



# SCIENCE OF THE SNOWY SCHEME

## *with Kirsten Banks*

### SNOWY SCHEME OVERVIEW

#### Multiple choice questions

1

Who is Kirsten Banks?

CIRCLE ANSWER

Astrophysicist

Science communicator

Snowy 2.0 TBM namesake

All of the above

2

Where is the mighty Snowy Scheme situated?

CIRCLE ANSWER

Blue Mountains, NSW

Snowy Mountains, NSW

Melbourne, VIC

3

The Snowy Mountains Scheme was originally developed to mitigate drought. Which way was the water diverted?

CIRCLE ANSWER

Westward

Across the Nullarbor

Eastward

#### Use the word bank below to complete this paragraph

renewables | captures | snowmelt | critical | water | tunnels | reservoirs | underpinning | network | stores | light | diverts

The Snowy Scheme has a \_\_\_\_\_ role in keeping the \_\_\_\_\_ on and \_\_\_\_\_ Australia's transition to \_\_\_\_\_. The Scheme \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ the \_\_\_\_\_ from \_\_\_\_\_ combined with spring rainfall using a complex \_\_\_\_\_ of aqueducts and trans-mountain \_\_\_\_\_. This network channels the water into 16 major \_\_\_\_\_ to be stored as energy in waiting.

## Match the facts and assets

Draw a line connecting the fact/asset to a number

More than \_\_\_\_\_ men and women from over \_\_\_\_\_ different countries worked on the Snowy Scheme

Snowy Scheme was built between

of tunnels

of aqueducts

Hydro power stations

4,215MW

27km

Almost 800m

30

9

80km

100,000

1

145km

33

1949 - 1974

Megawatts of power annually

of Snowy 2.0 new water way tunnels

Snowy 2.0 underground power station

Generating units

Pumping station

## Complete the sentences and questions

Circle the correct answer

**Example** - Tunnels, dams and hydro power stations | coal, rocks and train stations use the power of water to generate clean renewable energy

1. What is Snowy 2.0? A new event in the winter Olympics | pumped-hydro expansion project
2. Is Snowy 2.0 Australia's largest committed renewable energy project? No | yes
3. Snowy 2.0 project will reuse water between two existing reservoirs, Talbingo and Tantangara | Jindabyne and Guthega
4. What does TBM stand for? Totally Big Machine | Tunnel Boring Machine
5. Pumped-hydro provides on-demand dispatchable renewable energy | on-order dispatchable renewable energy.
6. The Snowy 2.0 project will pump when demand is high | low and there is excess renewable energy supply.
7. Snowy 2.0 will generate when demand is high | low, or when other generation sources are not producing, such as seaweed and tide output or outages in nuclear power stations | wind and solar output or outages at base load coal power stations