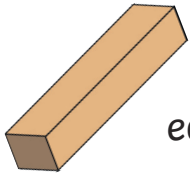


Disclaimer

This resource is provided for informational and educational purposes only. As this resource refers to sharp equipment, you must ensure that an adequate risk assessment is carried out prior to using this resource. Twinkl is not responsible for the health and safety of your group or environment. It is your responsibility to ensure the resource and the information/activity it contains are safe and appropriate to use in your situation.

Bridges and Tunnels

You will need:

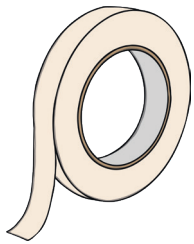
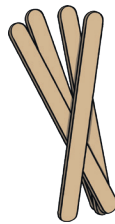


blocks or books to place under each end of the bridge/tunnel



toy vehicles

selection of items and materials to build with: cardboard, paper, newspaper, wooden lolly sticks, cardboard tubes



sticky tape/masking tape



glue



scissors

Method

1. Decide if you are building a bridge or a tunnel.
2. Discuss with your group what materials you will use and how you are going to build it.
3. Once you have built your bridge or tunnel, test it using your toy vehicle to make sure it works and that your vehicle can reach the other side.

Connecting Places

Tunnels and bridges connect places which might be hard to get to. For example, bridges often go above water, connecting the two places on either side. Tunnels are sometimes built through mountains or even in water, such as in rivers or seas.

Bridges need to be built correctly so when there is weight on the bridge, such as a car, it stays sturdy and straight. If it is not strong enough, the bridge will collapse. There are several different types of bridges. Their shape and what materials they are made from affects how strong they are.

How could you make your tunnel waterproof?
 How could you make your vehicle travel faster or slower?
 How could you change your tunnel design?
 Did your vehicle make it through the tunnel?
 What other materials could you use?
 What will happen if you make your bridge longer or shorter?
 Is there any way you can make your bridge stronger?
 What are you going to use?
 What shape is the bridge going to be?

Bridges and Tunnels

Bridges and Tunnels

What shape is the bridge going to be?
 What are you going to use?
 Is there any way you can make your bridge stronger?
 What will happen if you make your bridge longer or shorter?
 What other materials could you use?
 Did your vehicle make it through the tunnel?
 How could you change your tunnel design?
 How could you make your vehicle travel faster or slower?
 How could you make your tunnel waterproof?