

THE CAT WHO CAME IN OFF THE ROOF A STRANGE LADY (T1)

S19
T1
D10
L1 P3

Focus on:
• Creativity (D10)



Task 1: Cat memory with Beebots

The pupils play with Beebots individually or in small groups. The larger cat cards are placed under a transparent Beebot mat, the smaller cards are used to form a pile. The players draw a card from the pile, observe the picture and direct the Beebot to the matching pair.

Every solution is correct!

Correct the Beebot's path together if necessary! You can use the pictures from the ideas bazaar or print out your own pictures.

Idea bazaar – some ideas:

- Ready-to-use pictures for the Beebot-MemoryCat cards

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

TIPS!

1. Place several mats next to each other to enlarge the field
2. The transparent BeeBot mat can be replaced with a clear table film. Draw a grid with 15x15cm squares on it with a waterproof pen!

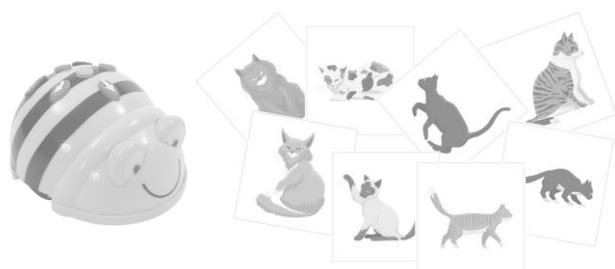
Developmental fields:

In Focus:

- Orientation
- Analytical thinking
- Creativity

In addition:

- Attention, memory
- Subject concentration – visual education
- Talent development



Task 2: Cat origami

The pupils watch the video and fold the cat figures. The video can be played slowly or stopped repeatedly so that the children can keep up with the process.

The task can be made more complex for older pupils or for talented children if the video is first played at normal speed and the folding is only started afterwards.

For language development, the pupils should also verbally formulate the necessary steps before starting with the folding work.

Idea bazaar – some ideas:

- Different cat figures to fold
- Of course you can invent your own designs!

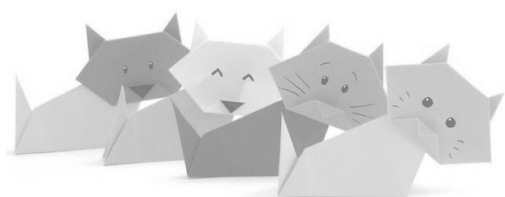
Developmental fields:

In Focus:

- Fine motor skills
- Creativity
- Orientation
- Memory

In addition:

- Attention
- Subject concentration – Technical handicrafts
- Talent development



How to manage output:

Take photos of the finished paper figures and scan the BeeBot cards you have made yourself. Organise an exhibition in the classroom or test the playing cards with other groups!

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T1
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Task 3: Newspaper editorial office

The pupils get to know the day-to-day running of a newspaper editorial office. They slip into the role of editor-in-chief, plan the front page, recruit journalists and start new sections. There are endless possibilities for situation games.

Every solution is correct!

Use the ideas from the ideas bazaar or let the children's creativity run wild!



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Idea bazaar – some ideas:

- Situation games
- Questions about ideas

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

Developmental fields:

In Focus:

- Language development
- Vocabulary, expressiveness
- Creativity

In addition:

- Attention, memory
- Subject concentration – Mother tongue
- Talent development

Task 4: Planning a cat playground

The pupils plan and design a playground for cats or other hobby animals. Research together on the Internet what needs the selected animals have.

Every solution is correct!

Use the ideas from the ideas bazaar or let the children's creativity run wild!



Idea bazaar – some ideas:

- Different cat playgrounds
- Of course you can invent your own designs!

Details of the various solutions can be found in the idea sheets!

Developmental fields:

In Focus:

- Fine motor skills
- Creativity
- Text comprehension

In addition:

- Attention to details
- Subject concentration – Technical handicrafts
- Talent development

How to manage the output:

Take photos of the finished workpieces.

Organise an exhibition or a pet supplies shop in the classroom!

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L1 P6

Focus on:
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Task 7: Cat tangram

The pupils get to know the tangram game. A square is cut into seven different plane figures. Figures can be constructed from the five triangles of different sizes, the square and the parallelogram. This time only cat figures are formed.

The cards are printed out, wrapped in foil and cut open, then the game of re-placement begins. The game can be made more complex if the pupils observe the picture for a while and then have to place it from memory.

If the cards are printed out in black and white, or only the silhouettes are shown, other cognitive functions can be encouraged.

Every solution is good!

Use the ideas from the ideas bazaar, or invent new figures!

Idea bazaar – some ideas:

- Tangram figures with cat pictures
- Tangram square to cut open (if no tangram game made of wood, plastic, ... is available)

You can find details about the different solutions in the idea sheets!

Developmental fields:

In Focus:

- Orientation
- Memory
- Analysis-Synthesis
- Creativity

In addition:

- Subject concentration
– Crafts, visual education
- Talent development



Task 8: Making a bookmark

The pupils design a bookmark in the shape of a cat.

Every solution is good!

Use the templates from the ideas bazaar or let the children's creativity run wild!

Idea bazaar – some ideas:

- Different bookmarks
- Of course you can invent your own designs!

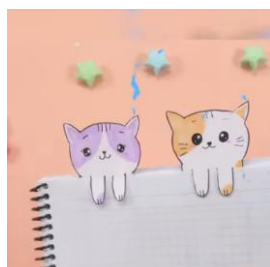
Developmental fields:

In focus:

- Fine motor skills
- Creativity
- Text comprehension

In addition:

- Attention
- Subject concentration
– visual education
- Talent development



How to manage the output:

Take photos of the finished workpieces.
Organise an exhibition or a pet supplies shop in the classroom!

THE CAT WHO CAME IN OFF THE ROOF A STRANGE LADY (T1)

S19
 T1
 D10
 L2 P3



Focus on:

- Creativity (D10)

Goals of the lesson:

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

There was the sound of furious barking close by. They both looked up. A big German shepherd was racing after something, but they couldn't quite make out what that something was. It disappeared between two parked cars, and the dog rushed after it. The very next instant there was a wild rustling in the tall elm tree near the cars. (...)

Tibble and Mr. Smith kept peering up for a moment. And now they saw something very high up among the new leaves. A leg. A leg in a stylish stocking with a shiny, high-heeled shoe on the foot.

„Heavens“, said Mr. Smith. „It's a lady.“

„It can't be“, Tibble said. „That high up? How'd she get up there so quickly?“

Now a face appeared too. A frightened face with big scared eyes and masses of red hair.

„Is it gone?“ she called.

„It's gone! Come on down!“ Tibble called back.

„I'm too scared“, she moaned. „It's so far.“

Tibble looked around. There was a van parked close by. Cautiously, he climbed onto the roof of the van and reached out as far as he could with one hand. The woman crawled slowly to the end of her branch, then lowered herself onto another and grabbed Tibble's hand.

She turned out to be tremendously agile. In one easy leap she was on the roof of the van, and a second hop took her down to the street.

Main features and interactions of the characters

Charakter	Features	Interactions
Tibble, Mr. Smith	Friendly, astonished, helpful	speak, go to the tree, help the lady down
Minou	Young lady, can run and climb fast	Run fast, climb up into the tree, jump down
Marsh	Aggressive dog	Runs after the lady, barks

Suggestions

- Discuss how people move, do some leg and arm movements together and have the children observe the phases of their own movements
- Build simple figures with moving legs and arms from ArTeC blocks
- Look together at pictures of aggressive, barking dogs. What posture is typical of this behaviour? Study the dogs' body language together.

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!



Your name _____

Build _____



Your name _____

Be attentive, your robot should be able to: _____



Your name _____

There also should be: _____



Your name _____

Think over: _____

Tibble, Mr. Smith
 Minou, Marsh

move, talk, raise hands,
 climb up/down, jump

Trees, Cars, vans, Houses,
 Bench on the square

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

Suggested materials

- ArTeC Blocks (at least the 112 pcs set)
- Storyline template
- Pencil

THE CAT WHO CAME IN OFF THE ROOF A STRANGE LADY (T1)

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L3-4
P4



Suggested materials

- ArTeC Blocks (at least the 112 pcs set) and ArTeC robotics set (1 Studuino motherboard, 2 DC motors, wheels, 2-3 servo motors, 1 Touch sensor, 1 or 2 IR Photoreflectors, 1 or 2 Buzzers)
- Mindmap or Chart draft, Storyline
- Character cards and Robotic task card template
- Pencil

Focus on:

- Creativity (D10)

Goal of the lesson:

- Fine motor skills
- Problem solving
- Decision making
- Life skills

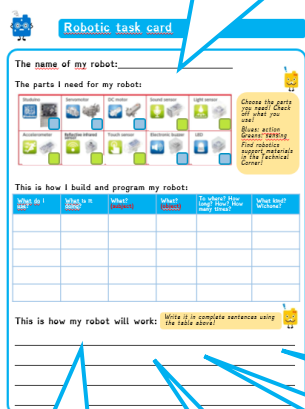
Suggestions

- Think about what gestures people and animals use when they are afraid or fleeing
- Collect ways in which the robot could be controlled to move along a certain route (walk between the parked cars)
- Collect ways of recognising when the robot arrives at an object (tree)

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 character 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.

Arm
Moving forward
Recognising an obstacle
Climbing



Robotic task card

The name of my robot: _____

The parts I need for my robot:

Part	Quantity	Notes
DC motor	2	
Servo motor	2	
Touch sensor	1	
IR Photoreflector	1	
Buzzer	1	

This is how I build and program my robot:

Step	What I do	What I see	What I hear	What I feel	What I think	What I say
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

- Programming DC motor
 - Winding the motor until the sensor detects change (4.b, 4.c)
- Programming servo motor
 - Moving the arm or tail to up and down (3.b)
- Testing and programming Touch sensor (4.a, 4.b, 4.c)
- Testing and programming IR Photoreflector (7.a, 7.c, 7.e)
 - Using an IR Photoreflector for detecting an object (7.d, 7.e)
 - Line tracing robots using 1 IR Photoreflector
 - Labyrinth-traversing robots
- Using Buzzer (6.a, 6.b)
- Using random numbers (10.a)

Static figure: Mr Smith or Tibble, who can move their arms

PROG1

Minou runs to the tree and tries to climb up by stretching out her hands

PROG2

Marsh runs, when he recognises the tree, he stops and barks

PROG3

Minou runs along a line, Marsh follows her, runs after her and barks

PROG4

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P5

Ideas for robots on different programming levels

Static figure: Mr Smith
or Tibble, who can move
their arms

PROG1

Minou runs to the tree
and tries to climb up by
stretching out her hands

PROG2

Marsh runs, when he
recognises the tree, he
stops and barks

PROG3

Minou runs along a line,
Marsh follows her, runs
after her and barks

PROG4



Tibble, Mr. Smith, Minou, Marsh

P1 Tibble, Mr. Smith

- Static figures
- Build Tibble or Mr Schmitt, who can move their arms mechanically on axes

P2 Minou

- Build Minou, she moves on wheels, driven by 2 DC motors
- Set the operating time of the motors so that she stops in front of the tree
- She raises her hands and tries to climb up (use servomotors for this)

P3 Marsh

- Build Marsh, the aggressive dog
- He runs with the help of two DC motors
- With an IR photoreflexor, he stops when he recognises the tree
- He stops at the tree and barks (buzzer)

P4 Minou and Marsh

- Minou follows a line and runs to the tree
- Marsh follows Minou, with the help of the IR photoreflexor he runs after Minou
- He barks

OR

- Minou sits at the top of the tree and dangles his legs (servomotors)
- Marsh runs around the tree trunk and barks

