



DROPS OF KNOWLEDGE

1 Introduction

Topic: Every Drop of Water is Important

Goals: Learn English vocabulary, practice speaking, discuss environmental responsibility, integrate knowledge from different subjects.

2 Task Description

Task: Students will explore the importance of water from multiple perspectives. They will work in groups representing different subjects (Biology, Chemistry, Geography, History, Economics, Environmental Science). Each group will prepare a 2–3 minute presentation explaining why water is important from their subject's viewpoint, using facts and academic phrases. They will also participate in a class debate on water use.

3 Fact Sheets (per Subject)

Biology

- Human body is ~60% water; brain ~75%
- Plants need water for photosynthesis
- Animals and plants die from dehydration
- Wetlands are highly productive ecosystems
- Speaking Phrases: From a biological point of view..., Living organisms depend on water because...

Chemistry

- Water = H₂O, universal solvent
- Chemical pollution contaminates drinking water
- Oil spills and microplastics are dangerous
- Speaking Phrases: Chemically speaking..., Water dissolves many substances...

Geography

- 70% of Earth covered by water; only 2.5% freshwater
- Droughts, melting glaciers, population growth increases demand
- Speaking Phrases: Geographically speaking..., Freshwater is unevenly distributed...

History

- Civilizations developed near rivers: Nile, Tigris, Indus
- Wars fought over water, Industrial Revolution caused pollution
- Speaking Phrases: Historically, water has played a key role in..., Ancient civilizations depended on...

Economics

- Agriculture uses 70% of freshwater; industry 20%
- Producing one T-shirt = 2,700 liters of water
- Water scarcity affects food prices
- Speaking Phrases: Economically speaking..., Water is a valuable resource because...

Environmental Science (Optional)

- Water cycle: evaporation, condensation, precipitation
- Pollution disrupts ecosystems
- Sustainable water use is necessary
- Speaking Phrases: From an environmental perspective..., Sustainable water management means...

4 Cross-Curricular Speaking Task

- Students split into groups by subject.
- Prepare a 2-3 minute presentation.
- Use at least 3 facts and 3 academic phrases.
- Include 1 suggested solution.
- Present to the class and answer questions.

5 Debate Card Activity

- Topic: "Water should be more expensive to stop waste"
- Each group receives a card: PRO or CON.
- Guidelines:
 1. Prepare 2-3 arguments.
 2. Use subject-specific facts.
 3. Ask 1 question to the opposing team.

Example PRO Card:

- Water is scarce, especially in agriculture.
- Raising the price encourages responsible use.
- People waste less if water has a cost.

Example CON Card:

- Water is a human right.

- Poor people cannot afford expensive water.
- Education is better than pricing.

6 Assessment Rubric

Criteria	Excellent	Good	Needs Improvement
Subject knowledge	Clear, accurate facts	Some facts	Limited knowledge
English language	Fluent, varied vocabulary	Minor mistakes	Frequent mistakes
Argumentation	Logical & convincing	Some arguments	Weak reasoning
Teamwork	Equal participation	Mostly equal	Uneven participation