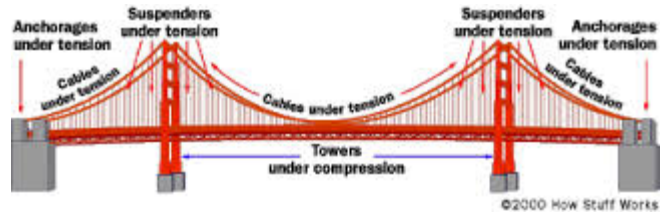


# ATL PROJECT



# BRIDGES

## *Design Brief:*

*You are going to have to design and build a structure that will bridge a gap of 50cm. Your bridge must be wide enough to allow a toy car to be pushed across it. It must be strong enough to support the weight of a dictionary. The Victorian engineer Isambard Kingdom Brunel designed and made a number of bridges when he was alive. Can you learn anything from his designs?*



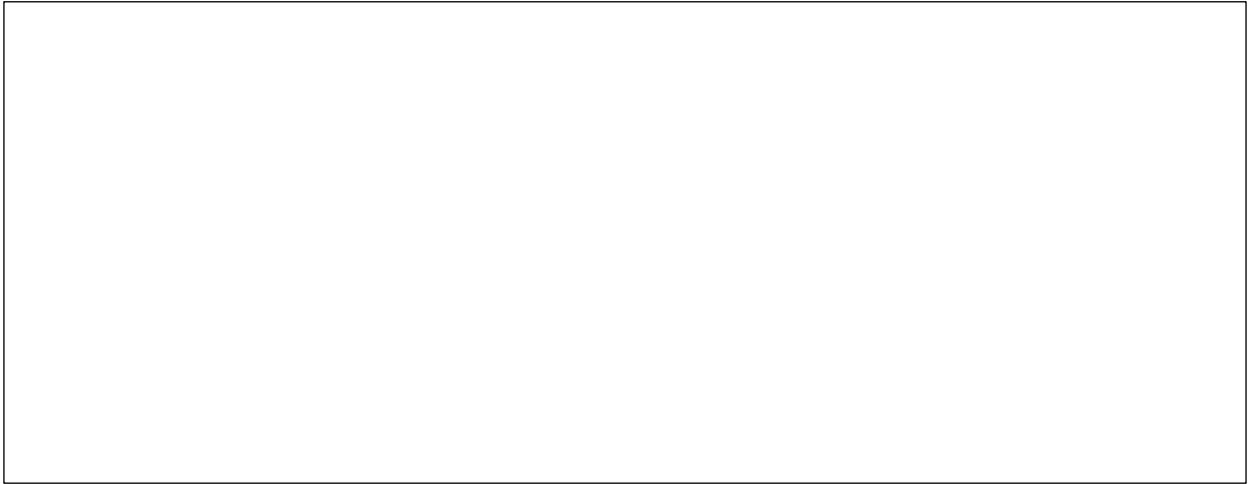
# Gather and Organise

What do you already know about bridges? Gather your information to create a mind map all about bridges.

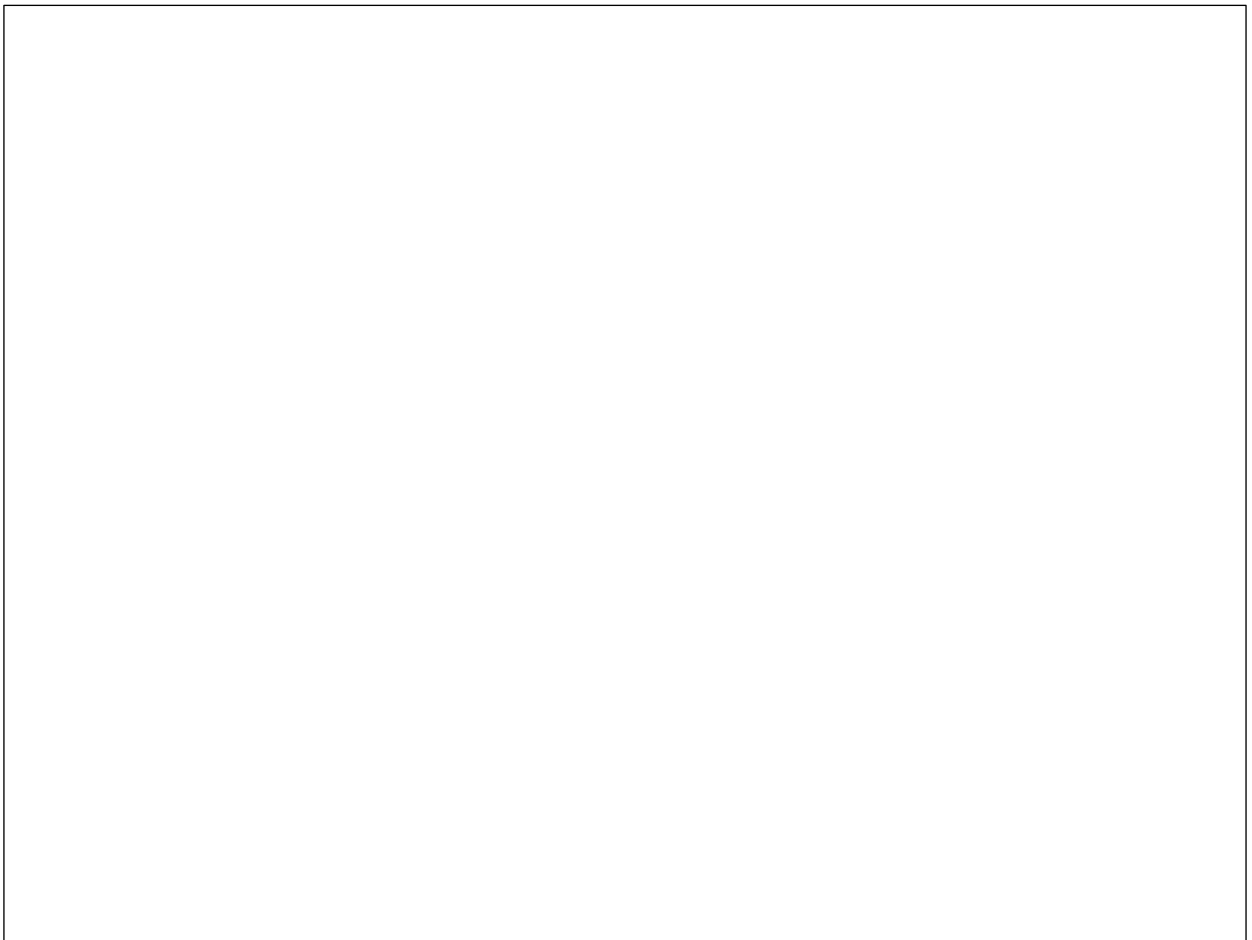


# Link to Topic

Isambard Kingdom Brunel made a number of suspension bridges –  
find out about the Clifton suspension bridge.



How do suspension bridges work? Draw and annotate a diagram  
below to show what you know.





# Identify

What is your task?

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How will you know if you are successful?

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Lots of groups will make a successful bridge – how will you make sure yours is the best?

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What makes a good team?

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What do you need to do to get started?

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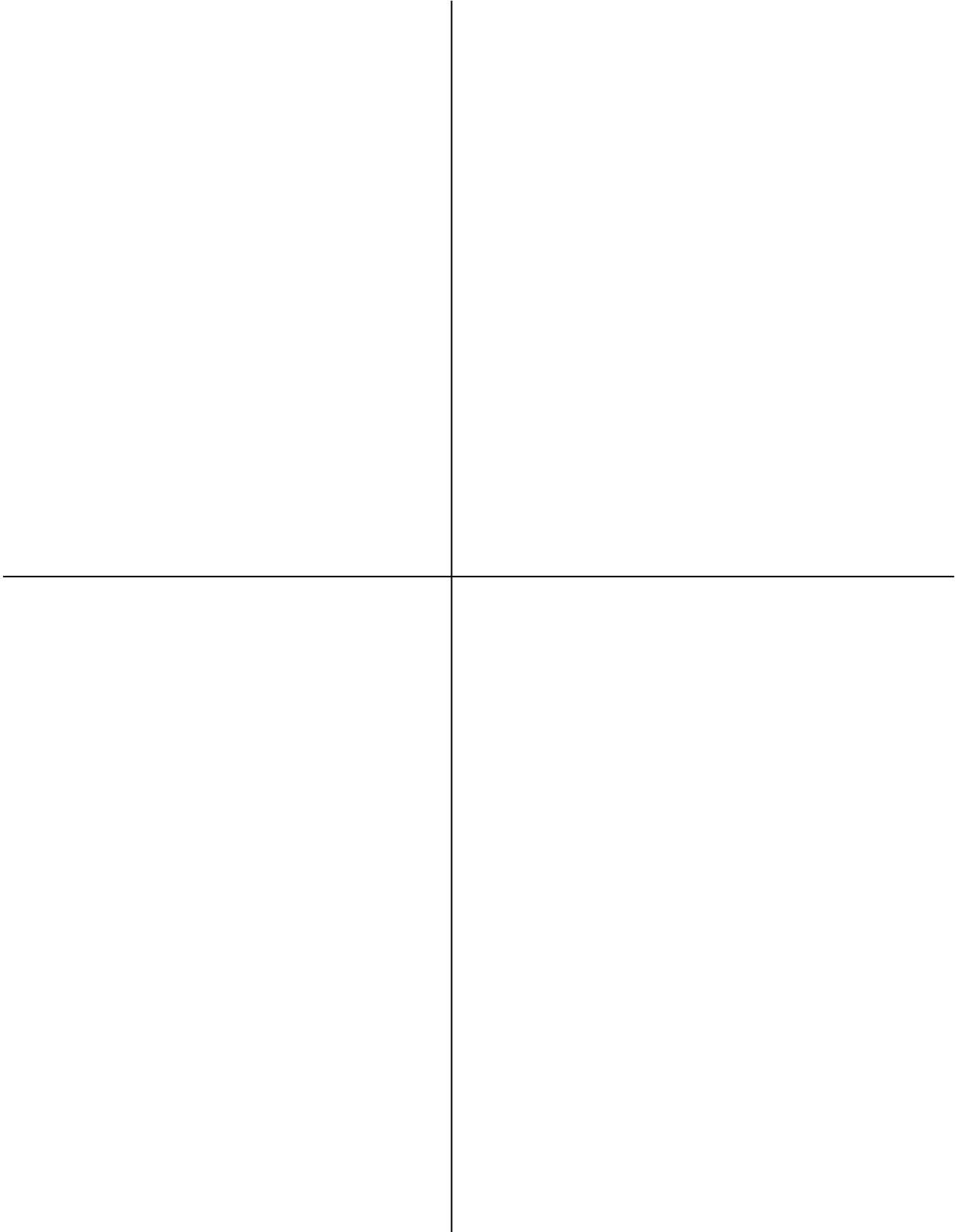
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# Generating ideas

Make some initial bridge designs.





# Decide

Design and annotate your best idea.

What materials will you use?

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Why did you decide to do this?

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.....

How will you connect parts of your bridge?

.....

.....

.....



# CAD

Design your bridge using ICT



# Implement

Build your bridge and take photos and insert here.





# Evaluate

Write a detailed evaluation of the project. Here are some questions to help you get started. Try and link some of your ideas or thoughts by using connectives.

## Questions

- Are you pleased with your final product?
- Are you pleased with your design?
- Have you been successful?
- Have you achieved your success criteria?
- Did anything go wrong?
- What would you do to improve your bridge next time?
- What have you learnt?
- How else could you use what you have learnt this week?
- What are you most proud of?

## Connectives

- Cause** – Therefore, since, as a result, consequently, a result of this is that ...
- Addition** – in addition, moreover, furthermore.
- Opposition** – However, but, yet, although, nevertheless.
- To emphasise** – above all, especially, in particular, notably, significantly.

A series of 18 horizontal dotted lines for writing an evaluation.