

What's inside an egg?

Science and Technology lesson plan



Area of learning and experience:

Science and Technology

Statements of what matters:

WM3: The world around us is full of living things which depend on each other for survival.

WM4: Matter and the way it behaves defines our universe and shapes our lives.

Descriptions of learning

Progression step 2:

- I can explore relationships between living things, their habitats and their life cycles.
- I can recognise patterns from my observations and investigations and can communicate my findings.

Success criteria

- I can identify the different parts of an egg and explain the function of each part.
- I can use scientific vocabulary accurately when talking about the different parts of an egg.

Key vocabulary

Egg, shell, membrane, yolk, albumen, chalazae, air cell, embryo, nutrient, protection, development, stabilize, observe, describe

Resources needed

- Lesson Presentation
- Child Instructions for Egg Activity
- Egg Observation Sheet
- Labelled Diagram Activity Sheet
- Teacher Instructions for 3D Model
- Chicken egg
- Water balloons
- Yellow modelling clay
- Tissue paper
- Cotton wool pads
- String or thread
- Plastic bowl or half-egg container

Prior learning

Children should already understand the basic idea of animals and life cycles as well as the concept that animals produce eggs or offspring. It would also be helpful if children had prior understanding of basic diagrams and labelling.

Time	Teaching activity	Teacher notes
5 mins	Introduce the lesson using the Lesson Presentation and ask the children the initial questions on the slide. Listen to children's suggestions and address any misconceptions they have about eggs. Explain to children that all eggs are different but similar in their function.	<i>Take ideas from children on what they think is inside an egg and how they know. What do children already know?</i>
10 mins	Tell the children that today you are going to be investigating the hidden structures inside a hen egg. Explain that eggs are designed to protect and feed the developing chick. Everything inside has a purpose. Explore the anatomy of a hen egg with the children, naming each part and explaining the function of each.	<i>Ask children to repeat the names as you go through to ensure they are secure in how to pronounce them. For children that may find using the scientific language difficult, use both the scientific name and a simple comparison e.g. albumen – the egg white.</i>
20 mins	Sort children into groups and introduce the three activities the children will be completing, ensuring they know not to touch the egg cracked into the bowl. Explain that each activity is designed to deepen their understanding of the inside of a hen egg and what each part does to support the development of the chick. Explain each activity in turn so that children fully understand the task. Model the activities, if possible.	<i>Ask children to repeat back instructions either to the whole class or in talk partners to ensure they understand the task. If necessary, assign roles within each group to ensure every child participates.</i>
10 mins	Bring the children back together and discuss what they have learned. Lead the children in the plenary activities to consolidate their knowledge, again addressing any misconceptions.	<i>Reinforce the key vocabulary as you go through the questions. Encourage higher attainers to give detailed explanations for how they know the answer. Accept partial answers from lower attainers.</i>

Lesson reflections / next steps / teacher notes

Assessment opportunities

- Observe children during the individual activities, where possible, and listen to the discussion.
- During the plenary activities, listen to children's answers and explanations for why they gave that answer.
- Can children name each part of the egg and explain what it does?

Suggestions for future learning

- This could lead on to a lesson on comparing the eggs of different animals.
- It could also be used to support an art lesson where children recreate the model of the egg using recycled materials.

Home learning opportunities

- Children could create a short quiz for a family member about the parts of an egg and their functions.