wood for cutting over, newspaper, sandpaper, Elmer's glue, trays for small parts.

Sponge: Handout: Assembling Your Car



Initial

Discussion: Tool safety – always wear goggles when sawing or watching someone saw. Be careful when using or carrying tools.

Review what needs to be done in this lesson: Measure and cut front axle, attach gearbox, front and back wheels. Go over handout with list of steps. Be sure everyone is comfortable with all steps.

Remind students to put small parts in trays. There are no extra parts.

Students will need to share tools. One group must begin with the front wheels so that all the axles can be sawed in one class period. Assign a table to be first to use saws.

Remind students that they need to make an entry in their design journals. Topics for this lesson are listed on handout.

Project: Assemble cars as described in handout: Assembling Your Car.

Vocabulary: Crank arm, grub screw, Allen wrench, gear hub.

Final

Discussion: What still needs to be done?

Clean up: Put cars in large ziplock bags with students' names facing out.

Home

Connection: Tell your parents what you are doing in class and let them know your progress.