






Summary

Flotation in Mining and Recycling: One Experimental Example: Waste Paper Recycling



	Target age	
	Age 12 and older	
	Level of difficulty	
	<input type="checkbox"/> Easy <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	
	Key words:	
	Ore beneficiation, Recycling, Sustainability	
	Abstract of the activity:	
	The principle of material separation by flotation is experimentally illustrated using the example of paper deinking. In an apparatus that is easy to assemble, waste paper cuttings that have been soaked overnight in water with various reagents are shredded and the print pigments are separated from the paper fibres by blowing in air.	
	Learning Goals:	
	<ul style="list-style-type: none"> • Binding types • Properties of surfaces • Functions of surfactants • Coagulation 	

Summary

Specific Abilities:



- Handle some laboratory equipment
- Understand some surface properties
- Understand the importance of recycling
- Understand the complexity of material separation

Cross-curricula Links:



- Ecology/Environment
- Chemistry
- Physics
- Technology

Prerequisites:



- Handling of chemicals and laboratory equipment
- Fundamental knowledge of chemistry

Time requirement:



1 h 30 min

Instruments: *compressed air or electrical air pump, glass frit, hand blender*

Learning and Teaching Support Materials - What you can find in the toolkit



Examples:

1. Lab Procedure- Module 1
2. Students' Card

Summary

RM Ambassadors

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