

Overview – Lesson 2 “Life of Birds”

Focus: Birds

Inspired by
Attenborough

Theme/Programme Link	Curriculum Links	Learning Objectives/Lesson Outline	Differentiation	Resources
Lesson 2 “Life of Birds”: Focus – Birds	Design and Technology Working with tools, equipment, materials and components to make quality products 2a. Children select appropriate tools and techniques for making their product b. children suggest alternative ways of making their product, if first attempts fail d. children measure, mark out, cut and shape a range of materials, and assemble, join and combine components and materials accurately Evaluating processes and products 3a. reflect on the progress of their work as they design and make, identifying ways they could improve their products b. carry out appropriate tests before making any improvements Science Sc1 – 2d: make a fair test or comparison by changing one factor and observing or measuring the effect while keeping other factors the same	Learning Objectives: <i>Can I make an aeroplane that emulates the flight of a bird?</i> Lesson Outline: Starter activities/engagement: <u>Birds and aeroplanes</u> Show videos of birds in flight. Look at pictures of early designs for aeroplanes – what are the similarities between the two? Whole class teaching: How does a bird fly? How do they withstand the pull of gravity? What features would help a paper aeroplane fly? Individual work: <u>Paper aeroplanes</u> Get children to work in mixed ability pairs. Who can make the aeroplane which flies the furthest? Get children to think of birds wings and try some different designs. Competition – which plane flew the furthest Extension: Children can try different materials to modify their original design. Plenary: Who’s plane went the furthest? Why?	Mixed ability pairs Templates of aeroplanes for less able to cut, fold and make Adult support of less able	Lesson plan 2 (see next page) Powerpoint 2: Life of Birds – Sir David introduction clip – Evolution of birds clip You will also need: Design and make materials for children to make own plane (paper/card/feathers/tape/glue/elastic bands/material/scissors, etc) Templates for aeroplanes Measuring tape for competition

Lesson plan 2

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Starter activities/engagement:

Birds and aeroplanes

Show children Sir David's introduction to the lesson, then watch the video on birds and discuss birds in flight (slide 1).

Look at pictures of early designs for aeroplanes – use slide 2 – what are the similarities between the two?

Whole class teaching:

How does a bird fly? How do they withstand the pull of gravity?– use explanation slides 3-6.

How does a heavier bird like an albatross manage to take off? (may use YouTube video as example).

How does this relate to how an aeroplane takes off?

What features would help a paper aeroplane to fly? Introduce the term “streamlined” and look at photos of modern planes – use slide 7.

Individual work:

Paper aeroplanes

Use planning templates – slides 8-12

Split children into mixed ability pairs.

Who can make the aeroplane which flies the furthest?

Get children to think of birds wings and draw out some different designs.

Teacher talks to pairs about which design they wish to try first and why.

Stop children and tell them that they are now going to make one design. Make available all necessary equipment.

Children make their favourite design. If they have time they could try a different design.

Encourage trial and error – can they modify any elements to make it better?

Which of their designs worked best? Why?

Competition – each pair enters one plane into a whole class competition – fly each one – which plane flew the furthest?

Talk about how to make it a fair test (keep all elements the same except the plane).

Extension:

Children can try different materials/mixture of materials and modify their original design to make it better.

Plenary:

Whose plane went the furthest? Why? Examine the design.