

# Time Zones and UTC

Use this worksheet after reading the lesson to practise the key ideas and prove you can meet the success criteria.

Name \_\_\_\_\_  
 Date \_\_\_\_\_  
 Class \_\_\_\_\_

## 1. Key Ideas

When it's Tuesday afternoon in Sydney, it's still Monday in New York. UTC is the anchor — know a city's offset, and you can always find the time anywhere on Earth.

- UTC is the global time reference; all other zones are UTC ± offset
- Why time zones exist — Earth rotates 15° per hour, so noon tracks the Sun

## 2. Success Criteria

By the end, you should be able to:

- UTC is the global time reference; all other zones are UTC ± offset
- AWST = UTC+8; ACST = UTC+9:30; AEST = UTC+10
- Daylight saving adds 1 hour: AEDT = UTC+11, ACDT = UTC+10:30

## 3. Key Terms

### UTC

the anchor — know a city's offset, and you can always find the time anywhere on Earth

### Sydney

in summer, London is in winter — no daylight saving in the UK

### time zone

ahead of (+) or behind (-) UTC

### Calculate what time it

in one city given the time in another

### time

ahead of (+) or behind (-) UTC; e

### Area and perimeter

calculated using the same formula

## 4. Activity: Build the Lesson Map

Use the lesson to complete the table. Keep answers brief but specific.

Prompt	Your answer
Main concept	
Important example	
Common mistake to avoid	
How this links to the next lesson	

## 5. Short Answer Questions

1. Explain this lesson goal in your own words: "UTC is the global time reference; all other zones are UTC  $\pm$  offset". Use one specific example from the lesson.

**BAND 3** **2 MARKS**

---

---

---

---

2. Apply this idea to a new example: "AWST = UTC+8; ACST = UTC+9:30; AEST = UTC+10". Show your reasoning clearly.

**BAND 4** **3 MARKS**

---

---

---

---

3. Analyse why this idea matters for understanding Time Zones and UTC: "Daylight saving adds 1 hour: AEDT = UTC+11, ACDT = UTC+10:30".

**BAND 5** **4 MARKS**

---

---

---

---

---

## 6. Extend: Apply the Idea

**BAND 5/6** **5 MARKS**

**A student gives a memorised answer about Time Zones and UTC but does not use evidence or reasoning.**

Improve the answer by writing a stronger response that uses accurate terminology, a relevant example and a clear explanation.

---

---

---

---

---

---

## 7. Multiple Choice

1. What is the best first step when answering a question about Time Zones and UTC?

- A. Identify the key concept being tested
- B. Write every fact from memory
- C. Ignore the command word
- D. Skip examples and evidence

2. Which answer would show stronger understanding of Time Zones and UTC?

- A. An answer with accurate terms and reasoning
- B. A copied definition only
- C. A single-word response
- D. An answer with no example

3. What should you do if a question asks you to explain?

- A. Link the idea to a reason or cause
- B. List unrelated facts
- C. Only draw a diagram
- D. Write the shortest possible answer

## 8. Success Criteria Proof

Finish with evidence that you can do each success criterion.

### SUCCESS CRITERION 1

Prove that you can: UTC is the global time reference; all other zones are UTC  $\pm$  offset

**BAND 3**   **2 MARKS**

---

---

---

---

### SUCCESS CRITERION 2

Prove that you can: AWST = UTC+8; ACST = UTC+9:30; AEST = UTC+10

**BAND 4**   **3 MARKS**

---

---

---

---

### SUCCESS CRITERION 3

Prove that you can: Daylight saving adds 1 hour: AEDT = UTC+11, ACDT = UTC+10:30

**BAND 5**   **4 MARKS**

---

---

---

---

One thing I still need help with:

---

---