

Answers: Saturn

Marking guidance - Value reasoning as well as the selected answer

1 to 4 | Identify

1. Gas giant.
2. Accept a correct location or orbital relationship.
3. Rotation: 10 h 42 min; orbital period: 29.45 years.
4. Temperature: ≈ -140 °C at cloud level; also accept a correct environmental feature.

5 and 6 | Read and compare

5. Each figure needs its unit and measured quantity.
6. The explanation should preserve the meaning of this comparison: Its diameter is a little over 9 times Earth's.

Teaching point

A rounded figure is still a useful estimate. The size of a drawing does not prove that its proportions are correct. A comparison must state its reference.

Answers: check and explain

English learning edition - September 2026

7. A. Enceladus

Enceladus's plumes reveal an ocean beneath its icy crust.

8. A. Cassini-Huygens

Cassini-Huygens transformed our understanding of Saturn and its moons.

9. B. A hexagon

A persistent atmospheric jet stream forms a remarkable hexagon around the north pole.

10. A. Yes, on average

Its average density is lower than water's, although no swimming pool could possibly hold it.

11 to 13 | Quantities and models

- 11. Accept two units from the table correctly linked to their quantities.
- 12. Bodies can be enlarged or distances compressed for readability, but this must be stated.
- 13. Accept accurate similarities and differences supported by a fact sheet or scientific source.

Answers: investigate and write

English learning edition - September 2026

14 | Observation or fact

Accept an accurate sentence describing a checkable characteristic or figure. Do not accept an opinion presented as a fact.

15 | Scientific question

The question should be investigable through observations, measurements, comparisons or a mission. Reward precise, testable wording.

Mini-mission | Suggested marks out of 10

Description of the environment: 0-2.

Three correctly used scientific terms: 0-2.

Clear exploration objective: 0-2.

Plausible mission and coherent account: 0-2.

Between 5 and 7 clear sentences: 0-2.

Adaptation

Accept spoken explanations when appropriate. For further challenge, require data and distinguish observation, interpretation and conclusion.

Sources and limitations

NASA Science: <https://science.nasa.gov/saturn/facts/>

Online fact sheet: <https://systeme-solaire-3d.fr/en/saturne>

Values are rounded. The artistic view changes sizes and distances for readability. Check dated information before reusing it.