SCIENCE OF THE SNOWY SCHEME with Kirsten Banks

GOING UNDERGROUND

Multiple choice questions

1

Where are Kirsten and Cameron?

CIRCLE ANSWER

Guthega Power Station

Blue Mountains Power Station

Tumut 1 Power Station

2

How far underground is this power station?

CIRCLE ANSWER

3,000 metres

366 metres

30 metres

How much power is generated at Tumut 1 Power Station?

CIRCLE ANSWER

3,030 megawatts approx

330 megawatts approx

30 megawatts approx

Why build underground?

Use the word bank below to complete the description

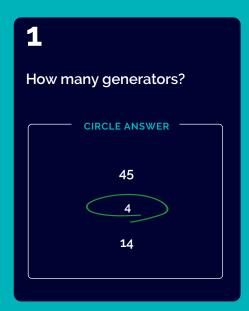
two | low | Tumut 1 | energy | surface | tunnel | stable | water

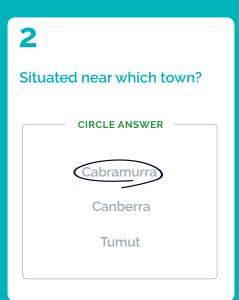
Tumut 1 Power Station is situated between two dams in the Snowy Mountains. To generate as much <u>energy</u> as possible out of the <u>water</u>, the power station was positioned as ___low__ as it could be. The __surface__ rock was loose and unstable. This geological fact contributed to the decision to <u>tunnel</u> in and construct the power station on stable bed rock.

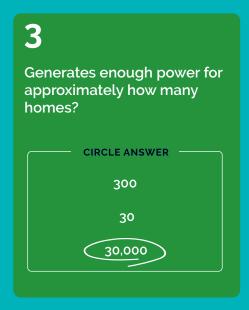


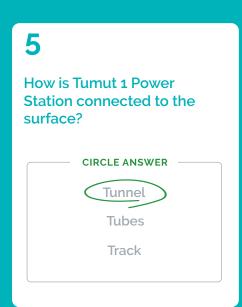


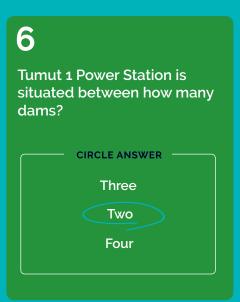
Multiple choice questions | Tumut 1 Power Station













Did you know?

Rock bolting

During construction of the Snowy Scheme, Snowy workers of the time further developed the technique of rock bolting. This provided a safer and cheaper alternative to concrete-lining for supporting rock in tunnel walls. Rock drill designs and drilling techniques also influenced the design of the modern-day masonry drill bit.



Design your own interconnected tunnel system

Hint - label your map either side view or top view

Use the symbols in the legend to create your map

RIVER

UNDERGROUND POWER STATION

TUNNELS

WATER STORAGE

POWER OR PUMPING STATION

Top view (TV) The top view is projected on the horizontal plane - a birds eye view

Side view (SV) The side view is projected on the profile plane

My map of an interconnected tunnel system

Students to design their own tunnel system



