

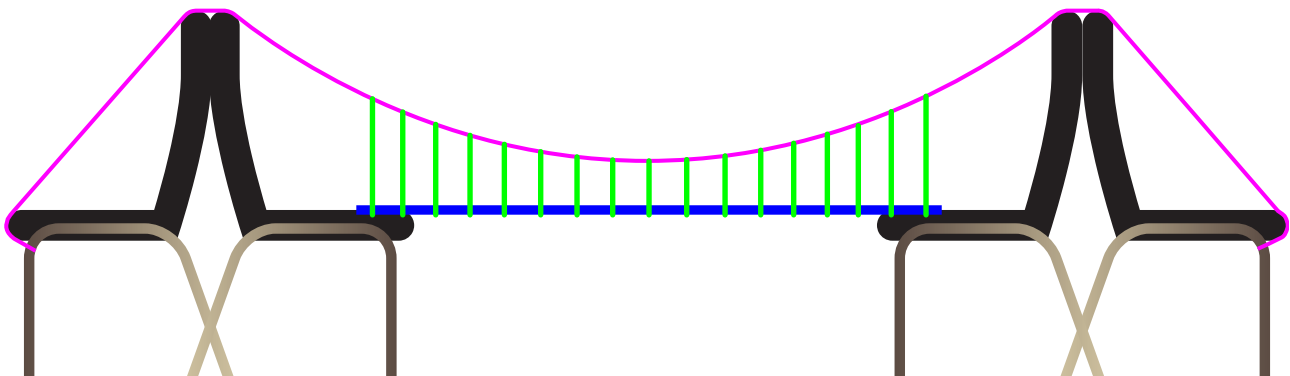
Name: _____

Date: _____



Can you design a model suspension bridge? It must have a smooth deck which a toy car can roll across. The picture below shows how a suspension bridge model can be made to span a gap between some chairs.

suspension cable
 hangers (cable)
 deck



What tools/equipment will you use? What will you need to measure? What materials will you use? How will you attach and fix your materials together? Make some notes before you start making your model:

TOP TIPS

Measure the distance! How long will your deck need to be?

Your bridge needs two suspension cables supporting either side of the deck.

Make sure your two suspension cables are the same length and 'sag' down the the same distance off the floor.

Work together - decide who will do what and how you will help each other.

Ask for help if you need to! Suspension bridges have complicated designs - it's going to be tricky to make this model!




Can you think of some other ways of testing your model suspension bridge? Write or draw your ideas, then get testing!

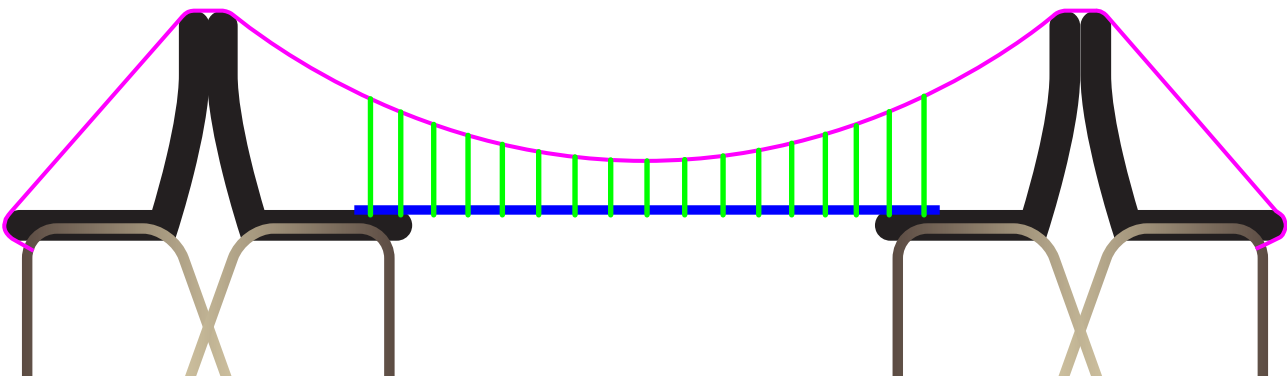
Name: _____

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Can you design a model suspension bridge? It must have a smooth deck which a toy car can roll across. It must also support a weight of at least 500g at any point along its length. The picture below shows how a suspension bridge model can be made to span a gap between some chairs.




 suspension cable  hangers (cable)  deck

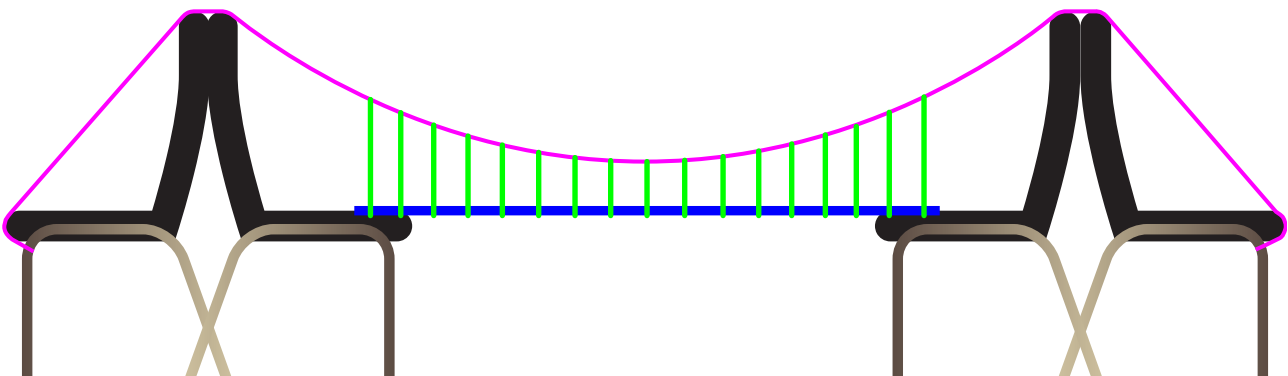


What tools/equipment will you use? What will you need to measure? What materials will you use? How will you attach and fix your materials together? Discuss these questions before you start making your model bridge.



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Can you design a model suspension bridge? It must have a smooth deck which a toy car can roll across. It must also support a weight of at least 500g at any point along its length. You could make a small model on your desk, or a big model between some chairs.

What tools/equipment will you use? What will you need to measure? What materials will you use? How will you attach and fix your materials together? Discuss these questions, then draw and label your design:

Evaluate your finished suspension bridge model:

Did your model have a deck which a toy car could roll across? YES / NO

Did your model support a weight of at least 500g? YES / NO

Was your finished model different to your design? YES / NO

If so, why?

Describe one way in which you worked well as part of a team:

Describe one way in which your model could be improved:



The Millennium Bridge between Gateshead and Newcastle-upon-Tyne



The Clifton Suspension Bridge, Bristol



The Humber Bridge, Hull



The Menai
Suspension
Bridge, Anglesey



The Queensferry
Crossing,
Queensferry



The Millau
Viaduct, France