

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

3

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

_____ Power Station is situated between _____ dams in the Snowy Mountains. To generate as much _____ as possible out of the _____, the power station was positioned as _____ as it could be. The _____ rock was loose and unstable. This geological fact contributed to the decision to _____ in and construct the power station on _____ bed rock.



Tumut 1 Power Station

Multiple choice questions | Tumut 1 Power Station

1

How many generators?

CIRCLE ANSWER

45

4

14

2

Situated near which town?

CIRCLE ANSWER

Cabramurra

Canberra

Tumut

3

Generates enough power for approximately how many homes?

CIRCLE ANSWER

300

30

30,000

5

How is Tumut 1 Power Station connected to the surface?

CIRCLE ANSWER

Tunnel

Tubes

Track

6

Tumut 1 Power Station is situated between how many dams?

CIRCLE ANSWER

Three

Two

Four

7

What colour are the generators?

CIRCLE ANSWER

Blue

Green

Orange

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.



Rockbolts

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 |  POWER OR PUMPING STATION |
|  WATER STORAGE | |

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