

The water cycle

Year	Field of study, subject	Subject connections
3.	Nature and society Environmental knowledge	Digital culture, technology

The purpose and didactic tasks of the lesson

Learning about the different states of water and through this the concept of the state of matter.
Developing scientific thinking, introducing the methodology of experimentation.

The effect of the clock

We guide students through the phases of water through experiments and play, helping them to learn and understand this fundamental natural phenomenon. Thanks to the color-coded control of the INDI car, the track can be changed, so children can even create different tracks themselves. On the track, which allows for great variety, they can practice in novel situations and in an experiential way, which helps to consolidate their knowledge.

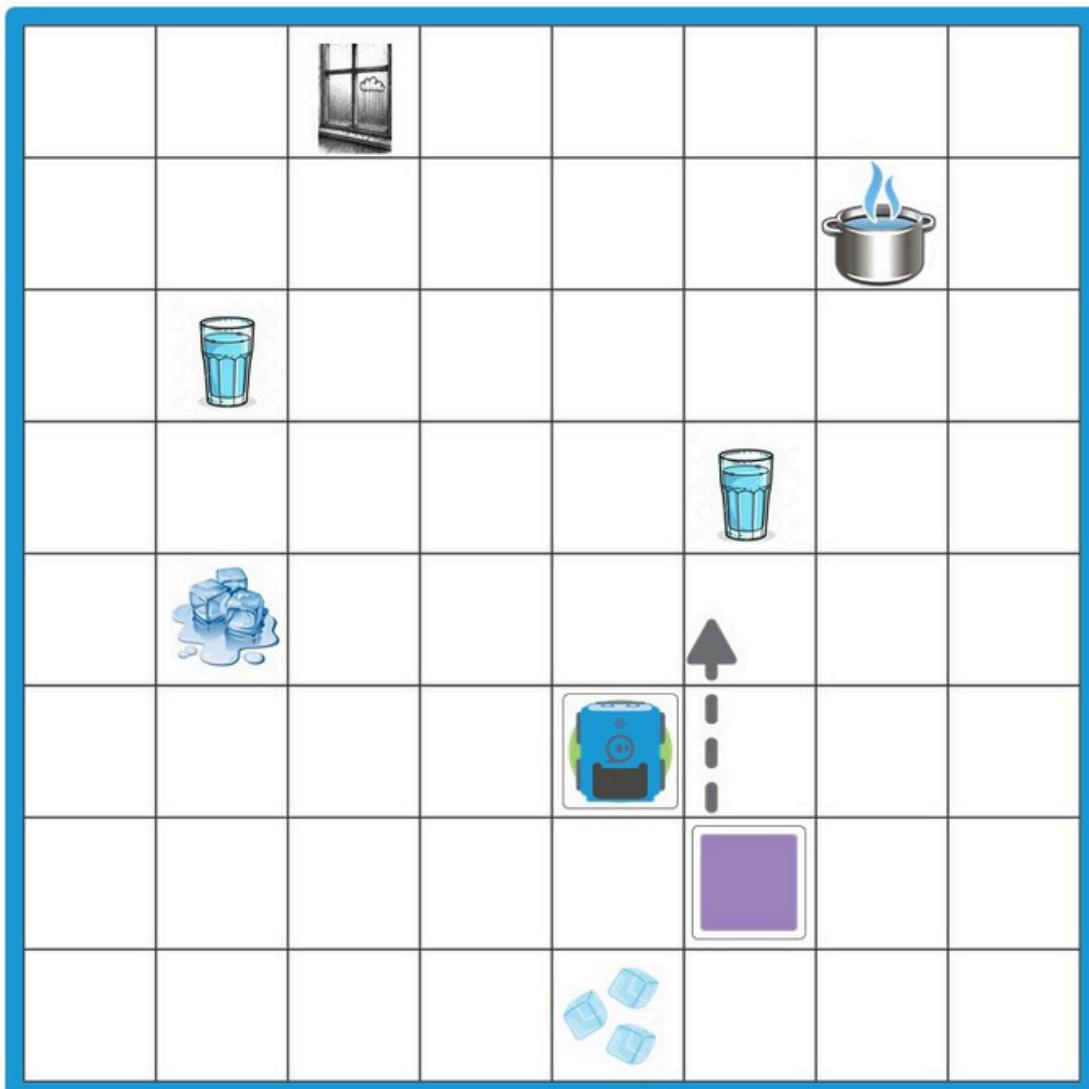
Tools and resources used

	<i>State curriculum, local curriculum, textbooks</i>
	<i>INDI robot and color code cards</i>
	<i>INDI robot track, worksheets</i>

Occupation plan

5 minutes	Introduction and objective	<ul style="list-style-type: none"> A brief introduction to the importance and parts of the water cycle. Attention, motivation, repetition Frontal work
10 minutes	Experimentation	<ul style="list-style-type: none"> Simple experiments with water, ice, steam Experiential learning, new knowledge Group work Equipment: water, ice, bowl, glass, kettle, metal tray
5 minutes	Stages of the water cycle	<ul style="list-style-type: none"> Summarizing experiences, creating a common diagram Explanation, question and answer, frontal work Tools: Large paper, pictures, colored pencils
5 minutes	Introduction to the INDI robot, explanation of the purpose of the course	<ul style="list-style-type: none"> Digital device use. Frontal work. Tools: INDI robot, track.
15 minutes	Robot path traversal	<ul style="list-style-type: none"> The course must be completed according to the water cycle. Algorithmic thinking, experiential learning. Pair or small group work, problem solving. Tools: INDI robot, track.
5 minutes	Summary and closing of the lesson	<ul style="list-style-type: none"> Systematization of knowledge, feedback Reflection, self-reflection. Frontal activity.

Methodological advice for creating a robot track



1. Differentiation options:

We can adapt the number and appearance of the states of matter placed on the track to the students' abilities and knowledge.

we can increase or decrease the number of images placed on the track

- we can only give the task of traversing certain states of matter or avoiding certain ones
- we can limit the number and type of color code sheets that can be used