OVERVIEW OF THE TASK

Get cleaning!

Target audience:	1st cycle
Type of work:	In groups, duos and individual
Class time:	About 4 h 30 minutes

Educational Aim

This LES presents various directed activities in order to sensitise students to the safety pictograms applied on certain commonly used domestic products. It also presents various directed activities in order to initiate students to the experimental process and to the use of measurement instruments. Hence, a technical capsule on the use of the graduated cylinder is presented. An initiation to sketching is also broached in this task. Finally, links with other subject matters are suggested.

Targeted disciplinary competency

- Explore the world of science and technology

Targeted cross curricular competencies

- Uses information
- Adopts effective work methods
- Exercises critical judgement
- Cooperates with others

Broad area of learning	<u>Environmental Awareness and Consumer Rights and Responsibilities</u> • Habits and attitudes that favour the protection, conservation and improvement of the environment <u>Health and Well-being</u> • Need for safety • Safe behaviours in all circumstances
Involved Worlds	Material World
Essential Knowledge	• Classify objects according to their properties and characteristics (e.g.: shape, size, colour, texture, odour) • Miscible and immiscible substances (e.g.: water and milk; water and oil) • Solid, liquid and gaseous states; state changes (e.g.: evaporation) • Commonly used household products (e.g.: properties, usage, safety symbols) • Transparency (e.g.: translucence, opacity)

Statements of learning progression	• **Classify objects according to their properties** • Distinguishes between translucent substances and opaque substances • **Recognise mixtures in his/her environment** • **Distinguishes between mixtures of miscible and immiscible liquids** • **Distinguish among the three states of matter (solid, liquid, gas)** • **Recognise water in its three states: solid (ice, snow), liquid and gaseous (steam)** • **Describe the operations involved in changing water from one state to another (heating or cooling)** • Associate the uses of certain household products with their properties • **Recognise commonly used products that are potentially dangerous (safety related symbols)** <u>Techniques and instrumentation</u> (2nd and 3rd cycles) • **Use simple instruments of measurement adequately (graduated cylinder and eye dropper)** <u>Appropriate language</u> • Adequate use of terminology associated to the material world
Strategies	<u>Exploration strategies</u> • Issue hypotheses • Resort to various methods of reasoning (comparison, classification, etc.) <u>Instrumentation strategies</u> • Resort to various observation tools and techniques • Resort to consignment tools (e.g.: sketch, graphs)
Possible evaluation criteria ❑ Appropriate use of language to describe objects or phenomena from the immediate environment ❑ Formulation of explanations or solution trails	
Global context While doing a round of window cleaning in the class, the school custodian accidentally left four non-identified bottles on your teacher's desk. What do these bottles contain and how could we identify them in order to prevent any injury? In addition, in your opinion, which of the four products would be most effective to accomplish the custodian's cleaning task?	