



Flight Adaptions

YEAR 5 AND 7
BIOLOGICAL SCIENCES
PHYSICAL SCIENCES



QGC

FUTUREMAKERS



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Future Makers

Future Makers is an innovative partnership between Queensland Museum Network and Shell's QGC business aiming to increase awareness and understanding of the value of science, technology, engineering and maths (STEM) education and skills in Queensland.

This partnership aims to engage and inspire people with the wonder of science, and increase the participation and performance of students in STEM-related subjects and careers — creating a highly capable workforce for the future.

Cover image: Sulphur-crested Cockatoo, Cacatua galerita. QM, Peter Waddington.

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This teacher resource is produced by Future Makers, a partnership between Queensland Museum Network and Shell's QGC business, with support from the Australian Research Council and other parties to ARC Linkage Project LP160101374: The University of Queensland, Australian Catholic University Limited and Queensland Department of Education.

Thank you to the University of Queensland School of Education for contributing to a number of the activities included in this workbook.

EXPLAIN

Flight Adaptations

Teacher Resource

Students develop knowledge and understanding about the flight-related adaptations of specific animals, and how these adaptations support survival in various environments. Students use the following table to research and record information about these adaptations, classifying the adaptation as structural, functional or behavioural, then identify how the adaptation helps the animal move through the air and/or survive in its environment. Students could begin their research by viewing the [flight adaptations video](#) presented by Dr Paul Oliver, Senior Curator of Vertebrates at Queensland Museum.

Students could also identify the forces that are acting on these animals as they move through the air, including lift, drag, thrust and gravity. Students can represent the forces acting on different animals in various stages of flight using force-arrow diagrams. They can also identify how researched features and adaptations serve to increase or decrease the effects of these forces.

Curriculum Links

Science

YEAR 5

Science Understanding

Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)

Science Inquiry Skills

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts (AC SIS093)

YEAR 7

Science Understanding

Change to an object's motion is caused by unbalanced forces, including Earth's gravitational attraction, acting on the object (ACSSU117)

Science Inquiry Skills

Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate (AC SIS133)

General Capabilities

ICT Capability

Investigating with ICT

Flight Adaptations

Student Activity

Research Task

- Record the adaptation that allows the animal to move through the air.
- Classify the adaptation based on its type (structural, functional or behavioural).
- Identify how the adaptation helps the animal move through the air and/or survive in its environment.

Adaptation	Type of Adaptation	Survival Adaptation

Flight Adaptations

Student Activity

Draw force-arrow diagrams to represent the forces acting on the bird at each stage of flight. Include lift, drag, thrust and gravity.

