



## CLIL LESSON PLAN

# The Great Journey of Water: From Ice to Cloud



## LESSON OVERVIEW

|            |                                             |
|------------|---------------------------------------------|
| Subject(s) | Physics & Chemistry · Environmental Studies |
| Age Group  | 7–10 years old                              |
| Duration   | 45 minutes                                  |
| CEFR Level | A2                                          |



## LEARNING OBJECTIVES

### Content Objectives

- Students will be able to identify and name the three states of water (solid, liquid, gas) in their daily life.
- Students will be able to classify different uses of water into simple categories (domestic use, recreational use).
- Students will be able to describe, using simple language, a change of state of water they have observed (e.g., ice melting, water evaporating).
- Students will be able to explain why water is essential for living beings (people, animals, plants).

### Language Objectives

- Students will be able to identify and correctly use key vocabulary related to the states of water (solid, liquid, gas) and its uses (domestic, recreational) by matching spoken or written words to images or diagrams.
- Students will be able to follow and respond to two-step oral instructions related to the practical activity (e.g., "Put the ice in the glass and wait").
- Students will be able to complete simple summary sentences using the key vocabulary.
- Students will be able to construct short, simple sentences to describe where they use water at home.
- Students will be able to interact in the classroom using Language for Learning to work in groups.
- Students will be able to ask simple questions using familiar structures (e.g., "What is this?" / "What do we use water for?").



## COMMUNICATION SKILLS

- Read and match simple labels with images of the three states of water (Solid, Liquid, Gas).



- Read short, numbered instructions (steps of an experiment or classification), focusing on action verbs (e.g., "Put," "Wait," "Classify").
- Listen to and follow the teacher's instructions of up to two steps to carry out the practical activity.
- Listen to and understand basic knowledge questions and respond with one or two words.
- Label the different states of water in a diagram.
- Write the answer to a simple question on the Exit Ticket (e.g., "What do you use water for at home?").
- Orally describe the three states of water using simple adjectives (e.g., "Ice is solid and cold").
- Share with a partner or the group one use of water at home.
- Use language for learning to interact during group work.

## GRAMMAR, VOCABULARY & PRONUNCIATION

### Language of Learning (CALP)

The terms below relate to water state changes and the water cycle as a natural process. They are organised into two conceptual groups to avoid confusion between everyday phenomena and specific scientific processes.

**States of water and their changes:** solid, liquid, gas (water vapour); melting (solid → liquid), evaporation (liquid → gas), condensation (gas → liquid).

Note: boiling is a rapid form of evaporation occurring at a specific temperature and is not a standard stage of the natural water cycle; it may be mentioned briefly if it arises spontaneously in the experiment.

**The water cycle:** evaporation, condensation, precipitation.

Students at this level are not expected to produce these terms in writing independently. However, as they are likely to know several of these concepts in their first language, the teacher should actively elicit prior knowledge before presenting the English term: "Do you know what this is called in your language?" Receptive recognition is the minimum expectation; active oral use is encouraged where prior knowledge allows.

### Language for Learning (BICS)

#### Cooperation Phrases (Group Work):

- "Can you pass me the glass?" • "How do you spell [word]?" • "I'm going to put this here."

#### Confirmation / Question Phrases:

- "Is this liquid water?" • "I don't know where to classify this." • "Can you help me with this use?"

#### Classroom Instructions:

- "Move your chair." • "Wait your turn." • "Let's start the activity."



## Language Through Learning (not planned)

Spontaneous language that arises from surprise during the state-change experiment (e.g., "Look, it melted!", "It's very hot!", "It smells like vapour!").

## COGNITION

### LOTS — Remembering, Understanding, Applying

- What are the three states of water?
- What functions does water have for life?
- Can you classify these cards showing uses of water? For example: Is washing clothes a domestic use or a recreational use?

### HOTS — Analysing, Evaluating, Creating

The objective of this lesson plan for ages 7–10 (BICS) is identification and basic application (LOTS). HOTS tasks are none or minimal, serving only as a small optional extension at the end of the lesson.

## GUIDING QUESTIONS FOR TEACHERS

### Pre-lesson and in-lesson self-reflection:

- Have I introduced and displayed the three states of water (solid, liquid, gas) and the supporting vocabulary (ice, melting, evaporation, condensation) before asking students to use them in the experiment and classification activity?
- Do my students know these concepts in their first language, and have I created a moment to elicit that prior knowledge before presenting the English terms?
- Have I modelled the active sentence structure ('We use water to...'; 'Water becomes...') before students are expected to produce it, and have I avoided passive constructions in my own modelling?
- Is the ice experiment viable in my classroom today — do I have the materials, and have I prepared an alternative in case there is no direct sunlight or access to a heat source?
- Have I made the two classification categories (Domestic Uses / Recreational Uses) clear enough for students to apply them independently, and have I checked comprehension with an ICQ before the card activity?
- After the lesson, can students describe what happened to the ice using the target vocabulary, and do I have evidence of this from the exit ticket?

## CULTURE

**Water Routines:** Students are encouraged to share where they use water at home before coming to school (showering, drinking, brushing their teeth). This uses everyday communication language to link it directly to the content.



**Food and Water:** There is a brief discussion about how water is essential for cooking and for the student's favourite food (e.g., "Do we need water to cook food?").

**Water as a Resource:** Awareness is promoted that water is a very valuable and limited resource.

**Simple Water Saving:** Simple actions that children can do to save water at home are discussed (e.g., turning off the tap while brushing their teeth).

**Intercultural Perspective:** Students are invited to share what water is like in their place of origin — for example, whether there is a lot of rain, very little water, or whether the water tastes different.

## ★ 21ST-CENTURY SKILLS

### BICS-Related Skills

**Communication:** Students describe the three states of water orally during the warm-up gesture activity and the experiment, using the target sentence frames.

**Collaboration:** Students work in pairs throughout the experiment and the card classification activity, making joint decisions about the state of water observed and the category of each use card.

**Social & Cross-Cultural Skills:** The Culture section invites students to share what water is like in their place of origin and to discuss water-related habits from different cultural backgrounds.

**Time Management:** Students must complete the card classification within the time allocated by the teacher in order to participate in the wrap-up.

### CALP-Related Skills

**Critical Thinking:** Students observe the ice melting experiment and must interpret what they see, connecting the physical change to the concept of state change. During the card classification activity, students must decide which category each use of water belongs to.

**Problem-solving:** The experiment presents a concrete observable problem: why does the ice change? Students must formulate a description of what happened using the target vocabulary.

**Productivity & Accountability:** Students are responsible for completing both the experiment observation and the card classification within the allocated time. The exit ticket functions as an individual accountability measure.

## 📄 METHODOLOGY

| Duration | Lesson Flow               | Activities                                                                                                                                                                                                     | Materials Needed                                     | AI Tools Integration                                                                                                                   |
|----------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 5–10'    | <b>Warm-up Activities</b> | <b>Classify the Image!</b><br>The teacher shows picture cards (cloud, rain, ice, glass of water, steam from a kettle) and asks: "What state is this?" Students respond orally using: solid, liquid, gas. Note: | Water state picture cards.<br>• Whiteboard / Screen. | <b>TTS (Text-to-Speech) Tool:</b><br>Use a TTS tool to play the target vocabulary with correct pronunciation: solid, liquid, gas, ice, |



| Duration | Lesson Flow     | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Materials Needed                                                                                                                                                      | AI Tools Integration                                                                                                                                                                                                                         |
|----------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |                 | <p>steam is treated as a visible example of the gaseous state. The teacher clarifies: "When water is very hot, it becomes a gas — we sometimes call it steam or water vapour." Before moving on, the teacher asks students whether they know any of these words in their first language and writes the English equivalent on the board alongside the L1 term. Choral repetition follows for each of the three forms.</p> <p><b>Activity: Shower, Freeze or Melt!</b><br/>Three gestures are introduced and practised beforehand:</p> <ul style="list-style-type: none"> <li>• Liquid: hands flowing downwards (like water running).</li> <li>• Solid: arms crossed and rigid (like a frozen block).</li> <li>• Gas: hands rising and spreading upwards (like steam or cloud).</li> </ul> <p>The teacher gives a key word or shows a picture card (e.g., drinking, ice cube, cloud) and students make the corresponding gesture. The activity covers all three states to ensure balanced reinforcement.</p> |                                                                                                                                                                       | <p>water, melting, evaporation, condensation. Students repeat chorally after each term. The teacher may also use the TTS tool during the warm-up gesture activity to introduce each key word aurally before students respond physically.</p> |
| 20'      | Main Activities | <p><b>Experiment: The Ice Mystery</b><br/>Before beginning, the teacher elicits prior knowledge: "What do you call this? Do you know this word in your language?" for the terms ice, water and melting. The teacher writes the English terms on the board as students contribute.</p> <p>In pairs, students place an ice cube in a glass and observe the melting process over several minutes. They describe what happens using the sentence frame: "The ice is becoming ____." or "The ice melts and becomes ____."</p> <p>Alternative if no direct sunlight is available: Students place the glass near a heat source (e.g., a sunny window, a warm radiator, or simply hold the glass in their hands). The teacher may demonstrate using warm water poured around — but not into — the glass.</p>                                                                                                                                                                                                       | <p>Ice cubes, clear glasses, stopwatch (optional).</p> <ul style="list-style-type: none"> <li>• Printed water use cards.</li> <li>• T-chart diagram sheet.</li> </ul> | —                                                                                                                                                                                                                                            |



| Duration | Lesson Flow           | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Materials Needed                                                                                                              | AI Tools Integration                                                                                                                         |
|----------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|          |                       | <b>Classification of Uses</b><br>Students receive cards with different uses of water and classify them on a T-chart diagram: <ul style="list-style-type: none"> <li>Domestic Uses: drinking, cooking, washing, brushing teeth, watering the garden.</li> <li>Recreational Uses: swimming, water park.</li> </ul> Note: the categories Domestic Uses / Recreational Uses are used consistently throughout this lesson plan.                                                                                                                                                                                                                                                                                                     |                                                                                                                               |                                                                                                                                              |
| 15'      | Wrap-Up & Sharing     | <b>Sharing and Reflection</b><br>Each group shares the most important water use they classified and briefly describes which form of water they used.<br><br><b>Exit Ticket</b><br>Students complete three sentence starters in their notebook: <ul style="list-style-type: none"> <li>"Today I learned that water can be ___ (solid / liquid / gas)."</li> <li>"One use of water at home is ___."</li> <li>"Water is important because ___."</li> </ul>                                                                                                                                                                                                                                                                        | Whiteboard / Screen. <ul style="list-style-type: none"> <li>Notebooks or paper for the Exit Ticket.</li> </ul>                | <b>Visual Translation Tool (Optional):</b><br>Used for a quick translation of a key word on the Exit Ticket to ensure student understanding. |
| 5–10'    | Evaluation & Feedback | <b>Teacher Assessment</b> <ul style="list-style-type: none"> <li>Observation of the use of Language for Learning during pair and group work.</li> <li>Correct classification of the water use cards into the two categories (Domestic Uses / Recreational Uses).</li> <li>Correct oral or written identification of the three states of water (solid, liquid, gas) during the warm-up and experiment activities.</li> </ul> <b>Student Self-Assessment</b> <ul style="list-style-type: none"> <li>I can name the three states of water: solid, liquid and gas.</li> <li>I can describe what happened to the ice in the experiment using the words melt and liquid (e.g., "The ice melted and became liquid water").</li> </ul> | Teacher observation sheet. <ul style="list-style-type: none"> <li>Student self-assessment sheet with simple icons.</li> </ul> | —                                                                                                                                            |



| Duration | Lesson Flow | Activities                                                                                                                                                                                                                                                                                                                | Materials Needed | AI Tools Integration |
|----------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|
|          |             | <ul style="list-style-type: none"><li>• I can classify a use of water (e.g., washing) in the correct category: Domestic Use or Recreational Use.</li><li>• I know how to ask my partner or the teacher for help if I do not understand.</li><li>• I worked well with my partner and finished the tasks on time.</li></ul> |                  |                      |

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