

THE LITTLE PRINCE

THE GEOGRAPHER'S PLANET (T3)



S22
T3
D8
L1 P3

Focus on:

- Subjects – Nature (D8)

Task1: Imagine and model a huge desert!

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:

- They can use sand or semolina and paint to make a sand picture about a desert.
- They can use air-drying ceramic or plasticine, pebbles, plastic plants and animals, recycled materials to build a maquette or diorama.

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



Developmental fields:

In focus:

- Fine motor skills
- Creativity
- Geography

In addition:

- Life skills
- Subject – Arts and crafts
- Talent development
- Social skills

Task3: What are the characteristics of the desert biosphere?

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:

- Fill in the table on the Idea Sheet about the weather features, vegetation and fauna of the deserts
- Watch videos about different deserts and collect the common and different features of them

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

Take photos of buildings while they are being built and when they are finished.

Developmental fields:

In focus:

- Subject – Nature
- Critical thinking
- Life skills
- Spatial orientation

In addition:

- Creativity
- Social skills
- Talent development

Daytime temperature	
night-time temperature	
precipitation	
wind	
vegetation	
fauna	

How to manage output:

Organise the completed photos either in an online repository or printed on a notice board. If the children have made notes, or have any additional ideas left over, attach them as well.

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THE GEOGRAPHER'S PLANET (T3)

S22
T3
D8
L1 P4

Focus on:

- Subjects – Nature (D8)

Task3: Build your own solar system!

Make a solar system using papier-mâché techniques!

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:

- Discuss the features and order of planets of the Solar System!
- Make the planets using balloons, papier-mâché!
- Paint them according to their characteristics!
- Hang them from the ceiling in the correct order!

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

Developmental fields:

In focus:

- Fine motor skills
- Creativity
- Geography
- Mathematics

In addition:

- Life skills
- Subject – Arts and crafts
- Talent development
- Social skills

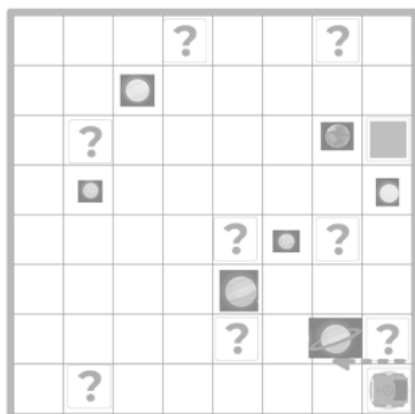
How to manage output:

Organise the completed photos either in an online repository or printed on a notice board. If the children have made notes, or have any additional ideas left over, attach them as well.

Task4: Explore the Solar System with your robots!

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:

- Different types of floor-robots can be used.
- The screen-free programming of the robots can be based on color coding, push-buttons for the directions, controlling by application, etc.
- Program the robot so that it travels through the fields marking the planets in the correct order!

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

Take photos of buildings while they are being built and when they are finished.

Developmental fields:

In focus:

- Spatial orientation
- Creativity
- Algorithmical thinking
- Social skills

In addition:

- Life skills
- Subject – IT
- Talent development

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S22
T3
D8
L1 P5

Focus on:

- Subjects – Nature (D8)

Task5: Sprout some beans! Observe how light and temperature affect the germination of the beans!

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:

- Prepare four identical sprouting containers with a thick layer of wet cotton wool in a flat bowl and place a few dry beans on top!
- Place the 4 bowls to 4 different places of different temperature and light!
- Observe how the beans develop! Take a photo of the growing plants every day!
- Record the observations in a table, take photos.
- Make a time-lapse video from the photos! (e.g. <https://www.youtube.com/watch?v=I36VF7ZVy-o>)

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

Developmental fields:

In focus:

- Life skills
- Critical thinking
- Nature

In addition:

- Social skills
- Responsibility
- Talent development

Task6: How do emotions show on the face? What emotions do these facial expressions correspond to?

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:

- Use modelling clay to create faces showing different emotions on the heads on the pages of the Idea Sheet!
- Depict joy, sadness, fear, pride, shame

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

Take photos of buildings while they are being built and when they are finished.

Developmental fields:

In focus:

- Social skills
- Fine motor skills
- Life skills
- Spatial orientation
- Creativity

In addition:

- Subject – Arts and crafts
- Talent development

How to manage output:

Organise the completed photos either in an online repository or printed on a notice board. If the children have made notes, or have any additional ideas left over, attach them as well.

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S22
 T3
 D8
 L2 P3

In focus:

- Subjects – Nature (D8)

Goals of the lesson:

- text comprehension
- problem solving
- decision making
- organising group work

The sixth planet visited by the Little Prince was much larger than the previous ones, and it was inhabited by a serious old man absorbed in writing large books: he was a geographer. Curious, the Little Prince bombards him with questions. He is fascinated by this seemingly noble and useful profession knowing the seas, the mountains, the deserts... but he soon discovers that the geographer knows nothing about his own planet. He never leaves his desk. He only records the accounts of explorers, after verifying their honesty and sobriety. Because a lying or drunken explorer could write nonsense in a supposedly eternal book.

When the geographer learns that the Little Prince comes from another planet, he becomes animated, eager to write everything down. The Little Prince tells him about his three volcanoes one of them extinct, "but you never know" and most importantly, about his flower. But to his great sadness, the geographer refuses to record it. Flowers, he says, are 'ephemeral,' and geography only deals with eternal things.

The word unsettles the Little Prince. He doesn't know what it means. When the geographer explains that it means "threatened with imminent disappearance," a chill runs through the Little Prince's heart. His flower is fragile, vulnerable, alone. And he has left her behind.

This was his first true feeling of regret. But he doesn't dwell on his sorrow. He lifts his head, asks for advice, and the geographer suggests a new destination: planet Earth. It has a good reputation, he says. And the Little Prince sets off once again, thoughtful... his heart turned toward his flower.

Character	Features	Interactions
Little Prince	Golden hair Curious	Bombards him with questions Tells him about his planet
Geographer	Seems noble and having a useful profession	Knows everything about seas, mountains... Knows nothing about the Little Prince's planet

Suggestions

- Identify the characters in the text, with particular emphasis on the main plot points, character traits, emotions and movements.
- Discuss what are the really important things for you
- Discuss, what science mean, what are the features of a science book
- Collect information about planets

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!

Little Prince, Geographer

Sit, speak, write

Island, palace, dinner table

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: _____

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T3
D8
L3-4
P4

Suggested materials

- ArTeC blocks (at least the 112 pcs set) and ArTeC robot set (at least 1 Studuino motherboard, 2 DC motors, 2 Touch sensors 1 Buzzer, 1 LED, 1 IR Photoreflector, gears)
- Character cards and Robotic task card template
- Pencil

Suggestions

Walking, staggering

- Discuss with children how people and animal move
- Do some movements together so that children can observe the phases of their movements
- Show children anatomical mannequins in motion
- Build figures with moving body parts from ArTeC blocks

Sitting
Writing
Speaking

Robotic task card

The name of my robot: _____

The parts I need for my robot:

DC motor	Touch sensor	IR sensor	Buzzer	LED	Light sensor
☐	☐	☐	☐	☐	☐

Choose the parts you need (check off what you use):

Buzzer action: _____

LED action: _____

Light sensor action: _____

Find robotics support materials in the Technical corner

This is how I build and program my robot:

What do I see?	What is it doing?	What? (action)	What? (action)	To what? (for what? how many times?)	What? (action)

This is how my robot will work: Write it in complete sentences using the table above!

In focus:

- Subjects – Nature (D8)

Goals of the lesson:

- problem solving
- decision making
- body image

How to fill in the Robotic card?

- Choose the robot's activity and the complexity of the program to match the child's abilities, based on the activity card, the developmental aspect and the programming level.
- If necessary (e.g. for clarification or differentiation), additional robot cards can be filled in.
- Design the robot with several ways of building/programming!
- Complete the robot cards in the target language!
- Not all columns of the table need to be filled in, only those relevant to the robot's specific operation.
- Based on each row of the table, describe the robot's operation in the target language using grammatically correct sentences.

Related topics in the Technical corner

- Programming DC motor (2.a, 2.b)
- Using Touch sensors (4.a)
 - Remote control made of 4 Touch sensors (4.d)
- Lighting the LED (5.a)
- Using Buzzer (6.a,b)
- Testing and programming IR Photoreflector (7.a, 7.c, 7.e)
 - Using IR photoreflector for detecting an object (7.d, 7.e)

Little Prince and Geographer axially built figures, the planets spin on gears

PROG1

Spinning and lighting planet

PROG2

Accelerating, spinning planet

PROG3

Accelerating, spinning planet triggered by infra sensor

PROG4

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Ideas for robots on different programming levels

Little Prince and Geographer axially built figures, the planets spin on gears

PROG1

Spinning and lighting planet

PROG2

Accelerating, spinning planet

PROG3

Accelerating, spinning planet triggered by infra sensor

PROG4

The Geographer

P1 A moving but not yet programmed structure

- We build a geared structure with 1 DC motor directly connected to 1 battery holder
- The geographer and the Little Prince's arms can be moved by means of axes
- The planets can be moved on the gears, water, plants
- The mechanism starts when the battery holder is switched on and stops when it is switched off

P2 LED action

- The planet above the figure has 1 LED.
- The figure is mounted on a base plate, driven from below by a DC motor mounted horizontally in the robot
- The robot starts automatically when the battery holder is switched on and stops after 3 seconds

P3 Display of accelerating movement

- The robot structure is similar to P2, but with 1 infrared sensor
- The robot starts automatically when the battery holder is switched on, and stops after 3 seconds
- When the figure passes the infrared sensor, the built-in DC motor rotates faster and faster

P4 Robot moving to infrared sensor

- Robot structure similar to P3, but with 1 infrared sensor
- When the Little Prince moves to the infrared sensor, the robot runs the program similar to P3

