



Lesson plan #1

# Cosmetic bee products creation in chemistry

---

Messini / Greece

## TITLE

Cosmetic bee products creation in chemistry

## TARGET GROUP

## DURATION

2 hours

## EXPECTED LEARNING RESULTS (AIM AND OBJECTIVES)

Students should be able to recognize bee products, their properties, and their uses. They should also be able to create a product using them. They should understand the importance of beekeeping in our lives. Furthermore, they should be able to produce a beekeeping product using one or more primary bee products.

## STUDENT KNOWLEDGE AND PERCEPTIONS

Students should know which are the primary bee materials. They should be able to distinguish, on product labels, the ingredients from the properties and record them. They should also be able to use a bain-marie or a microwave. They should be able to use a scale. They should know the necessary safety measures and apply them.

## CLASSROOM ORGANIZATION AND REQUIRED INFRASTRUCTURE

Initially, a brief presentation will be given on bee products that result from chemical processing. Then, these products and their properties will be analyzed. Any questions or uncertainties will be addressed. In the laboratory part, an attempt will be made to produce a chemically processed bee product.

## MATERIALS & SOFTWARE

Bain-marie or microwave, glycerin soap base, olive oil, grated beeswax, silicone molds, essential oil, honey, stirring stick, apron, gloves, scale.

## DESCRIPTION (BRIEF DESCRIPTION OF THE TEACHING PROCESS)

In the first part, bee products will be provided, and students will be asked to read their ingredients and properties and record them in Worksheet 1. Then, a discussion will follow about the ingredients and their properties. In the second part (laboratory session), the recipe to be followed will be presented, the materials will be distributed, and the product will be prepared.



## WORKSHEET #1

Full Name:			
Group:			
Date:			
	Products	Ingredients	Properties
1			
2			
3			
4			
5			



## WORKSHEET #2

### Recipe

- 250 g glycerin soap base
- 1 tablespoon honey
- 1 teaspoon olive oil
- ½ teaspoon grated beeswax
- Essential oil
- Silicone molds

### Instructions

1. Cut the soap base into small pieces.
2. Heat the base in a bain-marie or microwave.
3. Add the honey and olive oil.
4. Add the beeswax.
5. Remove from heat and pour the mixture into the molds.
6. Let it cool for 2–3 hours.