

Podcast Title: “Geo-Physics: The Pulse of the Earth”

Technical Sheet

Audience: Students aged 12–13 (Year 7 / 8th grade equivalent).

Duration: 8 minutes.

Objective: To understand that gravity is not just “falling down,” but the force that shapes the landscapes we study in Geography.

Program Outline

1. Introduction: “The Glue of the World” (1:30 min)

Hook: “Have you ever wondered why the Nile River doesn’t ‘fall off’ the Earth even though it’s in the Northern Hemisphere, or why water always flows downward?”

Definition: Explanation of gravity as the force that pulls objects toward the center of a planet.

Movie example: Brief mention of *Gravity* (where they float because they are in free fall) versus *Interstellar* (where they can walk because there is mass attracting them).

2. Geography in Motion: Rivers and Glaciers (2:30 min)

The journey of water: Explain that rivers exist because gravity pulls water from high mountains down toward the sea.

Relief: How gravity causes rockfalls and makes glaciers slide, “sculpting” the valleys we see on maps.

3. Is the Earth Round? (2:00 min)

Shape of the planet: Gravity pulls so strongly toward the center that it makes the Earth almost a sphere.

Geographical curiosity: Explain that gravity is not the same everywhere. At the Poles you weigh slightly more because you are closer to the center, while at the Equator you weigh less because Earth’s rotation “pushes” you outward.

4. The World Upside Down: What Would Happen If...? (2:00 min)

Final reflection: A hypothetical scenario. Without gravity, the atmosphere would escape, the oceans would float away, and there would be no relief because nothing would “fall.”

Closing: An invitation to look at a mountain and see gravity in action.