

## Didactic Scenario

1. Title
Metals

2. Keywords
iron, gold, silver, hardness, coldness

3. Basic Information				
STEAM Subject: Science, English, IT, Art				
Typical interaction time with the instructional scenario in teaching hours for in-school work: Science (1 hour), English (1 hour), IT (1 hour), Art (1 hour)				
General description of the scenario:				
<u>Phases</u>		<u>Stage</u>	<u>Time</u>	
Warm-up activity, introduction to the topic		preparation stage	5'	
Explanation of work ahead and what is expected of them		preparation stage	5'	
Presentation of the instructional-educational content		implementation stage	35'	
Age group: 9-10 years				
Estimated difficulty level:				
Very Easy	Easy	Moderate	Challenging	Very Challenging
			X	

### Teaching resources

**Material:** Aluminum foil, paints

**School infrastructure:** Internet access, video projector or projection screen

### Additional material from external sources/online tools:

- <https://www.youtube.com/watch?v=BowQcGw9IYk>
- <https://www.sciencekids.co.nz/sciencefacts/metals.html>
- <https://ro.pinterest.com/pin/291256300912669921/>
- <https://www.educationquizzes.com/ks1/science/materials-metal-and-non-metal/?q=metals>

**Differentiated Instruction for students of differing abilities and learning styles in the same class:** N/A

**Developed by:** Condrea Gabriela

## 4. Educational Problem

There are stages in the history of civilization without which it is difficult to imagine the development of human society. Once upon a time, many thousands of years ago, our distant ancestors discovered the secret of turning ore into metal. Later, they perfected the art of mining, smelting and processing metals.

Metals play an important role in our lives, being used in all fields.

## 5. Learning Objective (-s)

1. Students will understand how important metals are in our lives;
2. Students will carry out works with aluminum foil;
3. Students will develop their digital skills.

## 6. Phases of the Scenario

### Phase 1

**Title:** Warm-up activity, introduction to the topic

Indoor	Outdoor	Mixed
X		

**Phase duration in minutes:** 5'

**Detailed description of the scenario phase:** Students will watch a video about metals. There will be discussions with the students about the characteristics of metals and non-metals as they understood from the video; they will present what they have retained from the watched material.

**Activity sheets:**

<https://www.youtube.com/watch?v=BowQcGw9IYk>

### Phase 2

**Title:** Explanation of work ahead and what is expected of them

Indoor	Outdoor	Mixed
X		

**Phase duration in minutes:** 5'

**Detailed description of the scenario phase:** It will be explained to the students that we can say that today, the world could not be imagined without metals. We use metals for a large part of a day - when we use the tap, when we eat (we use metal cutlery), when we go by car, bus or plane, but also when we wear jewelry.

If we end up exploring other worlds, this is done with the help of rockets, ships, in the construction of which metal plays an essential role.

If the activity takes place in the classroom, the students will answer the questions orally.

**Activity sheets:** N/A

### Phase 3

**Title:** Presentation of the instructional-educational content

Indoor	Outdoor	Mixed
X		

**Phase duration in minutes: 35'**

**Detailed description of the scenario phase:** Students will watch the presented material and participate interactively in the lesson. The information will be read and discussed with the students.

Children are encouraged to create a work using aluminum foil and paints. They can work in a team, consult each other and collaborate. The completed works will be exhibited in the classroom.

**Activity sheets:**

- <https://www.sciencekids.co.nz/sciencefacts/metals.html>
- <https://ro.pinterest.com/pin/291256300912669921/>

## 7. Evaluation Methodology

The students will complete a test with the help of the application <https://www.educationquizzes.com/ks1/science/materials-metal-and-non-metal/?q=metals> to recall the information about metals and to develop their digital skills.

The students' answers will be evaluated through grades or verbal evaluations.

The teacher will appreciate the quality of the students' answers, will offer suggestions and recommendations.

The teacher will note the successful aspects of the activity and will plan other learning situation that will help the students to assimilate as many knowledge as possible in future lessons.

## 8. Additional Resources for the teacher

N/A