

Which Soap is Best?

Developer: Jack Holbrook

Institute: ICASE

Country: UK

Subject: Chemistry

Grade level: 10-11

Overall Objectives/Competencies: The students are expected to:

- Deciding how to determine the 'best' soap.
- Recognise factors that affect the choice of soap to buy.
- Put forward and carry out a procedure for testing the cleansing ability of soaps.
- Cooperating and meaningfully communicating orally as member of a group in planning, carrying out and interpreting the testing of soaps to undertake the tests in an effective manner.
- Understanding emulsifying power and the action of soap as a cleansing agent.

Curriculum content: Saponification (consolidation of concept); Soaps (consolidation of its preparation) and their cleaning action.

Kind of activity: Devising factors affecting 'best'; planning and carrying out tests on the cleansing ability of soap. Comparing soaps by cost.

Anticipated time: 4 lessons

Abstract:

This set of activities allows students to consider factors which can be involved in determining the best soap to use. The activities also allow students to devise tests for determining the effectiveness of the soaps as cleaning agents. Finally the activity reinforces the meaning of a soap and an understanding of its cleaning action.

Attached files		
1.	Student activities	Describes the scenario in more detail and the tasks the students should perform
2.	Teaching guide	Suggests a teaching approach
3.	Assessment	Gives suggested formative assessment strategies
4.	Teacher notes	Gives expectations of tests to be carried out by students

This unique teaching-learning material is intended to guide the teacher towards promoting students' scientific literacy by recognising learning in 4 domains – intellectual development, the process and nature of science, personal development and social development.

Its uniqueness extends to an approach to science lessons which is designed to be popular and relevant. For this the approach is intentionally from society to science and attempts to specifically meet student learning needs.

This uniqueness is specifically exhibited by:

1. a society related and issue-based title (supported in the student guide by a scenario);
2. student-centred emphasis on scientific problem solving, encompassing the learnign of a range of educational and scientific goals;
3. including socio-scientific decision making to relate the science acquired to societal needs for responsible citizenship.