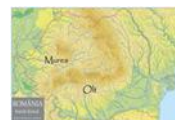


MURES AND OLT MURES AND OLT BECOME RIVERS (T₂)

S13
T₂
D1
L1 P1



Focus on:

- Text comprehension (D1)

Task1: How to make a paper mache mountain?

Students create a mountain as an element of the landscape.

Every solution is good!

Any kind of tool and material can be used!

You can use the ideas and list of materials from the Idea Bazaar, come up with your own ideas or just let the children be creative.



Idea Bazaar – some ideas:

- Building environment out of recycled materials
- Drawing
- Creating

For details of the creation, see the Idea sheets!

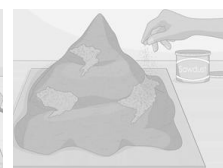
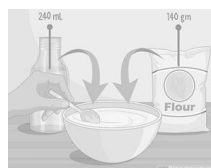
Developmental fields:

In focus:

- Fine motor skills
- Spatial orientation
- Creativity

In addition:

- Attention concentration
- Subject concentration – Art
- Talent development



Task2: Study the map of Romania. How do the two rivers, Mures and Olt flow?

Students search the internet to find interesting information about the different regions of Romania!

Create a presentation, a poster or a model using the map of Romania!

Every solution is good!

Any kind of tool and material can be used!

You can use the ideas and list of materials from the Idea Bazaar, come up with your own ideas or just let the children be creative.



Idea Bazaar – some ideas:

- Building out of ArTeC Blocks
- Printing out the map of Romania (large scale or smaller)
- Creating presentations, posters
- For details of the different solutions, see the Idea sheets!

Developmental fields:

In focus:

- Mathematical competences
- Spatial orientation
- Presentation skills
- Creativity

In addition:

- Attention, concentration
- Subject concentration – Natural Science, Geography
- Talent development

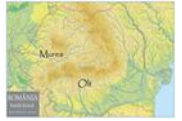


How to manage output:

Record videos of the children's creations and presentations.

MURES AND OLT MURES AND OLT BECOME RIVERS (T₂)

S13
T₂
D1
L1 P2



Focus on:

- Text comprehension (D1)

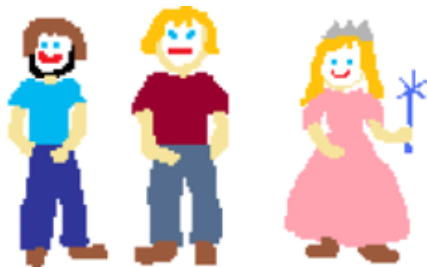
Task3: How does the characters and the scenes of the story look like?

Students create elements of the environment, the mountain, castle. They create plants, animals, figures as well.

Every solution is good!

Any kind of tool and material can be used!

You can use the ideas and list of materials from the Idea Bazaar, come up with your own ideas or just let the children be creative.



Idea Bazaar – some ideas:

- Building environment and characters out of ArTeC Blocks, using Artec mechanisms
- Drawing
- Creating computer graphics

For details of the different solutions, see the Idea sheets!

Developmental fields:

In focus:

- Spatial orientation
- Presentation skills
- Creativity
- Talent development

In addition:

Subject concentration
– Natural Sciences,
Arts

How to manage output:

Record videos with different characters and elements of the environment.

Task4: How to use arguments in a conflict? How to convince people of your ideas?

The main situation of the story can be used to talk about conflict solving and argumentation techniques. How to do it, what language to use to convince people in a conflict situation?

They dramatize and act out the given situation.

You can use the **Act it out! cards** from the Idea Bazaar

Idea Bazaar – some ideas:

- Finish sentences about siblings.
- Dramatize a conflict situation with your sibling. Think of the solution, argumentation!
- Imagine a conflict before travelling. What could be the reason and the solution?
- Dramatize the two end of the conflict.

For details see the Idea sheets!

Developmental fields:

In focus:

- Social competences
- Critical thinking
- Civics
- Text comprehension

In addition:

- Attention concentration
- Life skills
- Talent development


MURES AND OLT

S13
T1,3
L1


Some ideas – Behaviors in different situations

Finish the sentences:

What I like about my sibling(s) is that they...

What I cannot stand about my sibling(s) is that...

Act it out!

The brothers in the story were always quarrelling. Have you found yourself in a similar situation before? What was the reason and the resolution of the conflict? Find out and play out the situation!

Act it out!

In the story the brothers could not come to common sense regarding the travelling. What could be the reason? Do you think they managed to agree? How? If not, why? Imagine and dramatize the two ends of the conflict.

How to manage output:

Record a video acting out the situations.

MURES AND OLT MURES AND OLT BECOME RIVERS (T₂)

S13
T₂
D1
L2 P3

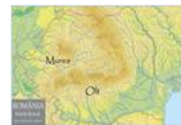


Focus on:

- Text comprehension (D1)

Goals of the lesson:

- text comprehension
- trial argumentation
- problem solving
- decision making
- organizing group work



Summary:

Tarcău, the fairy, wanted to send her sons to find their father. To make it easier for them to travel, she wanted to turn them into rivers. While she went to fetch her magic wand, the two brothers quarreled over whose name they would travel under.

Main features and interactions of the characters

Character	Features	Interactions
Tarcău	Walks, moves	Walks in front of the golden palace
Mures	Walk, moves	Quarrels with his brother
Olt	Walk, moves	Quarrels with his brother

How to use the character card:

Each student fills in their own Character card:

- writes the name of the character
- their features, movements, reactions, etc.
- collects the elements of the environment, other accessories, things to be built
- thinks over the phases, tools and materials of the robot's building

Students can use more pieces of each part of the Character card if needed!

Suggestions

Discussion topics:

- Why did the brothers quarrelled?
- What were their arguments?
- What does this say about their character?
- Have them act out the dialogue, and think of possible arguments.

Civic, social studies:

- Talk about the scene, participants, interactions during the dialogue (who are the participants, what is the environment like, who can speak, how can they quarrel, etc.)
- Collect information about the geographical situation of the rivers.

Suggested materials

- ArTeC Blocks (at least the 112 pcs set)
- Act it out! cards
- Pencil, paper, cardboard, glue

Tarcău
Mures
Olt
Mountains
landscape

Walk
Sit
Carry things

Landscape on a map
Shores, trees, palace

The main actions of the story
Media files needed
Divide the text segment into pieces
Make a list about things needed


Your name _____
Build _____


Your name _____
Be attentive, your robot should be able to: _____


Your name _____
There also should be: _____


Your name _____
Think over: _____

MURES AND OLT MURES AND OLT BECOME RIVERS (T₂)

Ideas for robots on different programming levels

S13
T2
D1
L3-4
P6

The two girls argue
with Buzzer

PROG1

Maros and Olt shaking
their hands in dispute

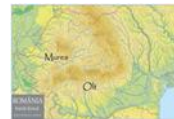
PROG2

Maros and Olt
arguing with Buzzer
and Sound sensor

PROG3

Mures and Olt debate
– cooperating robots

PROG4



Mures and Olt dispute

P1 Mures and Olt argue

- Maros and Olt robot mounted on separate trolleys
- They shout at each other using 1-1 buzzer, starting automatically, one after the other

P2 Maros and Olt arguing

- Maros and Olt static figures, mounted on separate motherboards
- One of them has a servo motor in his shoulder, the other a DC motor
- We switch them on alternately with 1-1 touch sensor
- Both girl figures are equipped with a buzzer, they make a sound

P3 Maros replies to Olt

- Both girls are static robots with 1 servo motor in each shoulder
- Olt is equipped with a Touch sensor and a Buzzer, Maros with a Sound sensor and a Buzzer
- After pressing the Touch sensor, Olt waits randomly for 1-3 seconds, then the Buzzer sounds and raises her arm
- On Maros, the sound sensor detects the buzzer sound, turns on and raises the arm and sounds

P4 Maros and Olt are arguing

- Both girls are built on 1-1 trolley
- Both move their arms with servomotors
- Both robots are equipped with 1-1 IR Photoreflexor, 1-1 touch sensor and 1-1 Buzzer
- When the touch sensor is pressed, they move towards each other, and when the IR Photoreflexor detects the other robot, they stop, move their arms, talk to each other with Buzzer, then back up for 2 seconds and stop

