



ENGINEERING ACTIVITY: DESIGN AND BUILD A ROAD!

Have you ever thought about what it takes to build a road? Many people from a wide variety of careers must work together to build a road.



what to do:

Set up your map:

1. Unfold your map and place it on the floor or a table.
2. Place the home sticker and science museum on opposite sides of your map. The home sticker represents your home, and the science museum is COSI!

YOUR CHALLENGE:

Build a road that will get your marble from your home to COSI safely.

CONSTRAINTS (rules):

1. The marble must start at your home and end at COSI.
2. If your road crosses a river, a bridge must be built at least 1 centimeter above the map.
3. If your road crosses a mountain, a tunnel must be built (a tunnel must be an enclosed tube)
4. The marble should reach COSI without your help! You can place the marble at the start of the track, but not push it along in between.
 - a. Tip! You can try using a stack of books, or any materials inside your box to raise the starting point above the ground or table you're working on.

ruler
centimeters



Design and build your road:

1. Look at what is between your two locations. Are there rivers or mountains? Remember, rivers require bridges and mountains require tunnels.
2. Design your road.
3. Build your road. Test it while you build to make sure the marble rolls along it!
4. Can your marble make it from home to COSI on its own? If not, make some adjustments and try again! Engineers don't always get it right on the first try.



learn more!

Go to this website to learn more about construction in your life.
www.ibuildamerica-ohio.com/cosi/



¡Aprende más!

Visita este página (or sitio) web para obtener más información sobre la construcción en tu vida.
www.ibuildamerica-ohio.com/cosi/

Share your completed road on social media with **#COSIConnects**
Comparte tu camino completado en las redes sociales usando **#COSIConnects**

