



## Didactic scenario

**Scenario title:** "Arithmetic methods to solve problems", consolidation lesson,

**Learning unit:** "Arithmetic methods to solve problems",

**Authors:** Diana Rafa- mathematics teacher,

**Short description:**

Solving arithmetic tasks is a demand often found in our daily life. The contents from 5 grade core curriculum are very adaptable to various regional contexts. Considering that our project aims to bring our communities closer to our students, I choose examples related to Ocna Dej Salt Mine production. The lesson may be accompanied with a small visitation to the salt mine packing workshops. Students will apply knowledge regarding unit reduction method, comparison method, graphic method and false assumption method.

**Keywords:** unit reduction method, comparison method, graphic method, false assumption method;

**Age group in which the target group falls:** 11-12 years

**Location:** "Avram Iancu" Lower Secondary School

**Time required:** 1 hours

**Connection with the curriculum:** the students will consolidate the knowledge from the school curriculum about arithmetic methods to solve problems.

**Scenario aims:**

At the end of the activity students will be able to:

- to identify the method necessary to solve a certain type of tasks;
- to capture the particularities about a method to solve arithmetic problems;
- to issue value judgments regarding solving problems methods.

**Phase I – generating questions**

**Piquing curiosity** – teacher will draw students' attention talking about the trip to Ocna Dej Salt Mine or watching the documentary about the salt extraction to Ocna Dej from <https://teaching21.com/projects-final-products/educational-movies-documentaries/>

**Formulation of questions-** "Can we apply our core curriculum contents from Mathematics in some situations related to salt exploitation?"

**Phase II – Lesson activity**

Students will get lesson's working sheet. Using Word-wall spinning wheel students will chose a solving method. After that they will select a task from the working sheet that can be



solved with that method. They will have the chance to compare their solution with the one, suggested by the teacher.

Guiding material can be consulted at: <http://teaching21.com/wp-content/uploads/2022/04/template-ppt.pdf>

#### **Phase IV – consolidation**

Students will synthesize the information received and identify, similarities and differences between solving arithmetic problems methods analyzing homework working-sheet.

#### **Phase V - reflection**

Students must create their own voki character that explains into words a solving methods from their homework from: <https://www.voki.com/>

#### **Follow-up activities and materials**

To train and consolidate lesson abilities (skills) students may use:

- Thematic movie or a documentation trip
- PPT
- word-wall spinning wheel
- voki characters
- lesson's working sheet