



Teacher Earth Science Education Programme



Professional Development Workshop Series in Earth and Environmental Science at Geoscience Australia's Education Centre, Canberra

Wednesday 6 March 2024, 2–5pm: Chemistry of the Rock Cycle, Plate Tectonics and Critical Minerals discusses why and where different minerals form, and subsequently where different rocks form due to plate tectonics. The workshop will discuss the geochemistry of the mantle and the crust, controls on mineral formation like temperature and pressure, and why economic and critical minerals only form in certain geological conditions. The workshop will integrate hands-on activities to describe rocks, rock cycle examples, and explore how the properties of rocks provide resources for humans, including for First Nations Australians and for the energy transition.

Tuesday 12 March 2024, 2–5pm: How Geology influences Biology and the Big 5 Extinctions discusses Fossils, Evolution & Extinctions, including life explosions and the Big 5 Extinction events. The workshop will examine how plate tectonic/volcanic/climate/solar system-related events and processes have influenced the evolution of life and led to mass extinctions, and will chronicle life explosions and extinctions throughout the history of the Earth. The workshop will include a hands-on opportunity to view fossil, volcanic and meteorite samples.

The PD workshops will include [hands-on classroom exercises](#), an [overview of the integrated TESEP rock kit](#), [plate tectonic poster](#) and [online resources](#), and an opportunity to learn more about the [role of GA and Education Centre](#).

The topics are focused on teachers of years 7-10 secondary science students and will be of interest to upper primary science years 4-6. Afternoon tea will be provided. Teachers and laboratory technicians are welcome to attend. An ASTA Certificate of PD Attendance will be issued.

Presenter: Phil Gilmore is a TESEP regional coordinator, and a geoscientist with over 25 years of experience and expertise in geological mapping and geodynamics, mineral systems and exploration, outreach and geotourism.

Workshop:

Chemistry of the Rock Cycle, Plate Tectonics and Critical Minerals

Date: Wednesday 6 March 2024

Time: 2 to 5pm Cost: \$35

Venue: Geoscience Australia's Education Centre (101 Jerrabomberra Avenue, Symonston, ACT)

Workshop:

How Geology influences Biology and the Big 5 Extinctions

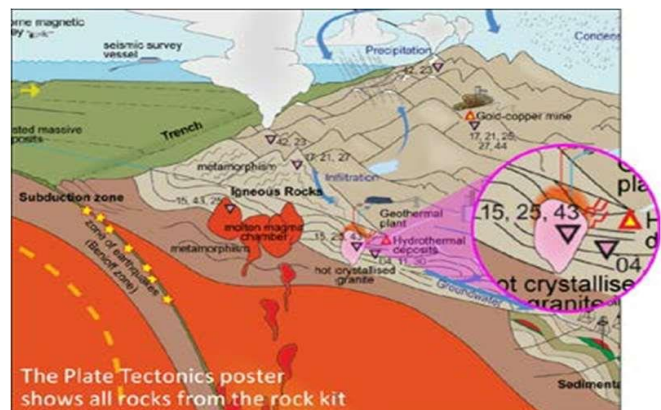
Date: Tuesday 12 March 2024

Time: 2 to 5pm Cost: \$35

Venue: Geoscience Australia's Education Centre (101 Jerrabomberra Avenue, Symonston, ACT)

To register for a workshop:

1. Please complete the following form and email to both registration@tesep.org.au and officemanager@asta.edu.au
2. You will be issued with an invoice by ASTA for payment by direct bank transfer or credit card.



TEACHER EARTH SCIENCE EDUCATION PROGRAMME

* Professional Development * Unique teaching materials * Curriculum resources portal *

See www.tesep.org.au for more information.



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WORKSHOP DETAILS

Please select one of the three options below:

Chemistry of the Rock Cycle, Plate Tectonics and Critical Minerals only

Wednesday 06/03/2024
2 to 5pm
Geoscience Australia
\$35

How Geology influences Biology and the Big 5 Extinctions only

Tuesday 12/03/2024
2 to 5pm
Geoscience Australia
\$35

Both PD workshops

Wednesday 06/03/2024
and
Tuesday 12/03/2024
Geoscience Australia
\$70

YOUR DETAILS

Name:

School:

Teaching area:

Phone (school):

Phone (mobile):

Email:

Postal address (for certificate):

Dietary or other requirements:

PAYMENT DETAILS

The registration fee is \$35 per registrant per workshop or \$70 per registrant for both workshops (incl. GST).

The registration fee is non-refundable – though the fee is transferable to another PD workshop or for another teacher to substitute.

An invoice will be emailed to you by the ASTA (Australian Science Teachers Association, ABN 87 902 882 824). The invoice can be paid by direct bank transfer or by credit card. Contact Michelle Lollback (ASTA Office Manager) officemanager@asta.edu.au if any queries.

CERTIFICATE OF PARTICIPATION

A certificate will be issued by ASTA which states the number of PD attendance hours.

For ACT Teachers: This workshop can be counted towards Teacher Identified hours for TQI accreditation.

Please note that issuing of a certificate is conditional on workshop payment.

Please contact us if any queries or for more information!



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