International Everest Day
(May 29, 2026)

TEACHING GUIDE

ℹ️ **What?** International Everest Day, which celebrates the first successful ascent of the world's highest peak.

👤 **Who?** Edmund Hillary, a New Zealander, and Tenzing Norgay, a Nepalese Sherpa, the first two humans to reach the summit.

🌍 **Where?** On Mount Everest (8,849 m), located on the border between Nepal and China (Tibet), in the Himalayas. 🧗

🚨 **When?** On May 29, 1953, a date commemorated every year since.

❓ **Why is it important?** Because this achievement marks one of the greatest moments in human history.

🎯 **For this activity, your goal will be to learn more about Mount Everest.** ⛰️

OBJECTIVES

- Discover the Himalayan mountain range and locate Mount Everest
- Compare peaks using numerical data (Everest, Olympus Mons, Mauna Kea)
- Solve mathematical problems using real-world data
- Understand the effects of altitude on the human body
- Develop the ability to read and interpret various resources (videos, articles, diagrams)

COMPETENCIES

- Researching and interpreting information
- Solving problems
- Analyzing situations
- Making connections between different pieces of information
- Organizing one's ideas

SUBJECTS

- **Science / Human Body**
  - Effects of Altitude on the Body
  - Respiratory and Circulatory Systems
  - Acclimatization
- **Mathematics**
  - Comparing Measurements
  - Division and Operations with Large Numbers
  - Unit Conversion (Meters, Kilometers, Hours)
- **Geography / Social Studies**
  - The Himalayas and Countries Traversed
  - The Sherpa People
  - The Solar System (*Olympus Mons*, Mars)

DURATION

- Approximately 45 minutes

GETTING STARTED

- Ask students if they know about Mount Everest
- Ask them which, in their opinion, is the highest mountain in the world
- Ask the question: why do we say that climbing Everest is dangerous?
- Show a photo of Everest and ask to estimate its height
- Collect their hypotheses about what happens to the human body at very high altitudes

ATENA
LEARNING MADE RELEVANT

ADVENTURERS

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QUESTIONS AND ANSWERS

STEP 1 — The Himalayan Mountain Range. Discovery of the Himalayan mountain range through a video. Answers to five comprehension questions.

Q1 — Any three of the following: Afghanistan, Pakistan, India, China, Nepal, Bhutan.
Q2 — By a collision between two tectonic plates (the Indian plate shifted north and collided with the Eurasian plate, pushing the land upward).
Q3 — The Sherpas.
Q4 — Approximately 50 million inhabitants.
Q5 — Altitude sickness is caused by low oxygen levels at high altitude, making you dizzy and nauseous. Most Himalayan people don't suffer from it because they have acclimatized over thousands of years.

STEP 2 — The Giant of the Solar System. Comparison of Mount Everest with *Olympus Mons* (Mars) and Mauna Kea (Hawaii) using a diagram. Solving four math problems.

Q6 — 21,229 m ÷ 8,849 m = 2.4 times!
Q7 — 21.2 km ÷ 5 km/h = 4 h 15 minutes!
Q8 — 4,207 + 6,003 = 10,210 m
Q9 — 10,210 m − 8,849 m = 1,361 m

STEP 3 — A Dangerous Climb. Reading an article from the National Geographic website about the dangers of climbing Everest, then identifying the effects of altitude on four parts of the human body.

Q10 — Headaches, difficulty thinking clearly.
Q11 — Breathing becomes increasingly difficult (reduced ability to breathe in enough oxygen).
Q12 — The heart works harder to pump blood and deliver oxygen. The body produces more red blood cells because they bring more oxygen to the brain.
Q13 — They can freeze! (frostbite) — because the heart prioritizes vital organs; fingers and toes receive blood last.

WRAPPING UP

- Conduct a group discussion about what the students have learned.
- Discuss what surprised them most (the size of Olympus Mons, its effects on the body, the role of the Sherpas).
- Ask: Would you be willing to attempt to climb Everest? Why?
- Make a connection between science (the human body) and geography (the Himalayas, the solar system).

FURTHER EXPLORATION

🎥 *Everest* (PG-13). Directed by Baltasar Kormákur.