Summary

MemoRAEE

Target age

11 years old and over

Level of difficulty

X Easy ☐ Medium ☐ High

Key words:

WEEE (Waste Electrical and Electronic Equipment), EEE (Electrical and Electronic Equipment), B&A (Batteries and Accumulators), WBA (Waste Batteries and Accumulators), Recycling, Critical Raw Materials, Rare Earth Elements (REEs), Circular Economy

Abstract of the activity:

The aim of the toolkit is to familiarise students with the components of various electronic equipment and to raise their awareness of the importance of correctly recycling WEEE (waste EEE) and WBA (waste batteries and accumulators) in order to recover metals, Rare Earths and essential components, which are present in them. Today, in fact, it is extremely important to recover precious materials, necessary for the creation of devices. Students can practise discovering which components can be found in different electrical appliances by forming the correct pairs of cards; teachers should print out and cut out the attached cards. When the cards are ready, students can play by dividing into small teams, trying to guess which equipment should be paired with the materials inside.

Learning Goals

- To be introduced to the concept of WEEE and WBA, WEEE and WBA management and WEEE and WBA recycling in the circular economy.
- The role of Critical Raw Materials and Rare Earths in electronic

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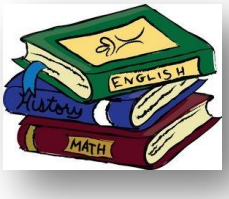
Summary

devices.

Specific Abilities - *At the end of the activity the student will be able to:*

- Knowing what WEEE (Waste Electrical and Electronic Equipment) and WBA (Waste Batteries and Accumulators) are and the specific components within them.
- Learn about the main circular economy issues related to the recycling of WEEE and WBA, in which precious metals and potentially also Rare Earths can be recovered.



Cross-curricula Links- *Examples:*

- Ecology/Environment;
- Geology/Chemistry;
- Sustainability;
- Social Sciences

Prerequisites - *Knowledge and skills necessary for carrying out the activity*

- Familiarity with basic concepts of chemistry, geology and mineral science.
- Familiarity with the basic concepts of environmental pollution.
- Waste concept.

Time requirement *plus eventually other boundary conditions (i.e. Instruments)*

2-3 h

Instruments *Printer, scissors*

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

Examples:

1. Teacher's Card;
2. Students' Card;
3. PowerPoint presentation for teacher's lesson;
4. Questions to print for the game
5. Printable cards to play with

RM Ambassadors

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