

Dragonflies

Cross-curricular lesson ideas



Below, you will find curriculum-linked lesson ideas and student activity sheets to extend students' learning from the 'Dragonflies – Nature's Flying Machines' unit of work. The education resource materials have been designed for a national audience and are suitable for middle to upper primary students.

Please note: To complete the lessons, students will need access to the 'Facts for students' in the 'Themed curriculum support resources' section of the For Teachers for students website www.forteachersforstudents.com.au.

English

- Students to create a 'big book' for younger students with photos, drawings and facts about dragonflies.
- Students to find definitions for the words on the **'Building my vocabulary'** activity sheet. These words all appear in the facts for students.
- Students to choose two species of dragonfly and compare them using the **'Venn diagram'** activity sheet.
- The dragonflies and damselfly which were featured on the 2017 SCM stamps all have fantastic common names. Students to select one of these and write a narrative in which the main character has that name or nickname. The main character does not have to be a dragonfly.
- Students to create a 'dragonfly' word wall using the **'Alphabet grid'** activity sheet. This can be enlarged to create a class word wall and added to as students learn more about dragonflies.
- Students to read the fact sheets (in the 'Facts for students' section), and then complete one or more of the following activities:
 - answer the questions on the **'Fascinating dragonflies'** activity sheet
 - complete the **'Winged word search'** activity sheet
 - select one of the featured dragonflies and highlight all the adjectives that are used to describe it on the fact sheet.
- Students to watch a selection of videos showing how dragonflies move and behave (there are many of these on YouTube), and then use their knowledge of personification to write a character profile for a dragonfly. What sort of human characteristics would they give it?
- Students to watch 'Sky Hunters, The World of the Dragonfly – The Secrets of Nature' (https://www.youtube.com/watch?v=knIXTU1R_rE) and discuss how features such as music, sound effects and slow motion are used to enhance the viewer's experience.



Dragonflies

Cross-curricular lesson ideas



Mathematics

- Students to test their coordinate plotting skills by completing the '**Dragonfly coordinate drawing**' activity sheet.
- Students to spend 15 minutes outside searching for as many flying insects as they can. They should record their observations and illustrate their findings on a graph. Ask if anyone spotted a dragonfly, and what the most common flying insect was.
- Dragonflies in the Carboniferous period had a wingspan of approximately 75 centimetres. Students to use recycled materials and a ruler to recreate what a wingspan of 75 centimetres would have looked like.

Science

- Students to identify the stages of the dragonfly's life cycle and then chose another insect and compare its life cycle, the similarities and differences. They should consider the number of stages, the length of the stages, habitats (e.g. where the eggs are layed) etc.
- Students to construct a model of an ideal environment/habitat for a dragonfly using natural and organic materials. Students to explain the features of their model.
- Students to define 'ecosystem', and describe what contributes to a healthy ecosystem. Does this vary? How do dragonflies contribute to the ecosystems in which they live?
- Dragonflies have been around for millions of years. To survive for this long, they adapted to their surroundings and evolved amazing features. Students to consider how the behaviour and design of the dragonfly has contributed to their longevity.
- Students to research the role of the dragonfly in its habitat. Is it a producer, consumer or decomposer? Students may need to research these terms.

Humanities and Social Sciences (History, Geography, Civics and Citizenship, Economics and Business)

- Students to brainstorm what they know, want to know and have learnt about dragonflies using the '**Dragonfly KWL chart**' activity sheet.
- Students to research the Carboniferous period (part of the Paleozoic era) and consider why it might have been good for the early dragonflies.
- Dragonflies usually live in freshwater environments. They prefer abundant, slow-moving freshwater that has no fish. This can include streams, ponds and other shallow water. Students to consider if their local area has an environment that could attract dragonflies. If not, work as a class to create one in your school.



Dragonflies

Cross-curricular lesson ideas



The Arts (Dance, Drama, Media Arts, Music, Visual Arts)

- Students to use wire or pipe cleaners to make the veins of a dragonfly wing and then use cellophane or tissue paper to make the transparent part of the wings.
- Dragonflies, particularly males, can have amazing colours and designs on their body and wings. Students to find a picture of a dragonfly and use art materials to create a mosaic of it.
- Students to select video footage (make sure to check copyright issues) of dragonflies and create a sequence that includes music. Ask them what effect the music has. Change the music to see how the effect changes. Students may also wish to experiment with effects such as slow motion.
- Students to create a dance/movement sequence to share with the class. Their sequence must include all the following movements that a dragonfly uses while flying: upwards, downwards, sharp turns and forwards/backwards. Students to select a piece of music to accompany their sequence.

Technologies (Design and Technologies, Digital Technologies)

- Students to use basic computer programming skills and applicable software to program a simple dragonfly animation.

