





Šiauliai Didzdvaris gymnasium

## PLAN OF THE LESSON

TOPIC: STEM PROFESSIONS IN THE COMPANY "PUTOKSNIS"

## **PURPOSES**

- 1. To analyse ecological problems in a chemical approach.
- 2. To discuss the ecological problems of using PET products and to suggest rational ways for solving these problems.
- 3. To find out the materials that are being used for PET manufacture.
- 4. To learn how to calculate manufacture losses.
- 5. To get acquainted with STEM-field professions in the company "Putoksnis".



## **TASK**

- 1. According to the given scheme to identify the type of the bottle.
- 2. Take it to the laboratory and make research: to calculate the production yield, to find out durability, elasticity, flammability of the bottle, to find out whether it meets the quality requirements. By knowing the composition of the bottle to find out the amount of secondary PET used in the manufacturing of the bottle.

- 3. To calculate the expenditure of the PET bottle manufacturing:
- How much do the materials cost?
- How much does the renovation of old machinery costs?
- How much does the control of technological processes costs?
- 4. To find out which combustion products are released by burning PET products.
- 5. To discuss plastic or glass is more useful to use.
- 6. To discuss what kind of knowledge and skills person should gain, if he/she wants to acquire a profession necessary for a job in the company "Putoksnis"...

## **SUMMARY**

- 7. Students' presentations of the research and discussions of the results.
- 8. Summing up the lesson.

