# 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

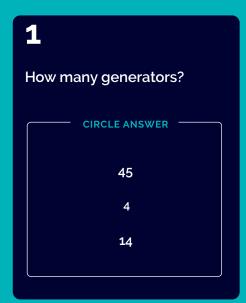
two | low | Tumut 1 | energy | surface | tunnel | stable | water

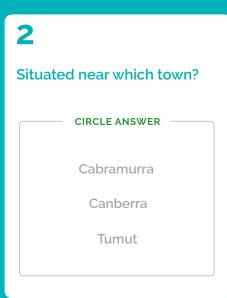
Power Station is situated between		dams in the Snowy Mountains. To
generate as much	as possible out of the	the power station was
positioned as	as it could be. The	rock was loose and unstable. This
geological fact contributed to the decision to		in and construct the power station on
bed rock		

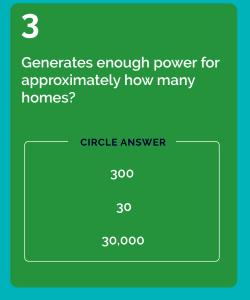


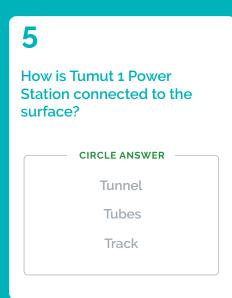


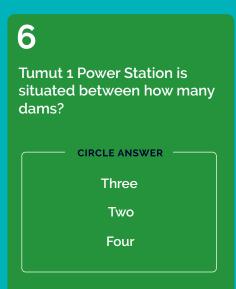
# Multiple choice questions | Tumut 1 Power Station

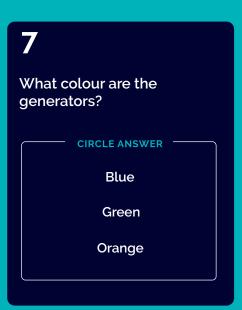








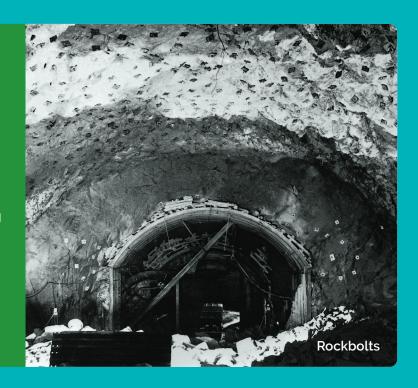




## Did you know?

#### **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



