

# Supporting practical work in science, technology and art - in primary schools

# Hatching spring chick

# Why do this?

This activity provides a context for children to make a product that includes a simple (first class) lever mechanism.

Curriculum links: D&T, art, levers, mechanisms.

# **Suitability**

Years 2-6

## **Practical details**

This activity has been prepared using CLEAPSS guidance. If in doubt, or for further information, contact CLEAPSS.

### Safety

• Paper fasteners are sharp, children need to be careful handling them.

### **Equipment per child**

- Lever, chick and egg outlines on card
- Scissors
- Glue

- Paper fastener
- Blu-tack or Plasticine
- Pencil

### **Notes**

Templates for the chick, egg and lever are given at the end of this document. They can be printed onto card ready for cutting out.

The artwork could be replaced to reflect any celebration or event, the mechanism remains the same.

### **Procedure**



Cut out the chick, lever and egg from the template including along the 'cracked' egg zig zag.



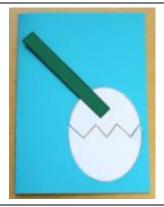
Glue or draw on the chick's eyes and beak.



Glue the front of the chick to the bottom of the egg, making sure its head and shoulders are above the cracking.



Place the lever on the front of the egg, so it points up at approximately 45°. Then glue the lever to the egg.



Arrange the pieces on the card so that both pieces fit entirely inside the edges of the card.

Use a pencil to mark the position of the bottom of the egg.

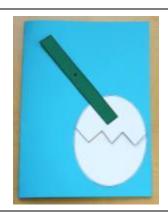
Do not stick them down yet!



Stick the egg base and chick on to the card.



Place the egg top and lever on the card and decide where your pivot point will be. Mark this spot on the lever with a pencil.



Place a small ball of *Blu-tack* under the lever where you marked it. Use a pencil to make a hole by pushing it through the lever and in to the *Blu-tack*. Then remove the *Blu-Tack* 



Place the lever back on the card and make a mark through its hole onto the-card. Make another hole at this point. Push the paper fastener through the holes in the lever and the background card. Turn the card over and fasten the fastener.

# **Expected observations and results**

When the lever is pushed down the top of the egg lifts off to reveal the chick, as if it were hatching. Pushing the lever back down lowers the egg top recovering the chick.

### Possible further activities

- Explore what happens to the egg top when the pivot point is moved.
- Design an alternative 'lift off' template, eg an opening Christmas present.
- Use the mechanism as part of a story telling activity or use it in a storybook made by a child.



# **Background notes**

A mechanism is a device that makes a job easier to do. Levers are used to help move large loads (anything being moved) with a small, or smaller, amount of effort (the amount of force needed to move the load) than would normally need to be applied.

Applying a downward force to the free end of the lever moves the load up in the opposite direction. The pivot (the thing around which the lever turns) in this instance is a paper fastener.

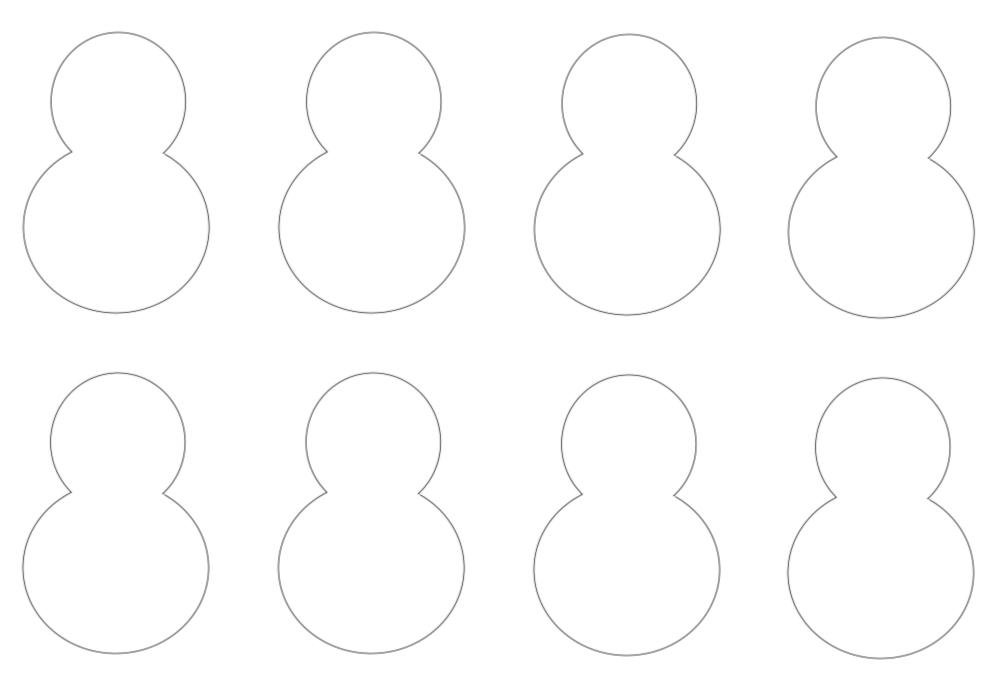
Although in this instance minimal effort is needed to work this mechanism it is still the action of the lever being pushed or pulled that is responsible for the transfer of the load (the egg top).

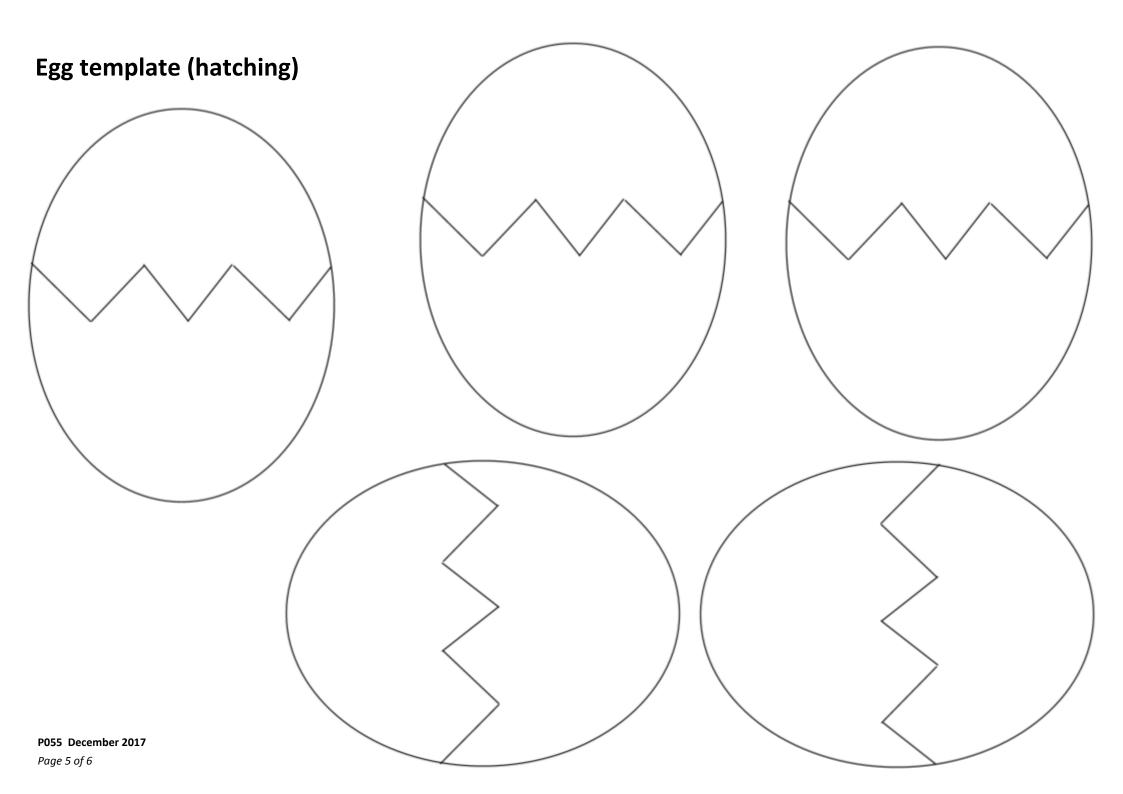






# **Chick template (hatching)**





# Lever template (hatching)