World timekeepers back future leap hour

LEVEL B1


Photo: Catrina Carrigan / Unsplash

I. WARM-UP

1. How do you check the time each day?
2. Have you ever changed clocks for daylight saving?
3. Why do computers need very accurate time?

II. KEY VOCABULARY

adopt
to start using a plan or rule officially

delegate
a person chosen to represent a country or group at a meeting

rotation
the act of turning around a centre; Earth's daily spin

atomic
relating to atoms; here, used for very accurate clocks

precise
exact and correct, with very small errors

drift
to move slowly away from the correct position or time

infrastructure
the basic systems a country needs, like power and networks

probability
the chance that something will happen, shown as a percentage

III. READING

Delegates from 69 countries met in Versailles, France, at a conference of the International Bureau of Weights and Measures and voted to replace the leap second with a leap hour. The change will be adopted from next year to protect computers and national infrastructure from timing problems.

Under the new plan, Coordinated Universal Time (UTC) may drift by up to one hour from astronomical time before a leap hour is used. Experts say that step will not be needed for thousands of years. Dr Setnam Shemar of the UK's National Physical Laboratory welcomed the move and compared it to daylight saving.

Since 1972, officials have added 27 leap seconds because Earth's rotation is irregular. Atomic clocks are far more precise: one second is 9,192,631,770 vibrations of the caesium atom.

Recently, the rotation sped up, creating a 30% probability of a first negative leap second in the next decade, which pushed the vote forward.

Reading text adapted from reporting by **The Guardian***: "How an accelerating Earth led experts to...". Original article linked at theenglishwire.com.*

IV. COMPREHENSION QUESTIONS

1. Who decided to replace the leap second with a leap hour?
2. When will the new system start to be used?
3. How far may UTC drift before a leap hour is added?
4. How many leap seconds have been added since 1972?
5. What recent risk pushed the vote forward?

V. DISCUSSION

1. Is a leap hour better than a leap second? Why?
2. How could time changes affect travel or daily life?
3. Should timekeepers prioritise technology needs or tradition?
4. Is comparing a leap hour to daylight saving helpful? Why?

VI. GRAMMAR FOCUS

Future continuous

Use will be + verb-ing for an action in progress at a specific future time or a temporary future activity. Form: will be + -ing (will be testing, will be reviewing).

*"Next year, experts **will be adopting** a leap hour."*

*"At this time tomorrow, systems **will be syncing** with UTC."*

VII. GRAMMAR EXERCISE

Complete the sentences with the future continuous form.

1. Next year, many labs (monitor) ___ UTC drift. _____
2. At midnight tomorrow, systems (update) ___ security logs. _____
3. This time next week, technicians (compare) ___ atomic clocks. _____
4. In a few years, engineers (adjust) ___ software for leap hours. _____
5. Tomorrow afternoon, servers (coordinate) ___ backup timing. _____

Teacher's Notes

TEACHERS ONLY

These notes are designed to help you get the most out of this lesson. Please do not share this page with students.


Photo: Catrina Carrigan / Unsplash

I. LESSON GUIDE

- Timing: 6–8 minutes warm-up, 8–10 minutes vocabulary, 12–15 minutes reading, 10 minutes comprehension, 10 minutes grammar, 10 minutes discussion.
- Pre-teach time terms on the board (UTC, leap year, daylight saving) and show a simple world clock image to activate knowledge before reading.
- Run a skim-read for the main idea, then a scan for numbers (69, one hour, 27, 30%). Pair-check answers before open class; this is a technical topic, so allow quick clarification of terms on the board.
- Differentiation: stronger students summarise the second and third paragraphs in 40 words; others match vocabulary to definitions and add one example sentence each.

II. DISCUSSION FACILITATION TIPS

1. Take a quick show of hands, then pair students to defend the other side for balance.
2. Elicit concrete examples (flights, meetings, apps) and push for one solution per example.
3. Split the room: one side argues for stability, the other for tradition; then swap roles.
4. Ask for one similarity and one difference between the two, then vote on clarity for users.

III. EXTENSION ACTIVITIES

Debate: In small teams, prepare and deliver a two-minute case for or against the leap hour, with one example and one risk.

Writing: Write a 70–90 word notice explaining the change to company staff who will see time stamps on systems.

IV. ANSWER KEY OVERVIEW

Comprehension questions: short factual answers from the text.

Grammar exercise: Future continuous

Discussion: open-ended. Accept any reasonable ideas supported by examples and reasoning.

Answer Key

TEACHERS ONLY

These answers are for teachers only. Please do not share this page with students.


Photo: Catrina Carrigan / Unsplash

IV. COMPREHENSION QUESTIONS

1. Who decided to replace the leap second with a leap hour?
   Delegates from 69 countries at a meeting in Versailles.
2. When will the new system start to be used?
   From next year.
3. How far may UTC drift before a leap hour is added?
   By up to one hour.
4. How many leap seconds have been added since 1972?
   27.
5. What recent risk pushed the vote forward?
   A 30% chance of a first negative leap second in the next decade.

V. DISCUSSION

Open answers. Accept any reasonable ideas supported by examples and reasoning.

VII. GRAMMAR EXERCISE

Complete the sentences with the future continuous form.

1. Next year, many labs ___ UTC drift. **will be monitoring**
2. At midnight tomorrow, systems ___ security logs. **will be updating**
3. This time next week, technicians ___ atomic clocks. **will be comparing**
4. In a few years, engineers ___ software for leap hours. **will be adjusting**
5. Tomorrow afternoon, servers ___ backup timing. **will be coordinating**

VI. GRAMMAR FOCUS

Key point: Use will be + verb-ing for an action in progress at a specific future time or a temporary future activity. Form: will be + -ing (will be testing, will be reviewing). (Examples constructed.)

"Next year, experts **will be adopting** *a leap hour."*

"At this time tomorrow, systems **will be syncing** *with UTC."*