



Professional Reflection-Oriented Focus on Inquiry-based Learning and Education through Science

PROFILES IBSE Teaching/Learning Materials - Overview compiled by the PROFILES Working Group of the Maria Curie-Skłodowska University, Lublin - Poland



What is the safe way to use cleaning agents effectively?

Developed by: Ryszard M. Janiuk, Magdalena Słowik and Katarzyna Osińskia

Institution: Department of Chemistry Education, Maria Curie-Skłodowska University, Lublin - Poland https://umcs.lublin.pl/zaklad_dydaktyki_chemii Mail: dydchem@poczta.umcs.lublin.pl

Abstract

Studies of cleaning agents provide an excellent opportunity to get pupils familiar with properties of some substances, which are their components, and as a result, how they act. This will require performing many interesting experiments. Besides consolidation and completion of their chemistry knowledge, pupils become convinced that it can be used in everyday life.

Subject: Chemistry Grade lead: 2nd to 3rd grade of junior secondary school.

Curriculum content: acids, bases, salts, pH, saponification of salts, bactericidal properties.

Kind of activity: looking for source information, learning by discovery, doing experiments, presenting the results, collaborating in groups. etc.

Anticipated time: 4 lessons of 45 minutes

Overall Objectives/Competencies: training skills, carrying out reasoning according to scientific experiment, following a given procedure, collaboration in groups, preparation and presentation of results.

Attached files		
1.	Student activities	Describes the scenario in more detail and the tasks the students should carry out
2.	Teaching guide	Suggests a teaching approach

Acknowledgement:

These materials were adapted by the UMCS-PROFILES Working Group - Member of the PROFILES Consortium using the Teaching-Learning Materials Tool compiled by the PARSEL Consortium as part of the EC FP6 funded PARSEL Project (SAS6-CT-2006-042922-PARSEL)

For further information see: www.parsel.eu.



