

**CROSS-CURRICULAR
CONNECTION IN ART IN THE
4TH GRADE OF THE 9-YEAR
ELEMENTARY SCHOOL**

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Many times, we hear parents who frighten their children by school enrolment where there will not be play anymore, but mere study.



This kind of thinking is totally wrong, as small children, but not only them, teenagers as well, and even adults, learn **most just through play**. Through play, small children gain the basis for further higher forms of learning and the development of thinking (Marentič Požarnik, 2000). Through play, small children gain sensory impressions and social skills.

Sensory impressions such as observing, touching, tasting, smelling and listening are gained, when pupils:

- knead and form dough for rolls, and then, they eat them when they are baked,



- decant differently dense juice from the bigger container to the smaller ones, and connect the colour of the juice with its taste,



- build a town out of the waste material and talk about the form and hardness of materials,



- close their eyes, and, only by using the smell, they find out what fruit they hold in their hand,



- make a telephone out of a yoghurt cup and listen to what their friend is talking on the other side etc.



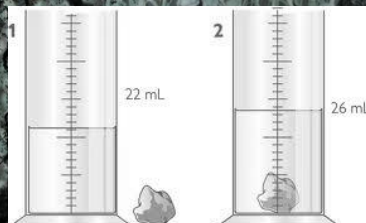
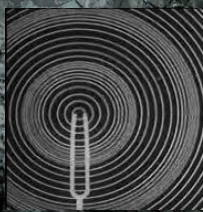
Social skills, such as showing tolerance, negotiating, making compromises, accepting different points of view etc., are gained when they:

- play different didactic plays, e.g. Don't get angry, dominos, memory, where it is necessary to respect certain written and non-written rules, to be patient and tolerant, even if you are not being good at them,
- participate in different role plays, where it is necessary to agree who will take which role and how they will act them out, when difficulties arise in class, e.g. arguing, calling names, which need to be solved in a peaceful, tolerant way.



Through the described examples, children learn things that can be transferred by the right kind of teaching in similar situations.

1. They can connect roll baking with the changing of things in a certain time period.
2. They can connect decanting of differently dense juice with containers' volume.
3. They can connect building of a town out of the waste material with the waste segregation and recycling.
4. They can connect recognising fruits by their smell with the kinds of fruits.
5. They can connect a telephone made out of a yoghurt cup with the sound transit etc.
6. They use social skills consciously or subconsciously in all forms of group work, pair work etc., which arise in different school situations.

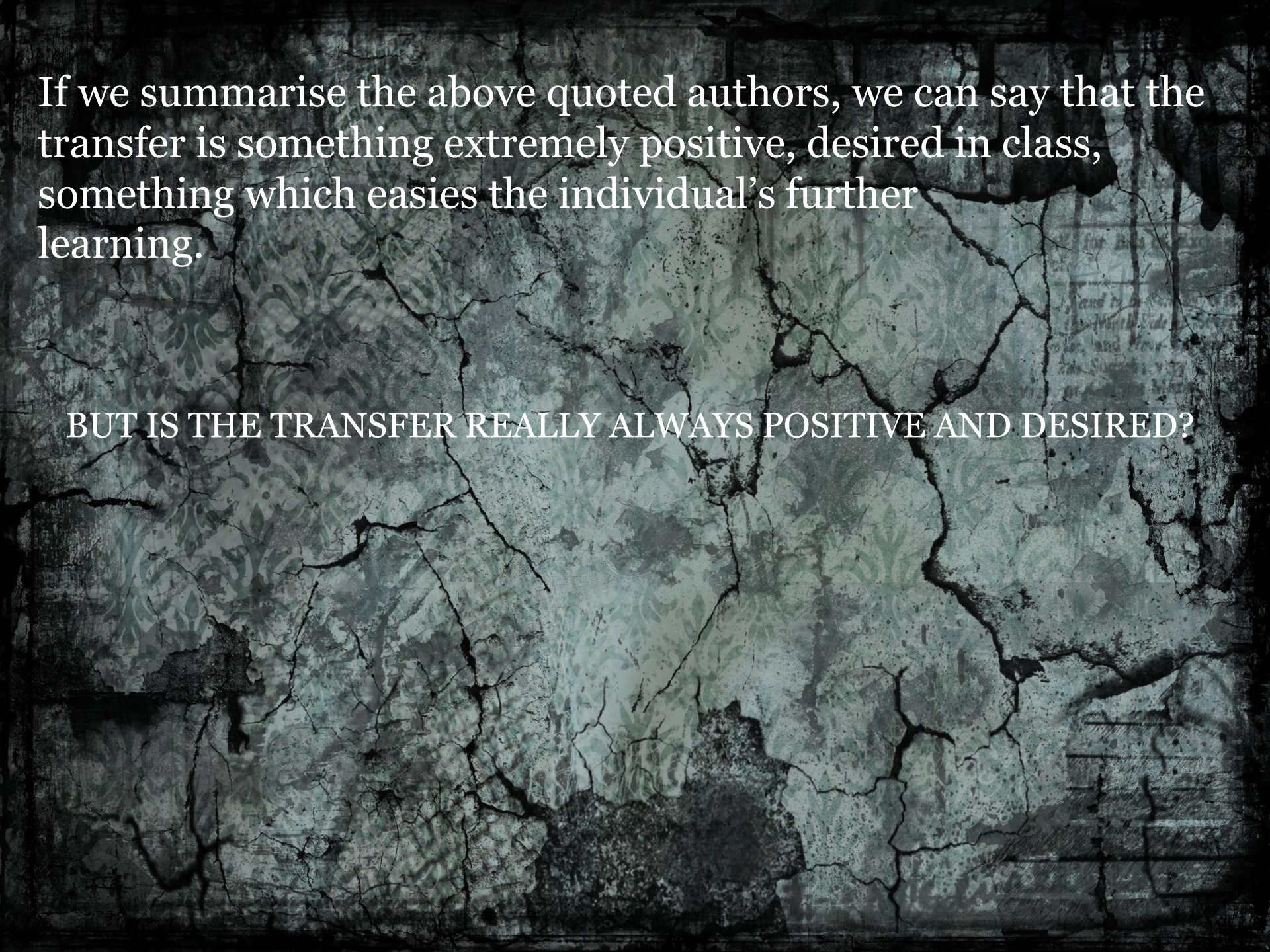


This kind of connection or this kind of transmission of the known to the unknown eases children's learning, on the lower and on the higher level of learning as well. This process is called **transfer**.

“Transfer is the transmission of the learning effect from the previous to the further learning, from one field to the other, but also from the known circumstances, e.g. school ones, to the new ones – life ones and professional ones” (Marentič Požarnik, 2000, pp. 98).

“Transfer means the transmission of the learning effect from one learnt activity to the learning of the other activity” (Žagar, 2009, pp. 62).

Perkins and Salomon argue that we talk about the learning transfer when the learning of something influences the success of learning something else (Perkins, Salomon, 1992).



If we summarise the above quoted authors, we can say that the transfer is something extremely positive, desired in class, something which eases the individual's further learning.

BUT IS THE TRANSFER REALLY ALWAYS POSITIVE AND DESIRED?

Transfer types:

- Positive transfer ⇒ positive influence of the previous experiences on further learning
- Negative transfer ⇒ negative influence of the previous experiences on further learning
- Vertical or specific transfer ⇒ experience transfer within the same field, subject
- Horizontal or general transfer ⇒ experience transfer between subjects, between theory and practice, between school learning and life situations
- Point-of-view transfer ⇒ point-of-view transfer from one school subject to all subjects
- Knowledge transfer ⇒ the transfer of general and specific knowledge from one subject to the other
- Motor transfer ⇒ influence of one motor skill on learning the other motor skill
- Emotional transfer ⇒ transferring emotions from parents to a teacher

(Žagar, 2009, Marentič Požarnik, 2000)

A look at described transfer types shows that we cannot always talk about the transfer as something positive, desired in class.

The transfer can sometimes be present also as something undesired.

Examples of undesired transfer:

- negative transfer
- point-of-view transfer
- emotional transfer

Desired forms of transfer:

- positive transfer
- vertical or specific transfer
- horizontal or general transfer
- motor transfer

The transfer that is still left is the knowledge transfer and it represents a pupil's general and specific knowledge which is transferred from one subject to the other. We can understand this transfer as the sum of all desired transfers that we encountered so far.

positive transfer + specific transfer + general transfer + motor transfer



knowledge transfer

The education that does not enable pupils to see these connections is present in class a great deal.

This is the education which covers mostly a teacher's talk to a whole class, in which the pupil is merely a recipient of information provided by the teacher, the education in which the subject matter is covered in a too abstract way and is, due to that, distant from pupils, the education which is directed only towards the matters within some chapter, subject.



The presented teaching style must go to oblivion if we want to enable the real transfer by pupils. It has to be substituted by teaching which will be based on the fact that:

- pupils will understand what they learn,
- pupils will be actively involved in a process,
- examples from real life that are close to pupils will be used,
- all or majority of sensory systems for information reception will be included,
- pupils will use the covered subject-matter in different areas, in different subjects,
- continuous revision and knowledge application will be present, also after pupils acquired something.

(Dragar, 2009, Gardner 1995, Kolb, Miltner, 2005, Tacol, 2006)

Only when teaching will include all the above mentioned characteristics, pupils will see the connection between knowledge which they acquire at school in different subjects and every-day life. And when they see it, we will be able to start talking about the transfer effect in the real sense of the word.



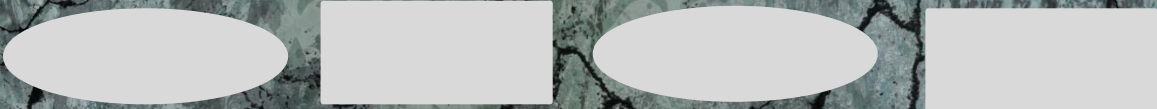
Example of cross-curricular connection

First hour

INTRODUCTION

- At the beginning of the first lesson, we played Brainstorming with pupils, where the pupils wrote/drew their answers to the questions What is rhythm? and What are all the places in which we see rhythm? on coloured sheets of paper.
- When the pupils drew/wrote the answers, I collected sheets of paper, I stuck them to the board by magnets and I used them as an introduction to the coverage of the concept of rhythm, and that was in such a way that we read aloud what was written/drawn and commented it together.

THE MAIN PART

- When we commented the last sheet of paper, I mixed the sheets of paper on the board and created the visual rhythm out of them. I asked the pupils what was created on the board. When the pupils found out that the rhythm was created, we discussed in which subject we can find such a rhythm.

- When they found out that we found such a rhythm in Mathematic I invited them to draw an example of Mathematical rhythm.
- When the pupils drew their Mathematical rhythm, they presented it.
- In the next step I showed them examples of mathematical rhythms on which they did not think.



6

$$1 \cdot 6 = 6$$



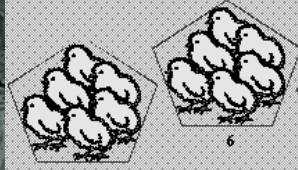
6



6

$$6 + 6 = 12$$

$$2 \cdot 6 = 12$$



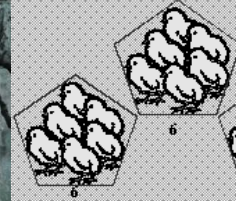
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$$6 + 6 + 6 = 18$$

$$3 \cdot 6 = 18$$



6



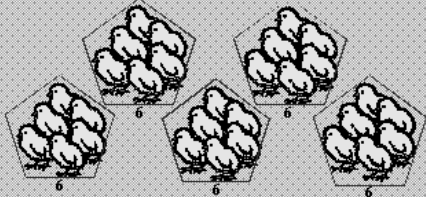
6

$$6 + 6 + 6 + 6 = 24$$

$$4 \cdot 6 = 24$$



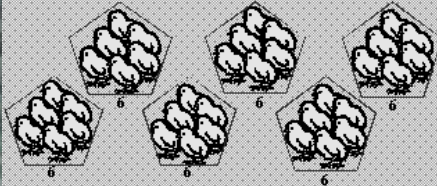
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6

$$6 + 6 + 6 + 6 + 6 = 30$$

$$5 \cdot 6 = 30$$



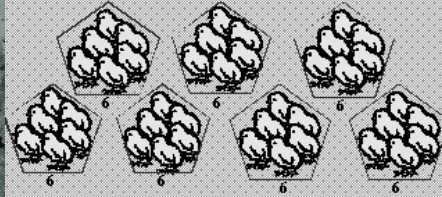
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6

6

$$6 + 6 + 6 + 6 + 6 + 6 = 36$$

$$6 \cdot 6 = 36$$



6

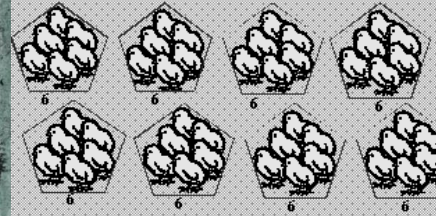
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$$6 + 6 + 6 + 6 + 6 + 6 + 6 = 42$$

$$7 \cdot 6 = 42$$



6

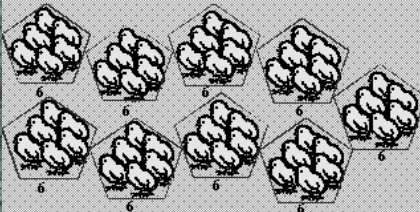
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6

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$$6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = 48$$

$$8 \cdot 6 = 48$$



6

6

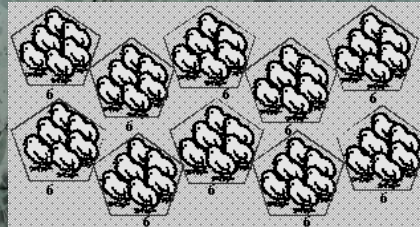
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6

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$$6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = 54$$

$$9 \cdot 6 = 54$$



6

6

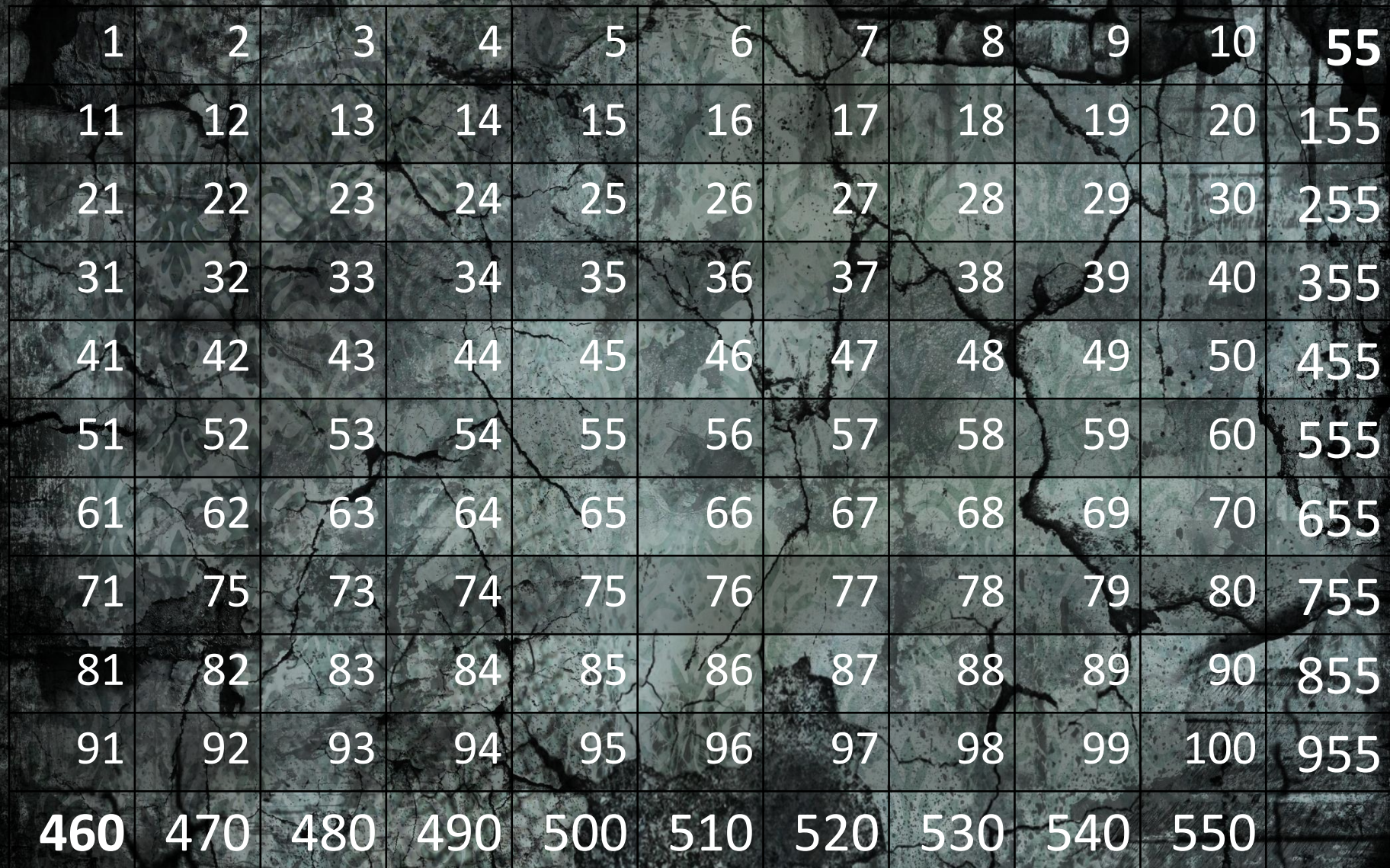
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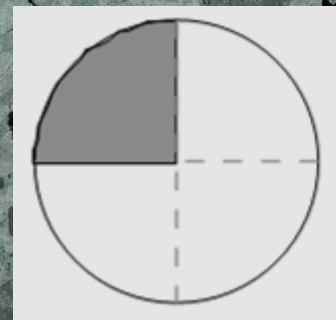
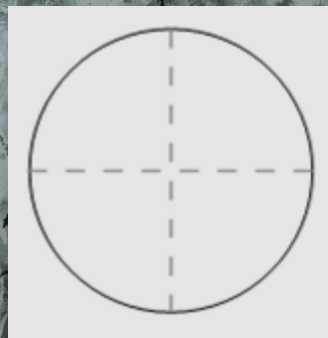
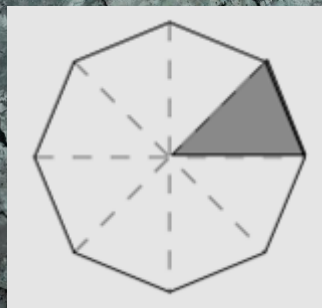
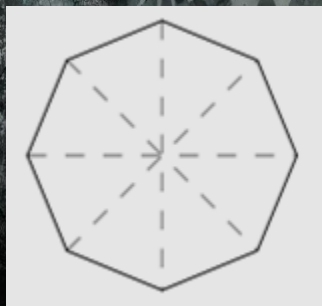
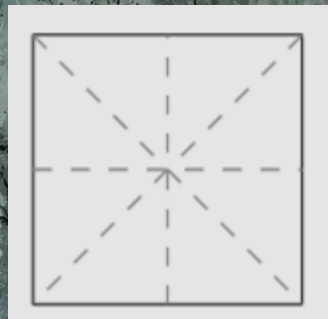
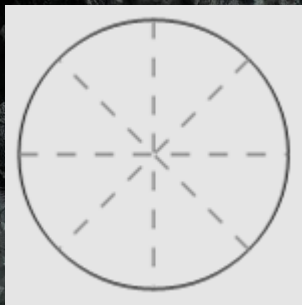
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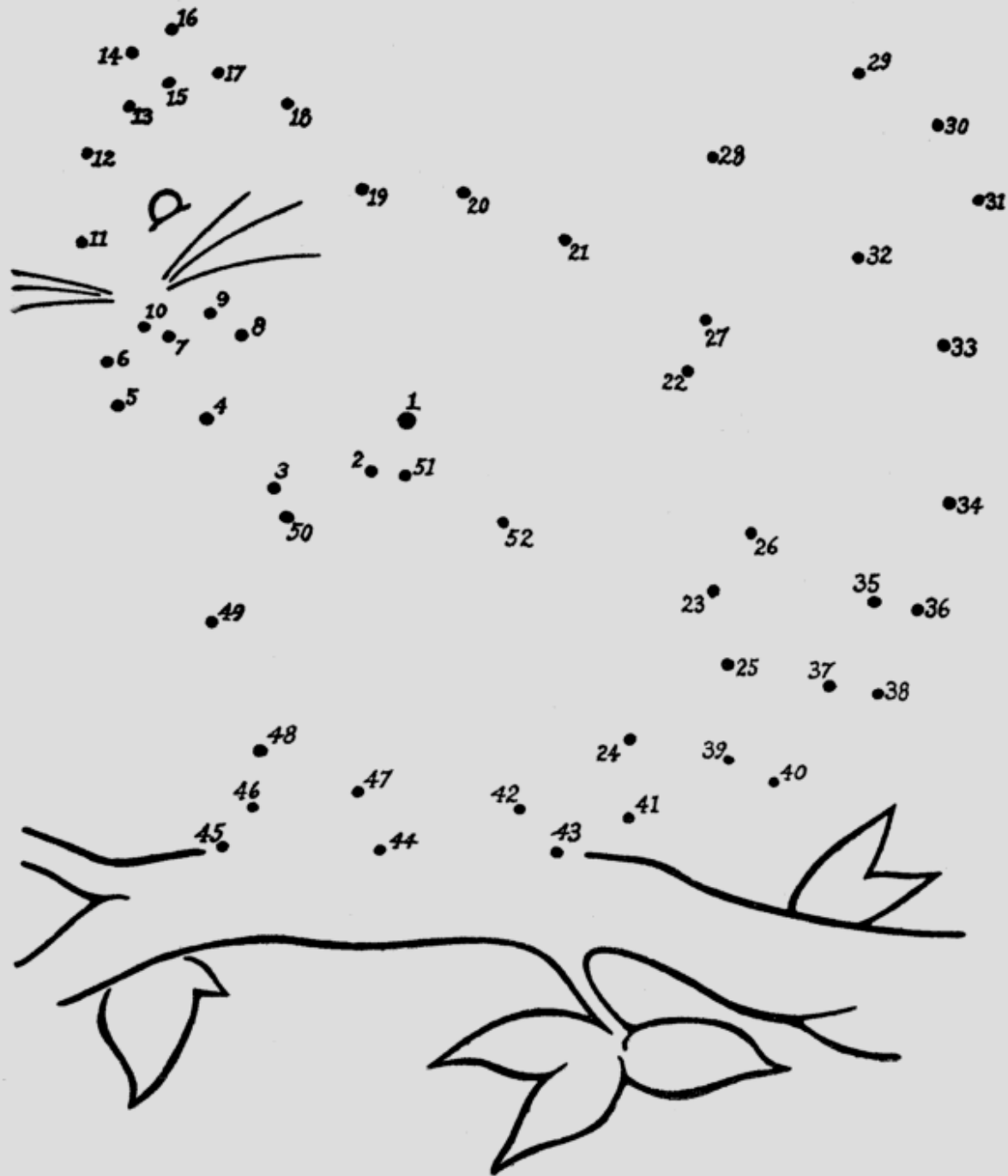
$$6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = 60$$

$$10 \cdot 6 = 60$$



1	2	3	4	5	6	7	8	9	10	55
11	12	13	14	15	16	17	18	19	20	155
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31	32	33	34	35	36	37	38	39	40	355
41	42	43	44	45	46	47	48	49	50	455
51	52	53	54	55	56	57	58	59	60	555
61	62	63	64	65	66	67	68	69	70	655
71	75	73	74	75	76	77	78	79	80	755
81	82	83	84	85	86	87	88	89	90	855
91	92	93	94	95	96	97	98	99	100	955
460	470	480	490	500	510	520	530	540	550	





THE FINAL PART

- I gave to pupils (they were in pairs) envelopes in which they were different colored small pieces of paper. With those pieces they created a rhythm. Since every pupil should have their own half of the resulting product they had to (when the product was finished) to look carefully how to cut the drawing sheet in half so that the rhythm was still recognizable.
- Pupils put their part of the product in already prepared art folder.
- For the homework they have find examples of rhythm and bring them to the next hour of art education.

Second hour

INTRODUCTION

- The pupils presented the examples of the rhythm that they found.
- The play Class concert followed. One pupil after my sign started creating sound by his body. After some time, after my sign as well, another pupil joined him, and he had to create the sound with another part of his body. When all the pupils were creating the sound, I interrupted the game.
- The game was followed by a talk about the game in order to introduce a discussion on the rhythm in music.

THE MAIN PART

- In the next step we look at a musical notation of known songs and try to identify the rhythm in it. We sang a song and accompanied it with the Orff instruments.
- Since this was a song that you can dance to we connect it with the rhythm in Physical education where they were learning to dance. While some of the pupils sang and accompanied the song with the Orff musical instruments, other pupils danced.
- In the next step we talked about where we can also find the rhythm in sport.
- I had prepared the items for which I assumed that will help pupils to find rhythm (skipping rope, hoop cones, stopwatch etc.).

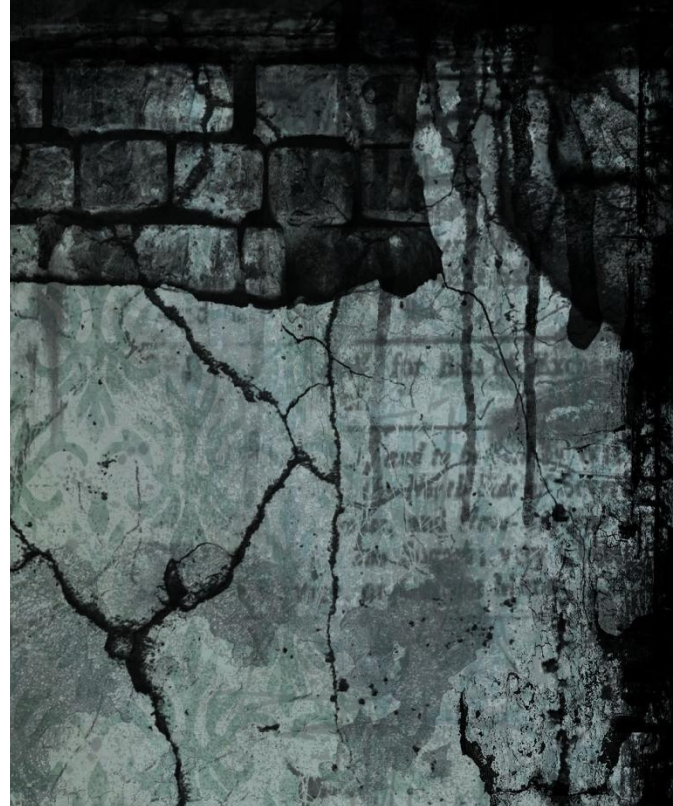
Čuk se je oženil



1. Čuk se je o - že - nil, tra - la - la, tra - la - la,
2. Čuk se - di na ve - ji, tra - la - la, tra - la - la,
3. So - va ču - ku mi - ga, tra - la - la, tra - la - la,
4. Čuk pa so - vo vpra - ša, tra - la - la, tra - la - la,
5. "E - no bu - čo vi - na, tra - la - la, tra - la - la,
6. Vi - no bo - va spi - la, tra - la - la, tra - la - la,



so - va ga je vze - la hop - sa - sa, so - va ga je vze - la hop - sa - sa.
so - va na ve - re - ji hop - sa - sa, so - va na ve - re - ji hop - sa - sa.
češ pa se vze - mi - va, hop - sa - sa, češ pa se vze - mi - va hop - sa - sa.
kol' - ko do - ta zna - ša, hop - sa - sa, kol' - ko do - ta zna - ša, hop - sa - sa.
en' - ga pe - te - li - na, hop - sa - sa, en' - ga pe - te - li - na hop - sa - sa.
bu - čo pa raz - bi - la, hop - sa - sa, bu - čo pa raz - bi - la, hop - sa - sa."



Barčica po morju plava



1. Bar - či - ca po mor - ju pla - va, dre - ve - sa se pri - kla - nja -
2. Bar - či - ca po mor - ju pla - va, ja - dra se raz - pe - nja -



jo. Oj le na - prej, oj le na - prej, do - kler je še ve - tra kej.
jo.



THE FINAL PART

- I created with pupils a short polygon in which we included objects with the help of witch we talked about the rhythm in the sport.
- For the homework they tried to find the rhythm in music and sport.

Third hour

INTRODUCTION

- The pupils presented the examples of the rhythm that they found.
- I encourage pupils to think (in groups) and write or draw on sheet where we can find rhythm in Science and technology and in Society.

THE MAIN PART

- In the next step I showed them where we can also find the rhythm in those two school subjects.

January 2012

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1	2	3	4	5	6	7
8	9	10	11	12	13	14
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22	23	24	25	26	27	28
29	30	31				

February 2012

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26	27	28	29			

March 2012

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25	26	27	28	29	30	31

April 2012

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May 2012

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26	27	28	29	30	31	

June 2012

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July 2012

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29	30	31				

August 2012

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September 2012

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October 2012

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26	27	28	29	30	31	

November 2012

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24	25	26	27	28	29	30

December 2012

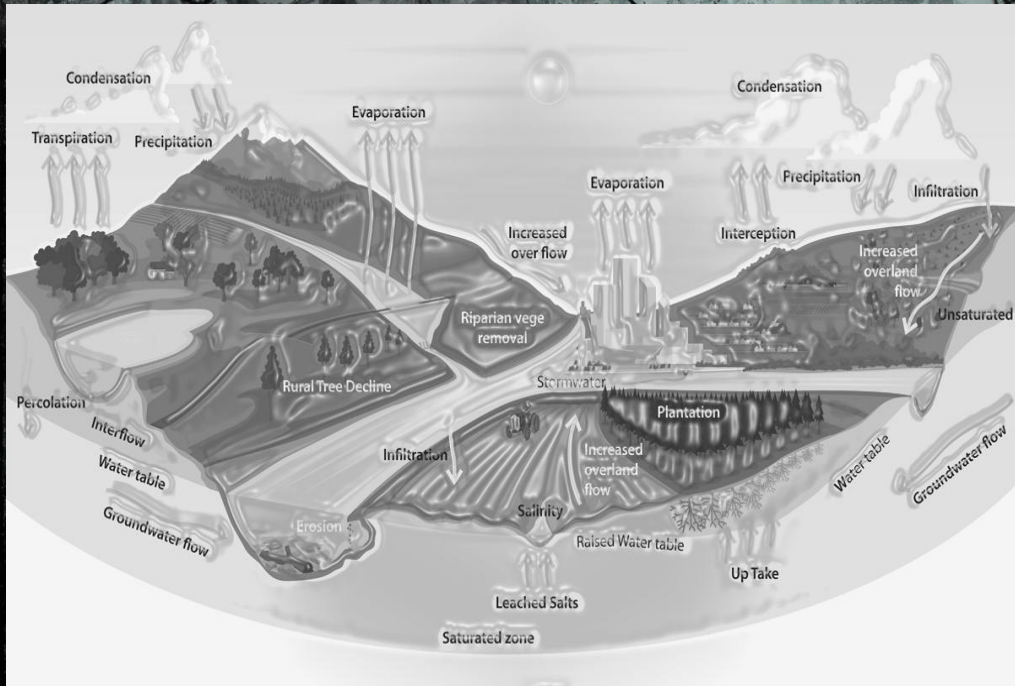
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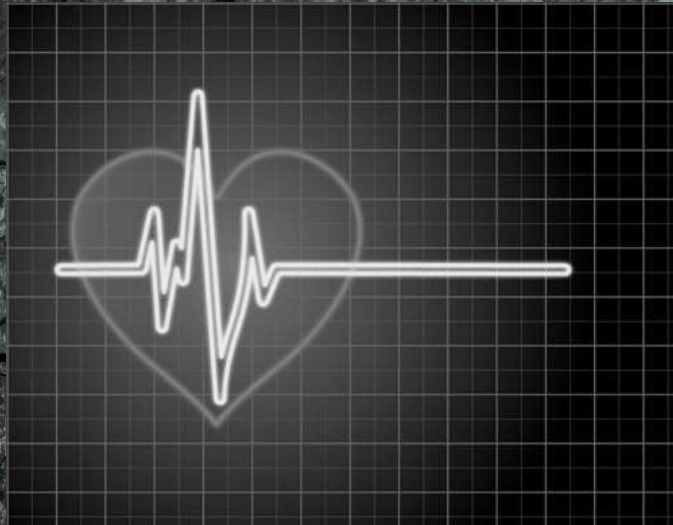
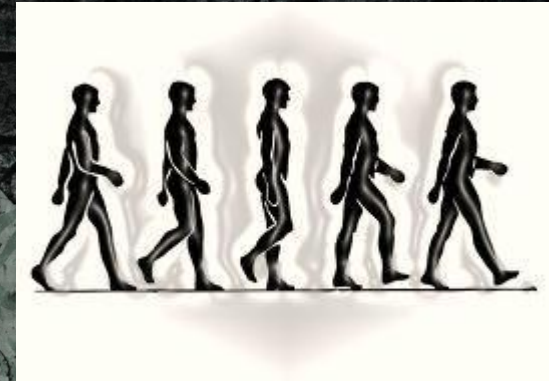
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<http://www.youtube.com/watch?v=agmDxXIZHNY>



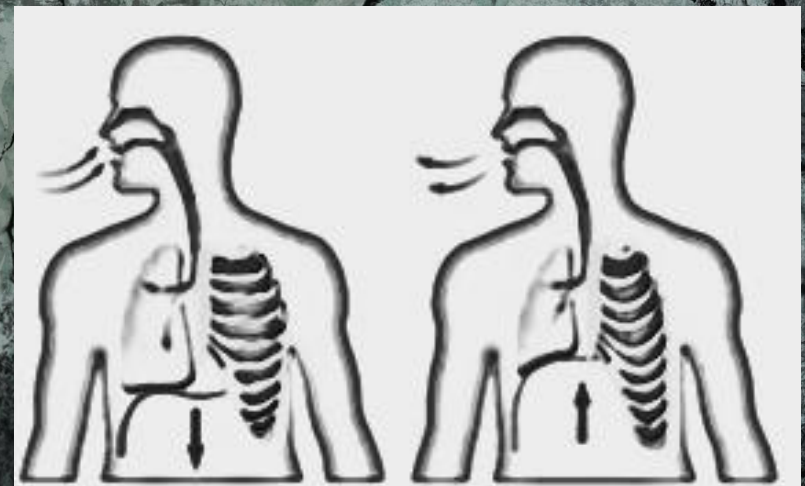
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<http://www.youtube.com/watch?v=KcQki dtD9Bo&feature=related>

<http://www.youtube.com/watch?v=39YczX2hsc4>



Töyrynummi Primary School

Töyrynummientie 8

00740 Helsinki

























Finland

TIMETABLE Form 4A

Teacher: Mr. Petri Kivutu

Admission Term: 15th August to 21st Oct 2007

Sing Term: 28th Jan. to 2nd June 2007

	Monday	Tuesday	Wednesday	Thursday	Friday
8.00-8.45	German 	Art 		ICT 	
8.45-9.30	Mathematics ⁴⁺³⁼⁷ 	Art 		English 	German 
9.30-10.00	Break 	Break 	Break 	Break	Break 
10.00-10.45	Finnish	Finnish	Natural and Environmental Studies	Mathematics ¹⁺² ₄₊₃₌₇	PE 
10.00-11.30	English 	Mathematics	Mathematics ⁵⁺⁵⁼¹⁰ _{4.3=12}	Natural and Environmental Studies	PE
11.30-12.00	Lunch 	Lunch 	Lunch 	Lunch 	Lunch 
12.00-12.15	Break	Break 	Break	Break 	Break
12.15-13.00	Finnish	Metal & Woodwork	Music 	Finnish	Religion/Ethics 
13.00-13.15	Break	Break	Break	Break	
13.15-14.00	Natural and Environmental Studies	Needlework	Music 	Creative Subjects Acting and Filmmaking Art/Handwork	
14.00-14.45				Technological Design Ball Games	

THE FINAL PART

- Pupils had to recognize the rhythm in the crowd of images that I brought.
- For the homework they tried to find the rhythm in nature.

Fourth hour

INTRODUCTION

- The pupils presented the examples of the rhythm that they found.
- In the following I gave them a song that had colored certain words painted. Together, we found that the same words were colored with the same color.
- I ordered them to colored in the same way all the words in the poem.
- When they did it, I have projected onto the blackboard entirely painted song. When they looked at it, they recognize the rhythm in it.

Ljudska

Jutri se bom v mesto peljal, kaj, kaj, kaj!

Jutri se bom v mesto peljal, kaj, kaj, kaj!

Kaj boš pa ti v mestu delal, kaj, kaj, kaj!

Kaj boš pa ti v mestu delal, kaj, kaj, kaj!

V mestu bom šivanko kupil, kaj, kaj, kaj!

V mestu bom šivanko kupil, kaj, kaj, kaj!

Kaj boš pa šivanko rabil, kaj, kaj, kaj!

Kaj boš pa šivanko rabil, kaj, kaj, kaj!

S šivanko si bom žaklje šival, kaj, kaj, kaj!

S šivanko si bom žaklje šival, kaj, kaj, kaj!

Kaj boš pa ti žaklje rabil, kaj, kaj, kaj!

Kaj boš pa ti žaklje rabil, kaj, kaj, kaj!

Ljudska

Jutri se bom v mesto **peľjal**, kaj, kaj, kaj!

Jutri se bom v mesto **peľjal**, kaj, kaj, kaj!

Kaj boš pa ti v mestu **delal**, kaj, kaj, kaj!

Kaj boš pa ti v mestu **delal**, kaj, kaj, kaj!

V mestu bom **šivanko** kupil, kaj, kaj, kaj!

V mestu bom **šivanko** kupil, kaj, kaj, kaj!

Kaj boš pa **šivanko** rabil, kaj, kaj, kaj!

Kaj boš pa **šivanko** rabil, kaj, kaj, kaj!

S **šivanko** si bom **žaklje** šival, kaj, kaj, kaj!

S **šivanko** si bom **žaklje** šival, kaj, kaj, kaj!

Kaj boš pa ti **žaklje** rabil, kaj, kaj, kaj!

Kaj boš pa ti **žaklje** rabil, kaj, kaj, kaj!

Ljudska

Jutri se bom v mesto **peľjal**, kaj, kaj, kaj!

Jutri se bom v mesto **peľjal**, kaj, kaj, kaj!

Kaj boš **pa ti** v mestu **deľal**, kaj, kaj, kaj!

Kaj boš **pa ti** v mestu **deľal**, kaj, kaj, kaj!

V mestu bom šivanko **kupil**, kaj, kaj, kaj!

V mestu bom šivanko **kupil**, kaj, kaj, kaj!

Kaj boš **pa šivanko** **rabil**, kaj, kaj, kaj!

Kaj boš **pa šivanko** **rabil**, kaj, kaj, kaj!

Š šivanko si bom **žaklje šival**, kaj, kaj, kaj!

Š šivanko si bom **žaklje šival**, kaj, kaj, kaj!

Kaj boš **pa ti** **žaklje**, kaj, kaj, kaj!

Kaj boš **pa ti** **žaklje**, kaj, kaj, kaj!

THE MAIN PART

- I presented to pupils a song in which create the rhythm by reading.
- In the following pupils (in pairs) found in a collection of songs that I had with me, a song that they liked the most and they read it in rhythm.

RAK

Rak, rak
je krojač,
urezal mi je
dvoje hlač.

Ker mi hlače
niso prav,
sem mu jih
poslal nazaj.

Rak, rak
je rdječ,
ker mi hlače
niso všč.

THE FINAL PART

- With the pupils we repeated the term rhythm, which we learnt in individual subjects.
- Pupils have completed their art folder.