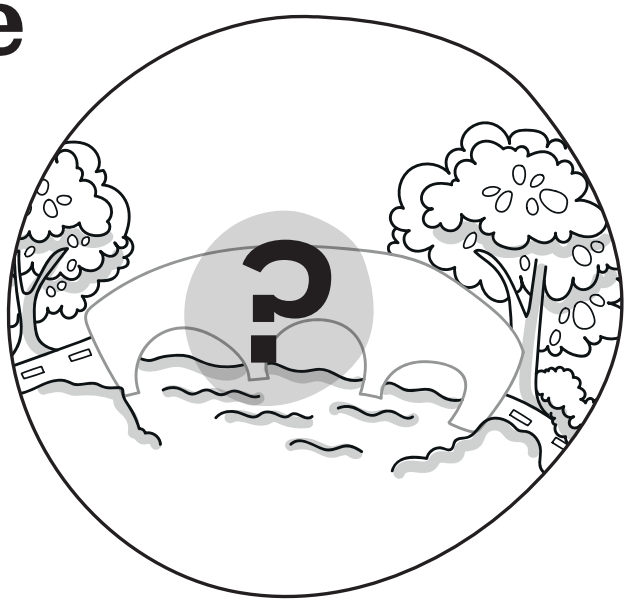
**Name** _____ **Date** _____

# Design a Bridge




Can you think about a river, road or railway line near your school and design a new bridge to cross it?

Before you start, consider the following questions:

**Who** is going to be using your bridge?

**pedestrians** **cars** **trains**

**What** will be travelling **underneath?**

**boats** **trains** **cars**

Does your bridge need to stretch a **long** way?

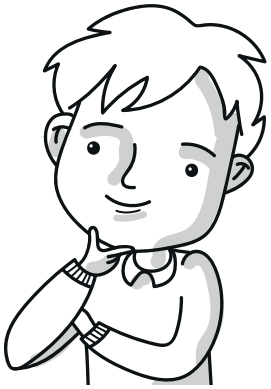
**yes** **no**

Will the bridge be **high** or **low?**

**high** **low**

Do you want it to **fit in** with your local area or... **stand out?**

**fit in** **stand out**





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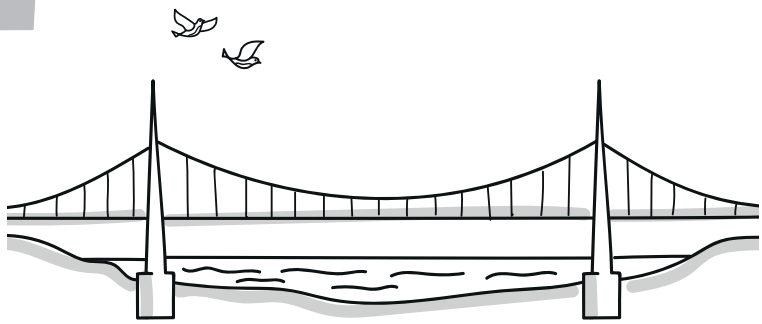
Now consider how you can make it structurally sound. What type of **bridge** do you think will best suit the task?

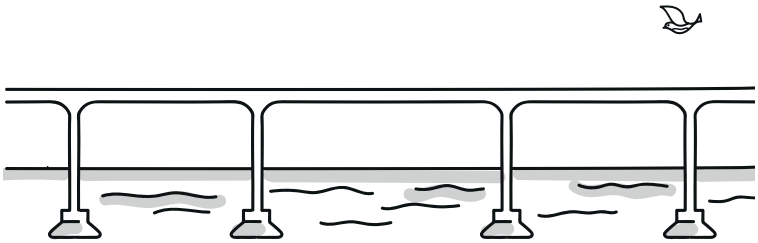
## suspension bridge

- Great for stretching long distances
- Can withstand earthquakes
- Cost effective
- Uses minimal materials



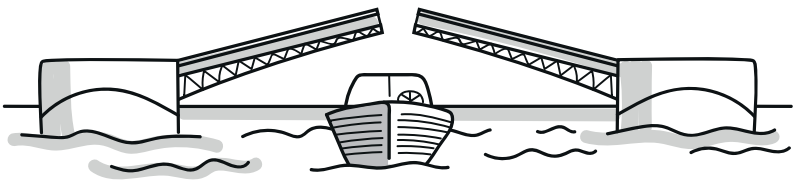
## beam bridge

- Quick to build
- Can be built from many different materials
- Can sag and weaken over time
- Can be joined together to lengthen or widen



## bascule bridge

- Can lift for passing ships
- Suitable for small spaces
- Efficient, need only be raised to the ships height
- Requires engine to lift





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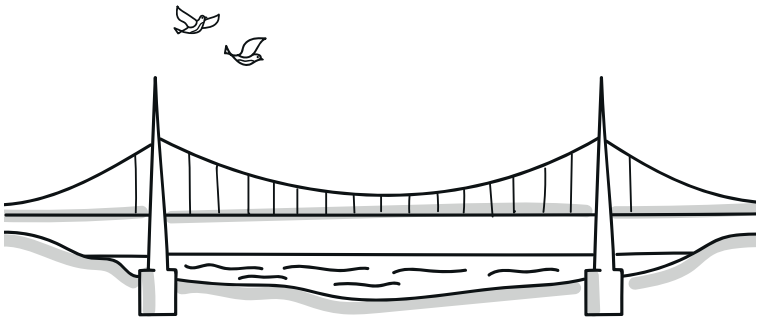
**Name** _____ **Date** _____

Write the correct bridge name for each picture.

**suspension** **beam** **bascule**



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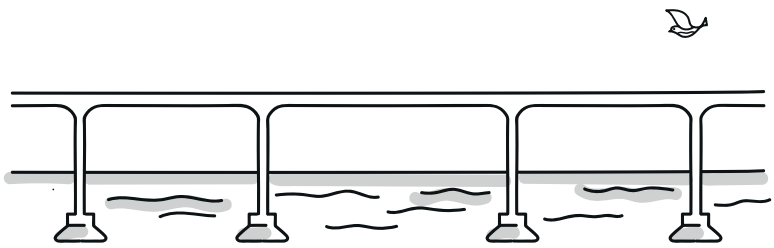

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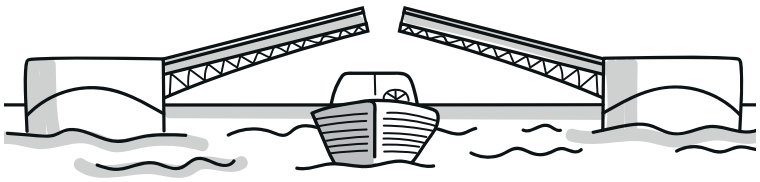


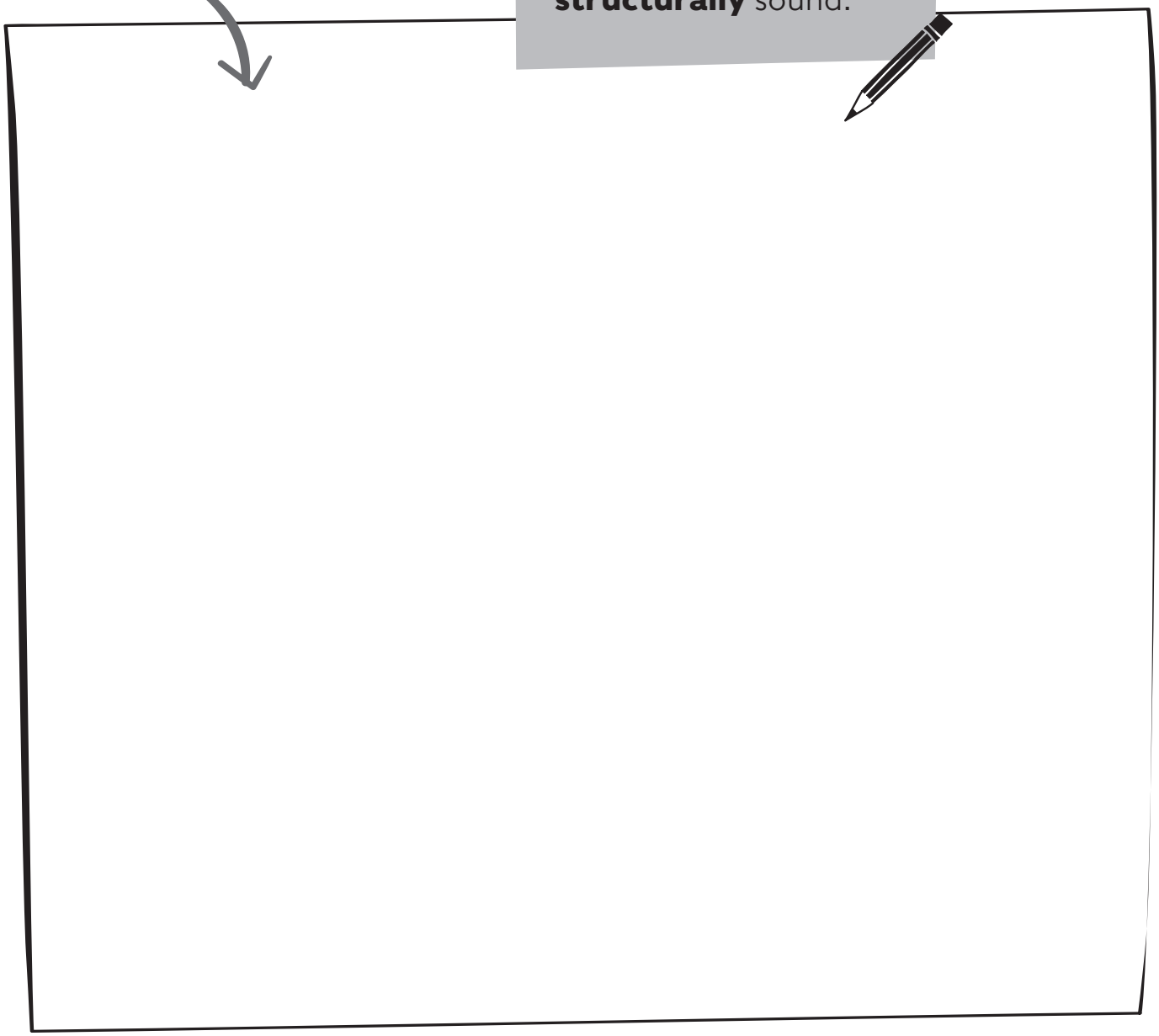
_____

**Name** _____ **Date** _____

Now you're ready to design your bridge! Draw it in the box below.

**Remember**

It must be **practical**, **attractive** and **structurally** sound.



All bridges have a name and **Tower Bridge** is named after the **Tower of London**, it's closest neighbour. Now you have designed your own bridge, why not give it a name? Why did you choose that name?

**My bridge's name is...** _____



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