



UNIT: **CHEMICAL REACTIONS**

LESSON 1: IDENTIFYING CHEMICAL REACTIONS

FINAL TASK:

RECORD A VIDEO PERFORMING DAILY LIFE REACTIONS

(RESEARCH WORK)

Teaching objectives

- ▶ To introduce concepts related to the topic
- ▶ To identify and classify chemical reactions
- ▶ To use measuring instruments
- ▶ To elaborate a memory
- ▶ To record a video doing chemical reactions
- ▶ To develop thinking skills through HOT activities, concept maps and reflection on learning process

Evaluation criteria

Students should be able to :

- ▶ Differentiate between physical and chemical change
- ▶ Identify familiar chemical reaction, reagents and products
- ▶ Distinguish between exothermic and exothermic reactions
- ▶ Write and adjust chemical reactions
- ▶ Use de measuring instruments
- ▶ Record data using the correct units
- ▶ Elaborate a memory
- ▶ Check the mass conservation in each reaction
- ▶ Appreciate the social interest of chemical reactions
- ▶ Participate in an oral presentation/video about a research work

Key competences

- ▶ Competence in linguistic communication
- ▶ Basic competences in mathematics and science
- ▶ Learning to learn competence
- ▶ Digital competence
- ▶ Social competence
- ▶ Awareness and cultural competence

Material/ Resources

- ▶ Whiteboard
- ▶ Laboratory
- ▶ Power point presentations
- ▶ Web pages
- ▶ Pupil's dossier
- ▶ Digital material

4 C's approach: Learning outcomes

► **Content:**

Name of familiar substances, reagents and products, laboratory material and rules, measures, symbolic representations

► **Cognition:**

Measuring, comparing, classifying, identifying, explaining, predicting, experimenting, concluding, elaborating a memory, discussing

► **Culture:**

Being conscious of the relevance of reactions in society

Identifying daily life chemical reactions

Comparing industries/products from different countries

Knowing local industrie

► **Communication:**

Content language and compatible language

(changes, imperative verbs, reagents, products, heat, balance, flask, etc.)

Activities

- ▶ **Warm up activities (to catch pupil's interest):** Can we transform matter?
Show different materials (an apple, sugar, wood, iron, silver, paper marble, etc.)/
BRAINSTORMING
- ▶ **Main activities (to introduce the topic):**
Work in groups reflecting about which a chemical reaction is, give examples and identify chemical reactions, identify reagents and products
- ▶ **Want to Know/Reinforcement:**
Search examples of daily life reactions in the web, write down key vocabulary, try to predict the products of a particular reaction, revise chemical formulation
- ▶ **Assessment/Reflection:**
Direct observation, notebooks, reflection about they have learnt, questions and answers
- ▶ **Material/Resources:**
Different materials, laboratory material, pupil's dossier, whiteboard, internet