

LISA AND LOTTIE CHARRED PORK CHOPS AND BROKEN PLATES (T5)

S1
T5
D6
L1 P3



Focus on:

- Computational thinking – life skills (D6)

Task 1: What are the typical accessories for a summer vacation?

What things would you definitely take with you to a summer camp? Why?

In this Dobble game we have collected some camp items and of course other objects and people from the book. Play Dobble, get to know this great game. Older kids can design their own game and look up the math of the Dobble game online. All solutions are correct!



Idea bazaar – some ideas:

- Getting to know the Dobble game
- Making your own Dobble game
 - Making and collecting drawings
 - Creating computer graphics

Details of the various solutions can be found on the Idea Sheets.

Developmental fields:

In focus:

- Fine motor skills
- Creativity
- Vocabulary development

In addition:

- Attention
- Subject focus – Maths
- Talent development

How to manage the results:

Save the finished game to your computer. You can assign it to other groups as a task or show it as an example.

Task 2: Jingle – Composing music

Mr. Ludwig Palffy, the twins' father, is a composer and conductor by profession.

Taking on the role of the composer, the students should create a small piece of music, a jingle.

Students choose a product or invent their own product.

Then they collect the product's characteristic features and write a suitable advertising slogan based on them. It should be original and easy to remember.

The students rhyme the advertising slogan. They think of a suitable rhythm and finally a melody for their slogan.

Idea bazaar – some ideas:

- Creating an advertising slogan
- Rhyming
- Composing music

Developmental fields:

In focus:

- Language development
- Vocabulary development
- Auditory attention

In addition:

- Teamwork
- Subject focus – mother tongue, music
- Talent development



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How to manage the results:

Students perform the jingle to the class, possibly with instrumental accompaniment. Make an audio recording and save it to your computer.

Skilled students who can write sheet music, write down the melody!

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Task 3: Cotton dog

Court councilor Mr. Strobl has a dog, Peterkin. Students will make their own dog using cotton yarn and socks. Cotton wool, plastic granules, or natural materials are used as fillers.

All solutions are correct!



Idea bazaar – some ideas:

- DIY task, with textile and yarn

Details and exact description can be found on the idea sheets!

Developmental fields:

In focus:

- Fine motoric skills
- Creativity
- Serial thinking

In addition:

- Attention
- Subject focus – Arts, Drawing

How to manage the results:

Organize a dog show! Take photos. Students can take the finished works home.

Task 4: Let's determine exactly where we live, work with a map

Students learn to identify exactly where they live (galaxy -> solar system -> planet -> continent -> state -> ...) and make a stackable tower game out of paper cups. You can find craft instructions and templates in the idea bazaar.

Older students, who may already know the story of Lisa and Lottie, can work with the blind map. They mark their place of residence and the cities mentioned in the novel on a map of Europe.

The description of Bohrlaken on Lake Bohren leads us to a cute village surrounded by mountains. Students study a map of Europe and discuss where this fictional town might be.



Idea bazaar – some ideas:

- Making a tower game
- Working with the blind map
- Studying the map of Europe, discussing the location of Bohrlaken

Details of the various solutions can be found on the Idea Sheets.

Developmental fields:

In focus:

- Language development
- Spatial orientation
- Attention

In addition:

- Teamwork
- Subject focus – Geography
- Talent development

How to manage the results:

Take a photo of the finished game. The students can keep the glasses, but you can also use them in sessions with younger students.

Take photos of students working together and scan the maps they worked on.

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Task 5: Compile a cookbook!

Lisa tries to play the role of her sister in Munich. This includes cooking the broth, which is not that easy at all.

Students can compile a cookbook based on their favorite recipes.

All solutions are correct!



Idea bazaar – some ideas:

- Creation of uniform recipe pages
- Search the web for recipes and pictures
- Compile a photo book with online programs

Details and a possible cookbook page can be found in the idea sheets!

Developmental fields:

In focus:

- Fine motoric skills
- Creativity
- Attention

In addition:

- Subject focus – IT, Housekeeping and cooking, life skills

How to manage the results:

Scan the pages of the finished cookbook or take photos of the recipe collections.

Task 6: Menu design

Students can create a fictional menu for the Imperial Hotel.

Study Austrian and Viennese specialties together, research on the Internet. For older students, we can adapt the names of the dishes to the mother tongue lessons, e.g. perfect participles: "fried potato wedges", "flambéed bananas", "fried goat cheese", etc.

Students compare Austrian food with the typical food of their home country.

- What are the similarities, what are the differences?
- Are there foods that are prepared in the same way in both countries?
- Are there any foods in their home country that may have originated in Austria?

Idea bazaar – some ideas:

- Compilation of the menu
- Compare the food of your home country with Austrian specialties

Details of the various solutions can be found on the Idea Sheets.

Developmental fields:

In focus:

- Language development
- Creativity
- Attention

In addition:

- Teamwork
- Subject focus – Grammar, IT, Housekeeping and cooking
- Talent development



How to manage the results:

Take a photo of the finished menus or save the files to your computer.

LISA AND LOTTIE

CHARRED PORK CHOPS AND BROKEN PLATES (T5)

S1
 T5
 D6
 L2 P3



Focus on:

- Computational thinking – life skills (D6)

Goals of the lesson:

- Text comprehension
- Problem solving
- Decision making
- Organizing group work

The mother slowly realized, that her other little daughter, not Lottie, had been with her since the summer vacation. Lia quickly got into cooking and is waiting her mom home with a hot dinner. She is about to set the table when her mother unexpectedly calls her „Lisa“. The little girl drops the plats with a loud clatter and throws herself into her mother's arms.

Main features and interactions of the characters

Character	Features	Interactions
Lisa	Diligent, confused	talks, stands from one foot to the other, drops the plates, throws herself into her mother's arms
The mother	Tired, confused, warm-hearted	Talks, spreads her arms



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!

Character task cards

1.  Your name _____
 Build _____

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

3.  Your name _____
 There also should be: _____

4.  Your name _____
 Think over: _____

Lisa
 The mother

talks, moves forward,
 raises or lowers her arms

Table with dinner, plates

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

Suggestions

- Discuss, how people's movements look like, make some leg and arm movements together, have the children observe the individual phases of the movement
- Build simple figures with movable arms using ArTec blocks
- Talk about body language and other forms of metacommunication. What can be expressed with gestures? What state of mind does it assume?

Suggested materials

- ArTec Blocks (at least the 112 pcs set)
- Storyline template
- pencil

LISA AND LOTTIE

CHARRED PORK CHOPS AND BROKEN PLATES (T5)

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Suggested materials:

- ArTeC-blocks (at least the 112 pcs set) and ArTeC Robotics set (1 Studuino-motherboard, 1 buzzer, 1-3 servo motors, 2 DC-motors, wheels, 1-2 touch sensors, 1 IR-photoreflector)
- Mindmap or chart draft, Storyline
- Character cards and robotic task card template
- Pencil

Focus on:

- Computational thinking – life skills (D6)

Goals of the lesson:

- fine motor skills,
- problem solving,
- decision making,
- life skills

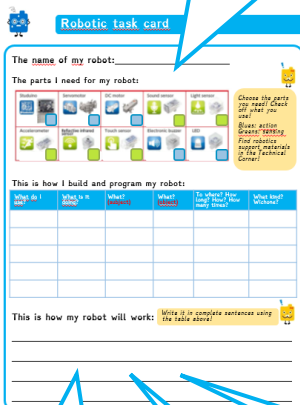
Proposals

- Think about the gestures people use when they are shy, embarrassed, or shocked
- Collect options for how to display the spreading of arms
- Collect possibilities for robotic ways to make the figures hug each other

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.

Arms and legs
Sits, kneels down



Robotic task card

The name of my robot: _____

The parts I need for my robot:

Part	Quantity	Notes
DC motor	2	
Servomotor	1	
Pressure sensor	1	
Beeper	1	
IR photoreflector	1	
Sound sensor	1	

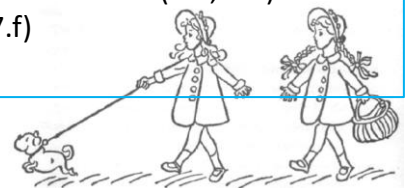
This is how I build and program my robot:

Step	What to do	What to see	What to hear	What to feel	What to think
1					
2					
3					
4					
5					

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

Related topics in the Technical Corner

- DC motor (2.a, 2.b, 2.c, 2.d)
- Servomotor (3.a, 3.d)
- Pressure sensor testing and programming (4.a, 4.b, 4.c)
- Beeper (6.a, 6.b)
- Testing and programming IR photoreflector (7.a, 7.b)
 - Using IR-Photoreflector for object detection (7.d, 7.e)
 - Programming a tracking robot (7.f)
- Sound sensor (9.a, 9.b)



Static figure:
Luise with movable
arms

PROG1

The mother: talks to
Luis, opens her arms
at the push of a
button

PROG2

Luise:
She talks to mommy,
drops the plates if
someone scares her

PROG3

Luise:
She talks to the
mother and then
drops the plates. She
runs to her mother,
stops in front of her
and spreads her arms

PROG4

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Robot ideas on different programming levels

Static figure:
Luise with movable
arms

PROG1

The mother: talks to Luis,
opens her arms at the
push of a button

PROG2

Luise:
She talks to mommy,
drops the plates if
someone scares her

PROG3

Luise:
She talks to the mother
and then drops the
plates. She runs to her
mother, stops in front of
her and spreads her
arms

PROG4



Luise and her mother

P1 Luise or her mum

- Gear wheel driven by a DC motor mounted on a battery holder.
- The head of the nut mounted on the gears is red on one side and white on the other.
- Luise is holding the plates in her hands on one side and the pots are at her feet on the other side.
- As the gears turn, the mother and Luise show two parts of the scene.

P2 The mother

- Luise is a standing robot with her arm attached to her body by a DC motor. 1 sound sensor is attached to her.
- On shouting, she lowers her arm and the plate falls.
- The mother is mounted on a trolley. 1 push button is attached to her, her face has 1 red and 1 white LED.
- Press the push button and she rolls forward while the red LED lights up, then stops and the white LED lights up.

P3 Luise

- The mummy is built as in P2. 2 IR photorefectors are connected to it.
- Start it with a push button, it comes in as a tracking robot, stops at a predefined position. The LEDs work as in P2.
- 1 servo motor is mounted on Luise's shoulder and neck, and a sound sensor is connected to the robot.
- A cube in the little girl's hand represents the plate.
- She spreads her hands with the servomotor and the plate falls. Her head turns around her neck: Lotte's head turns into Luise's head.

P4 Luise

- The mother is constructed in a similar way as in P3. We attach an accelerometer, IR photoreflector and buzzer.
- Accelerometer is used to guide the little girl to the robot, and when the IR photoreflector detects the little girl, it stops, the red LED goes out, the white LED lights up and makes a buzzer sound.
- The hand of the little girl is fixed to a geared-gear-gear mechanism moved by a DC motor, a servo motor is mounted in the plate.
- Luise holds the plate in her hand, lowers the plate onto the DC motor geared rack on the sound sensor and the servomotor causes the plate to open as if it were to break in two.
- Meanwhile, her head turns from Lotte to Luise, as in P3.

