



7+ with Adult Assistance

## Build a Beam Engine

Crofton Beam Engines was built over 200 years ago to pump water to the highest point of the Kennet and Avon Canal to keep it nice and full.

Without the water, narrow boats wouldn't be able to move from one end to the other. The station uses large pieces of machinery called **beam engines** which power large water pumps which move the water.

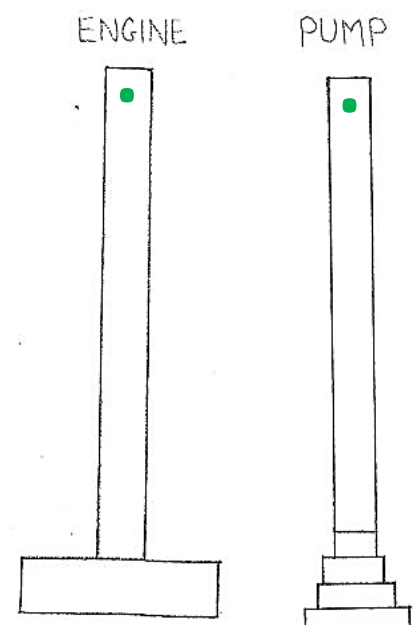
Complete the activity to build your own moving beam engine and see how it all works.

### You will need:

- Build a Beam Engine activity instructions
- Base template (printed on card)
- Cut out template (printed on card)
- 7 wooden lolly sticks
- Scissors
- Glue
- A sharp pencil
- A ball of Blu Tack
- 3 paper fasteners
- Colouring pens or pencils

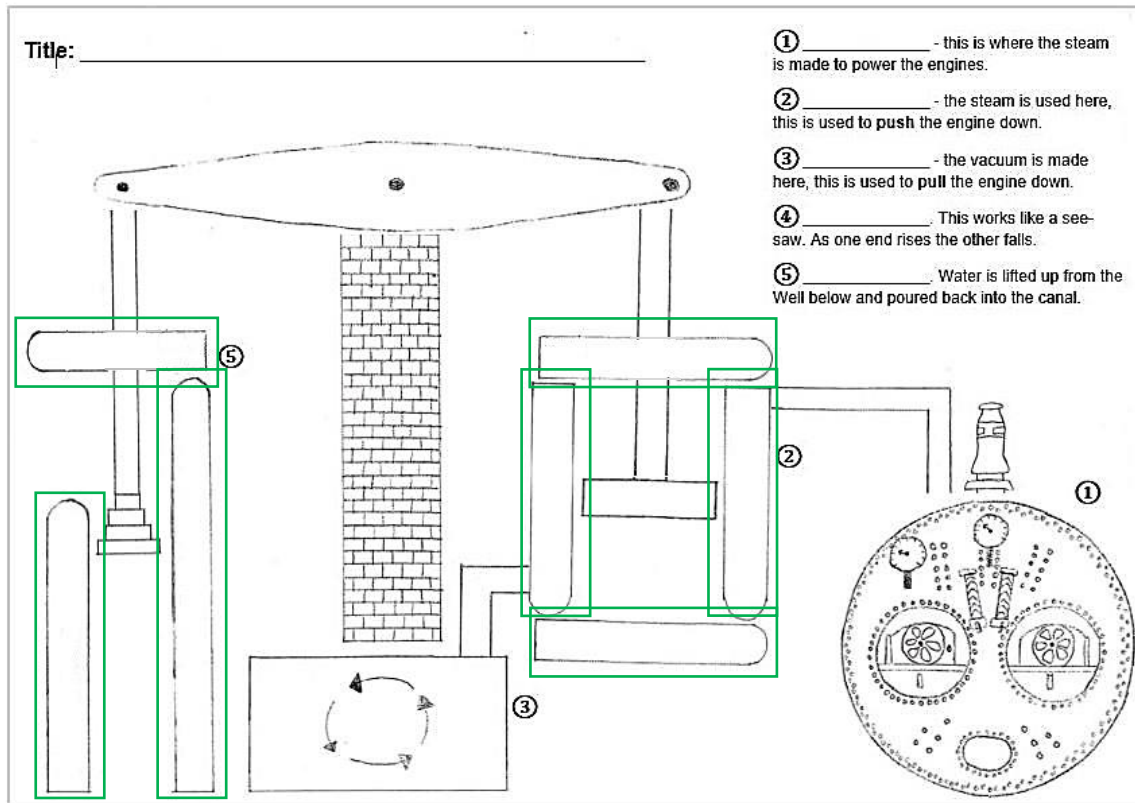
**Step 1:** Colour in the shapes on the Cut Out template, use whatever colours you wish. Once finished, cut these out.

**Step 2:** Adult assistance here. Use the sharp pencil and Blu tack to make a hole (●) in the top of the pump and engine pieces, as well as three holes in the beam pieces and one in the Base template.





**Step 5:** Measure and cut the wooden lolly sticks to size. Next glue (only where it says to) these onto the base template. Make sure that the pump and engine pieces are **behind** the sticks – this will allow the model to move.



**Step 5:** Finally full in the blanks ( \_\_\_\_\_ ) to describe each part of the model. To complete your model add a title.