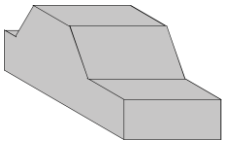
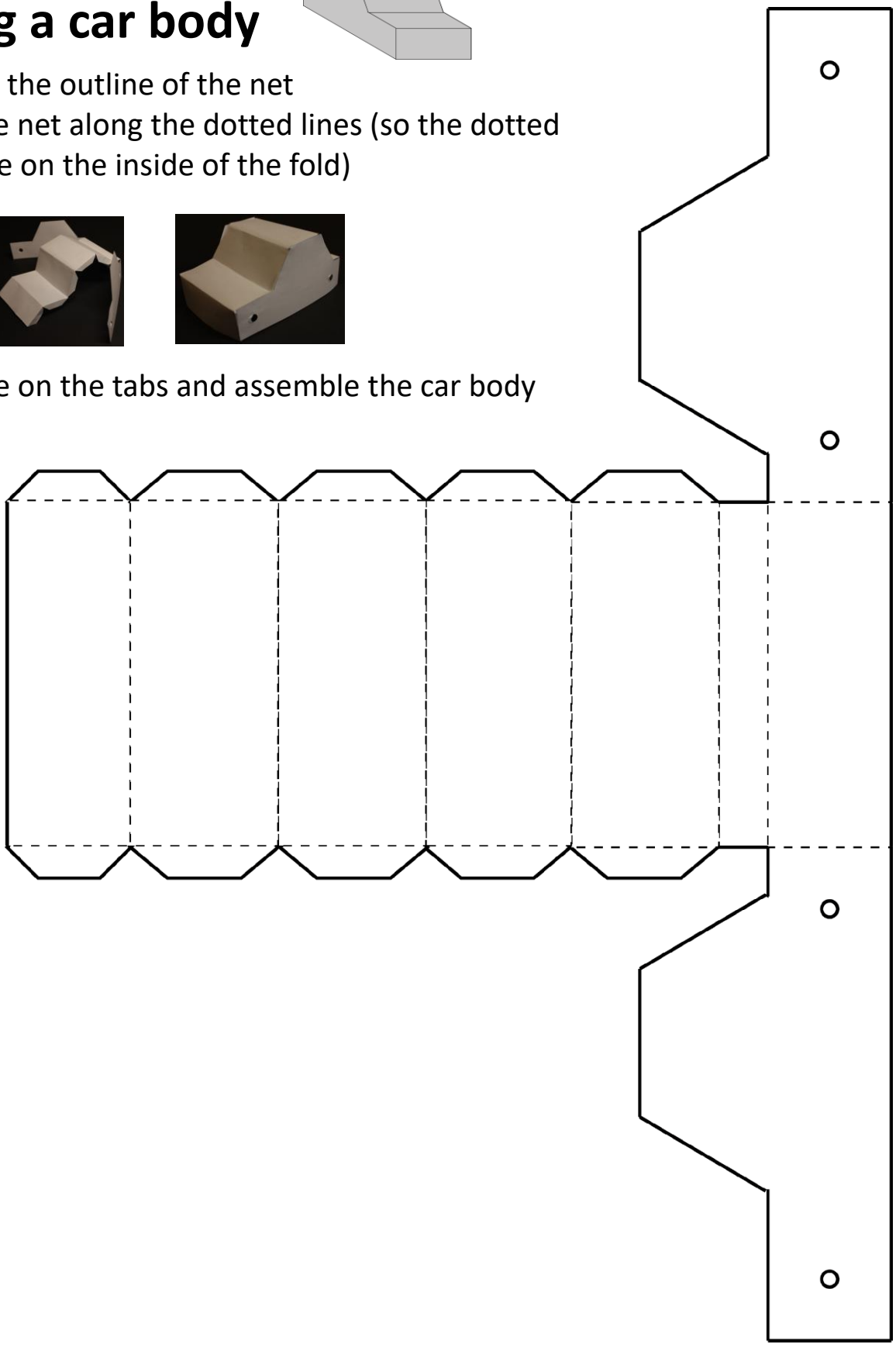
STEM Vehicle – Part 1

Making a car body



1. Cut out the outline of the net
2. Fold the net along the dotted lines (so the dotted lines are on the inside of the fold)

3. Put glue on the tabs and assemble the car body



STEM Vehicle – Part 2

Creating your vehicle

https://www.youtube.com/watch?v=tykmKY4kY4I

Watch the video on YouTube on how to make an elastic band powered car. Then read the information below.

When you stretch a rubber band it stores potential energy. Specifically it stores elastic potential energy—the type of energy stored when a material is deformed (as opposed to gravitational potential energy, the type you get when you raise an object off the ground). When you release it all, that stored energy has to go somewhere. If you launch a rubber band across the room, the potential energy is converted to kinetic energy, the energy of motion. But what about putting all that stored energy to use? You can attach your rubber band to a simple machine—a wheel and axle—to build a simple rubber band–powered car. In real cars, gasoline's chemical energy or the electrical energy in a battery is converted to kinetic energy of the moving car. Your model car will use a rubber band as the source of energy. It will take a little engineering to get your vehicle working—challenge yourself to see how far your car can go!

Your Challenge…

Using the body that you have just created, and whatever recycled materials that you can find in the house, we want you to create an elastic band powered vehicle similar to that seen in the video. There are some pictures below to inspire you!