

Teacher Resource Guide

This Resource:

Includes a teacher guide & student worksheet activities

Contributes to:

Stage 3 (Years 5–6)

- **HS3-HT2-01** - Describes and explains how significant people, events and developments have shaped Australia
- **HS3-HT2-02** - Uses historical concepts (continuity, change, cause/effect, significance)
- **HS3-GE02-01** - Examines how people influence places and environments
- **HS3-GE02-02** - Explains spatial patterns and connections
- **MA3-RAT-C-01** - Uses rates and ratios
- **MA3-MAS-C-01** - Measures and calculates with length, mass, capacity
- **MA3-NUM-C-01** - Solves problems involving whole numbers
- **MA3-ALG-C-01** - Represents and solves problems using equations
- **EN3-CWT-01** - Composes texts for different purposes and audiences
- **EN3-UARL-01** - Understands how texts convey ideas

Exploring Sydney: Then, Now and Beyond

In this resource, students engage in a series of activities that explore Sydney's past, present and future through observation, estimation and problem solving. Using the Sydney Tower Eye as a focal point, students investigate historical events, geographical features and mathematical concepts to better understand how Sydney has developed over time. Students will estimate real-world data, compare structures, solve measurement-based problems and sequence significant events in Sydney's history. The resource also encourages creative thinking, asking students to imagine both future and past perspectives of the city.

Please Note:

This resource has been designed to support Stage 3 students and aligns with the NSW Curriculum in HSIE, Mathematics and English. It is intended to be used as pre-visit and post-visit learning for excursions to the Sydney Tower Eye.

Learning Focus

Students are encouraged to:

- estimate, calculate and interpret real-world data, including height, distance, time and capacity
- apply problem-solving strategies to measurement and rate-based scenarios
- develop spatial awareness by observing and interpreting the layout of Sydney from above
- identify and sequence significant historical events that have shaped Sydney over time
- explore how people interact with and influence natural and built environments
- use creative thinking to imagine past and future perspectives of places

Student Worksheet

Activity 1: Estimate

[Pre-arrival task & excursion activity]

Estimate the answers to the following questions. Check your answers when you arrive at the Sydney Tower Eye.

Question

How much did it cost to construct the Sydney Tower?

\$

\$

How many megalitres of water are there in Sydney Harbour?

litres

litres

When was Sydney founded as a city?

How many years did it take to build the Sydney Tower?

How many tonnes does the Sydney Tower weigh?

How many years has Sydney Tower been open to the public?

How far can you see from the Sydney Tower Eye observation deck?

kilometres

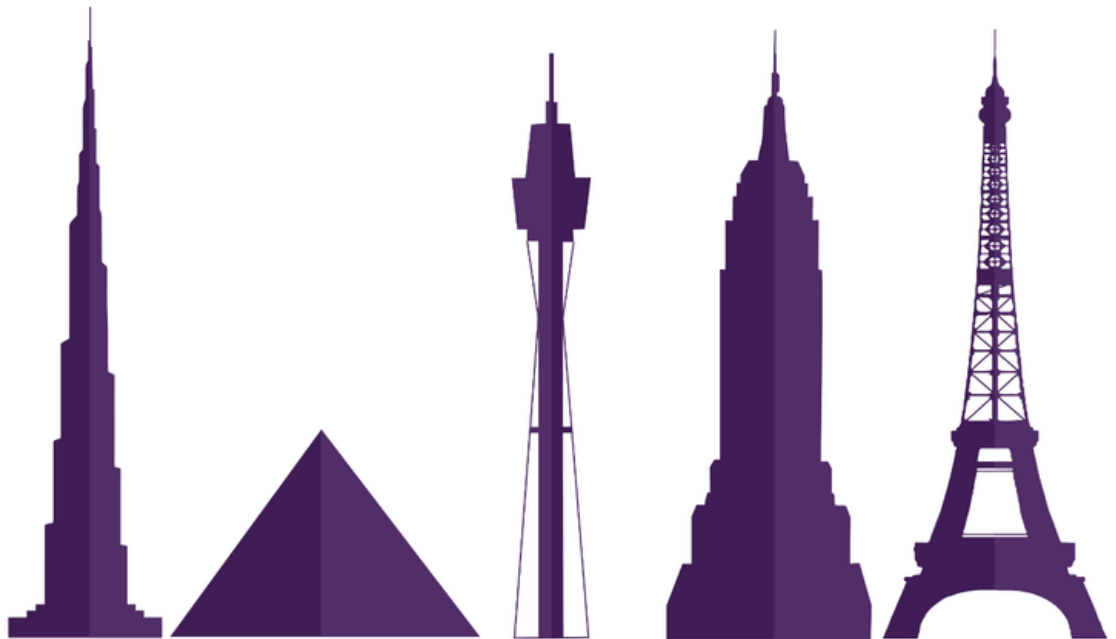
kilometres

Student Worksheet

Activity 2: Tallest to Smallest

Label these towers with their names. Then, order them from tallest to smallest; 1 being the tallest, 5 being the shortest.

Finally, add the height of each tower and answer the questions below!



Name of tower					
Height of tower (in metres)					
Order of towers (tallest to smallest)					

What is the difference in height between the tallest building and the shortest building?

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What is the total height of all the buildings?

.....

Student Worksheet

Activity 3: Problem Solving

Answer the following problem-solving questions.

SKYWALK on the Sydney Tower Eye is 268 metres high. SKYWALK is double the height of the Sydney Harbour Bridge. How tall is the Sydney Harbour Bridge?

.....

.....

1,504 steps go from Pitt Street Mall to the Observation Deck. If you can run up 100 stairs in 30 seconds, at what speed could you run to the top? $Speed = distance/time$

.....

.....

1,504 steps go from Pitt Street Mall to the Observation Deck. If the record for running up the stairs is 6.08 minutes, how many stairs did the record holder climb per second? $Distance = speed \times time$

.....

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There is a 162,000-litre water tank at the top of the Sydney Tower, which acts as a stabiliser for the tower. If 10% of the water was removed, how much water would be left?

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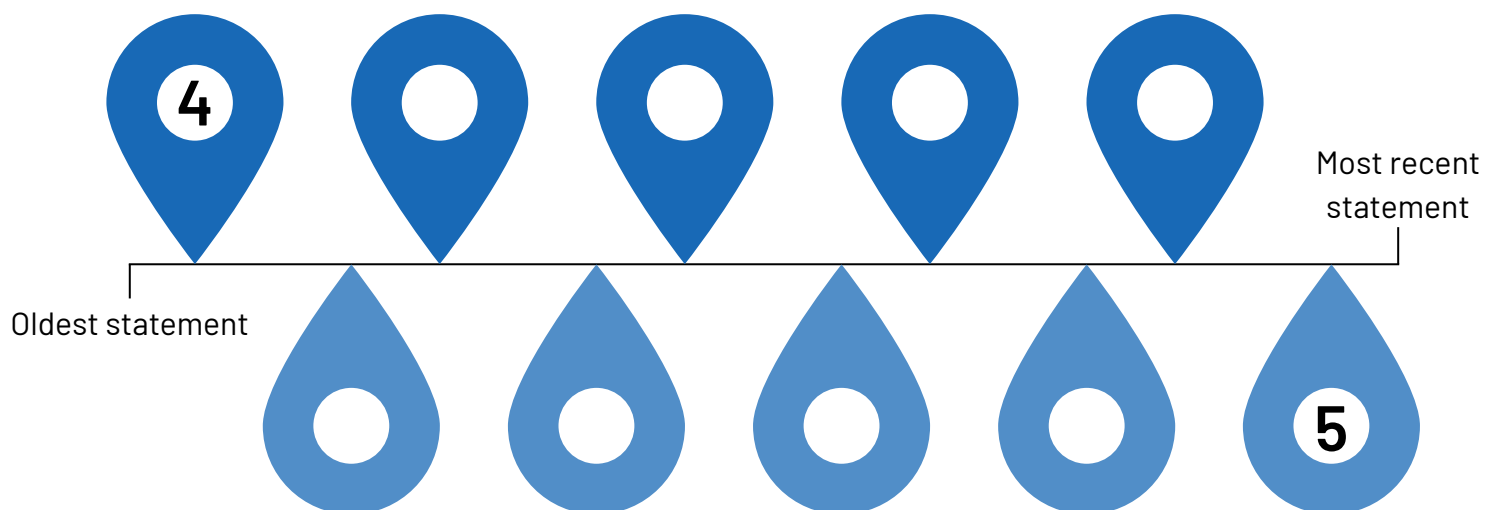
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Student Worksheet

Activity 4: Timelines

Sydney has undergone significant changes since the Indigenous Australians inhabited the area, as evident from the Observation Deck. Put the list of 10 statements below into order from oldest to most recent by using the number next to each statement. We've started for you.

1. The 27th Olympic Games were held in Sydney in the year 2000.
2. Sydney Tower was built in 1981.
3. Construction of Sydney Town Hall Station commenced in 1869.
4. Indigenous Australians have lived in the Sydney region since as far back as 100,000BC.
5. The Sydney Opera House became a World Heritage site in 2007.
6. In 1867, an epidemic of measles struck Sydney.
7. Captain Cook arrived in Botany Bay in 1770.
8. Taronga Zoo opened in 1916.
9. On the 4th August 1906, Central Station was opened.
10. In 1794, the first theatre was built in Sydney.



Student Worksheet

Activity 5: Looking forward

Imagine it is the year 2950. Write an email to your future relatives describing what you can see out of the windows of the Observation Deck.



To...

Cc...

Subject: