



# FASCINATING FOSSILS

**SCIENCE | STAGE 5  
TEACHER NOTES**



# VISITING THE AUSTRALIAN MUSEUM

## BRIEFING

A Museum staff member will be on hand to greet your group when you arrive. They will brief your groups about how to move around the Museum and direct you to areas of the Museum you intend to visit.

## BAG STORAGE

There is limited bag storage available on site. It is recommended that students just bring a small carry bag with the essentials for the day, however if required, storage can be provided depending on availability.

## EXHIBITIONS

In addition to any booked educator-led sessions, students and teachers may explore the Museum's exhibitions in their own time. Some special exhibitions may incur an additional charge. It is suggested that students visit the galleries in small groups to prevent overcrowding.

## LUNCH AND BREAKS

It is recommended that students bring their recess and lunch and eat in Hyde Park or Cook & Phillip Park, both of which are across the road from the Museum. Alternative arrangements will be provided in the case of wet weather.

## BYOD AND PHOTOGRAPHY

Students are encouraged to bring their own devices to take photos, video and/or audio to record their excursion. Some temporary exhibitions do not allow photography but you will be advised of this on arrival.

## FREE WIFI

The Museum offers free Wi-fi for onsite visitors. It is available in 30 minute sessions. Students and teachers can log on for more than one session.

## PHOTOCOPYING

Please photocopy the following materials for students and accompanying adults prior to your visit.

## SUPERVISION

Teachers and supervising adults are required to stay with their groups at all times. Disciplining of students remains the responsibility of teachers and supervising adults accompanying the group.

# FASCINATING FOSSILS

## NSW SYLLABUS LINKS - SCIENCE

### KNOWLEDGE AND UNDERSTANDING

	STAGE 5
<b>OUTCOMES</b>	A student: <ul style="list-style-type: none"><li>› analyses interactions between components and processes within biological systems SC5-14LW</li><li>› explains how biological understanding has advanced through scientific discoveries, technological developments and the needs of society SC5-15LW</li></ul>
<b>CONTENT</b>	<b>Living World</b>  <b>LW4</b> The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence. (ACSSU185)  Students: <ul style="list-style-type: none"><li><b>a.</b> describe scientific evidence that present-day organisms have evolved from organisms in the past</li><li><b>b.</b> relate the fossil record to the age of the Earth and the time over which life has been evolving</li></ul>

# SKILLS - WORKING SCIENTIFICALLY

STAGE 5				
	QUESTIONS AND PREDICTING	PROCESSING & ANALYSING DATA & INFORMATION	PROBLEM SOLVING	COMMUNICATING
OUTCOMES	A student: › develops questions or hypotheses to be investigated scientifically SC5-4WS	A student › processes, analyses and evaluates data from first-hand investigations and secondary sources to develop evidence-based arguments and conclusions SC5-7WS	A student › applies scientific understanding and critical thinking skills to suggest possible solutions to identified problems SC5-8WS	A student › presents science ideas and evidence for a particular purpose and to a specific audience, using appropriate scientific language, conventions and representations SC5-9WS
CONTENT	<b>WS4</b> Students question and predict by: <b>a.</b> formulating questions or hypotheses that can be investigated scientifically (AC SIS164, AC SIS198)	<b>WS7.1</b> Students process data and information by: <b>a.</b> selecting and using a variety of methods to organise data and information including diagrams, tables, models, spreadsheets and databases <b>e.</b> identifying data which supports or discounts a question or hypothesis being investigated or a proposed solution to a problem  <b>WS7.2</b> Students analyse data and information by: <b>d.</b> using knowledge of scientific concepts to draw conclusions that are consistent with evidence (AC SIS170, AC SIS204) <b>e.</b> synthesising data and information to develop evidence-based arguments <b>f.</b> evaluating conclusions and evidence, including identifying sources of uncertainty and possible alternative explanations (AC SIS171, AC SIS205)	<b>WS8</b> Students solve problems by: <b>a.</b> describing strategies to develop a range of possible solutions to an identified problem <b>c.</b> applying the processes of Working Scientifically in developing creative solutions to problems <b>f.</b> applying critical thinking in considering suggested proposals, solutions and conclusions, including a consideration of risk <b>g.</b> evaluating different approaches used to solve problems	<b>WS9</b> Students communicate by: <b>b.</b> selecting and constructing an appropriate table, type of diagram, table or graph (histogram or sector, column or line graph) to present information and show relationships clearly and succinctly using digital technologies as appropriate <b>d.</b> proposing ideas that demonstrate coherence and logical progression <b>e.</b> presenting scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations for specific audiences (AC SIS174, AC SIS208)