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Teaching programming in primary school:
curriculum, didactic methods, textbooks, online support
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TITLE: Logic Games I.

LEARNING SCENARIO		
School:	*Duration (minutes):*	**90**
Teacher:	*Students age:*	**8**

Essential Idea:	We solve the tasks given by the instructions correctly if we carry out the instructions in the correct order.

Topics:

- Pupils explore, design and create step-by-step and creative instructions to solve a specific challenge or problem.

Aims:

- Pupils analyze a series of instructions that perform a simple task and if necessary, correct the wrong sequence.

Outcomes:

- Pupils can correct the wrong sequence in the instructions for solving a simple task.
- With the help of the teacher, they can solve simple logical tasks. It shows curiosity and it questions paths using which they can come to a solution to a simple logical problem. They encourage themselves and others to persevere in finding solutions.

Work forms:

- individual work
- work in pairs

Methods:

- presentation
- discussion
- graphic work

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ARTICULATION
Course of action (duration, minutes)

INTRODUCTION

We begin a conversation about traffic behavior.

How do we cross the street?

Are there any rules which we must follow when crossing the street?

Can we change this set of rules when crossing the street, e.g. left - left - right and then crossing the street?

Explain your answer.

Announcement of the goal of the lesson:

Today we will solve puzzles and play logic games.

MAIN PART

The teacher explains the tasks.

Pupils solve tasks and present their solutions.

Pupils and teachers discuss and evaluate the presented solutions.

1. Discover the numbers where our pets arrive will arrive to after moving.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

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cat – 92, dog – 12, rabbit – 44

2. Line path to the basket, one of the possible solutions:

steps: 18

3. Visit:

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Cat visited the rabbit.

4. Robot

Rocky prepares for a robot race. He has to assemble four robots.

Each robot consists of two arms, two legs, a head and a torso.

The head consists of one cube, the torso consists of three cubes, the arm consists of two cubes, the leg consists of four cubes.

How many cubes does it take to assemble one robot? (16)

How many cubes does it take to assemble four robots? (64)

5. Gita and a birdhouse

Gita paints a birdhouse.

The roof of the house consists of six wooden planks.

The front of the house consists of two wooden planks.

Each of the three sides of the house consists of four wooden planks.

Each plank needs to be painted with two brush strokes.

How many wooden planks does a house consist of? (20)

How many brush strokes does Gita have to make? (40)

CONCLUSION

We will solve the tasks correctly only if we execute the instructions in the correct sequence.

Some tasks have repetitive actions that we need to consider when solving tasks to get an accurate solution.

The teacher checks the pupils' solutions to the tasks.

Together they repeat the strategy they used in solving today's tasks.

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Methods		Work forms
presentation	interview	individual work
discussion	demonstration	work in pairs
work on the text	role playing	group work
graphic work		frontal work
interactive exercise /simulation on the computer		

Material:

- textbook, notebook

Literature

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PERSONAL OBSERVATIONS, COMMENTS AND NOTES