Science and Innovation

Note-taking: school weather stations | Cambridge IGCSE ESL 0510/0511

1. Lead-in discussion

Talk with a partner before you read.

1. What weather information do people check most often?
2. Why might students collect weather data at school?
3. How can science projects be useful outside the classroom?
4. Would a weather station interest students in your school?

Exercise 3 at a glance

In this activity, you will read one factual text and complete notes using information from the text. In the exam, this task is usually worth 7 marks. This practice version includes extra notes to help you build confidence. Use short words or phrases from the text, not your own ideas.

2. Read for overall understanding

Read the text. How can school weather stations support learning?

School Weather Stations

A school weather station is a small set of instruments that records local weather conditions. It may include a thermometer, a rain gauge, a wind vane and a sensor for air pressure. Students use the equipment to collect real data instead of only reading examples in a textbook. This can make science lessons feel more connected to everyday decisions. For example, students may compare a forecast with what actually happens in the school playground.

In one project, students checked the temperature each morning, measured rainfall and recorded wind direction. They compared their results with forecasts on national weather websites. When the figures were different, they discussed possible reasons, such as the position of the school building or the height of the rain gauge. This helped students understand that scientific measurements can be affected by where and how they are taken.

Weather stations can support other subjects too. In geography, students may use data to study microclimates around the school grounds. In maths, they can calculate averages, draw graphs and identify patterns over time. Some schools share their results with local gardening clubs, because information about frost, rainfall and dry periods can help people protect plants. This gives the project a real audience beyond the science classroom.

The project is not difficult, but it needs routine. Instruments must be checked at the same time each day, and students need a clear system for recording results. If data is missing, the pattern becomes less reliable. Teachers say the best part is that students begin asking their own questions, such as why one part of the playground is warmer or why heavy rain does not always fill the gauge. These questions can lead to small investigations that are more memorable than copying definitions from a board.

3. Strategy focus

Look for the measured detail

When a text describes equipment, the answer may be what it measures, not the name of the equipment itself.

4. Practice note-taking task

Complete the notes using information from the text. Use short words or phrases from the text. Do not add your own ideas.

Notes	Write short answers
Weather conditions recorded	- ..... - ..... - .....
Equipment used	- ..... - ..... - .....
Links with other subjects	- ..... - ..... - .....
Routines needed for reliable data	- ..... - ..... - .....

5. Vocabulary notebook

Underline five useful words or phrases from the text. Check their meaning, then record them in your vocabulary notebook.

6. Follow-up tasks

1. Discussion: What weather data would be most useful in your local area?
2. Strategy: Choose three answers and remove any extra words that are not needed for a clear note.
3. Writing: Write a short report about how a school could use weather data.
4. Vocabulary: Circle words and phrases connected to science, data and weather.

ANSWER KEY

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Note-taking: school weather stations

2. Read for overall understanding

Suggested answer: they help students collect real data and connect science to everyday decisions.

4. Practice note-taking task

Weather conditions recorded

- temperature
- rainfall
- wind direction

Equipment used

- thermometer
- rain gauge
- wind vane

Links with other subjects

- study microclimates
- calculate averages
- draw graphs

Routines needed for reliable data

- checked at the same time each day
- clear system for recording results
- data is missing / pattern becomes less reliable

Notes for checking

This is an extended practice version of the IGCSE ESL note-taking task. The live exam normally has fewer marks, but this version includes extra notes to build confidence and selection skills.

Accept short phrases that keep the same meaning.

Learners should avoid copying a whole sentence if a shorter note answers the heading.

Some answers need more than one or two words, especially when the key detail is a phrase.