

# WORKSHOP EXTENSION ACTIVITY

Built by The Home Depot Kids Workshop

## June 2021: SUV

Ages 5-12

### CONNECT.

Imagine that you have your own SUV. Not only is it all yours, but you can pack it up and drive it anywhere that a road will take you. If you had the time for a three-week road trip, where would you go? What would you pack?

### INVESTIGATE.

Thankfully, you won't have to cram all of your luggage into the trunk of your SUV. You'll be able to put some things on the roof of your car, too... but first, you'll have to design the best way to do this!

#### You'll need:

- Your SUV
  - Wooden craft sticks
  - Plastic stretch wrap
  - Hex nuts  
(or another household material that you can pretend is luggage)
  - Pencil
  - Super glue
  - String
1. Experiment with these materials and brainstorm how to best transport your luggage on top of your SUV. Tip: You want to create a carrying container that holds your luggage in all kinds of weather, as well as a roof rack to make sure it can easily be secured to your vehicle!
  2. Begin by creating a sketch of your design below. Be sure to use a pencil so you can make changes as you develop new ideas. As you draw, use the list of materials to help you label each part!

### INNOVATE.

1. Now that you have some initial thoughts, it's building time! Which makes more sense to build first: your car top carrier or your roof rack? Think about the best process and then get started!
2. Once you have your roof rack and car top carrier built, secure them both on the roof of your SUV and take the vehicle out for a spin. You'll want to make sure these are sturdy before you add your luggage.
3. Pretend that the hex nuts are luggage and slowly add them to the top of your SUV. Add them one by one until your car top carrier is as full as possible. Then take your SUV out for another test drive to make sure everything stays in place.
4. Uh oh! It seems that you forgot to pack one very important large suitcase. How could you change your design to hold even more luggage? Carefully make the changes and see how much more it can hold. If you need to disassemble your original design, that's okay! Many of the world's best inventions went through multiple iterations or versions.

Car top carriers are containers that come in all different shapes and sizes, but they all have one main goal: to safely transport belongings that can't fit inside a car.

