



Erasmus+
Programme Your Future



COMPUTATIONAL THINKING - LESSON SCRIPT

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Lesson information:	Subject:	Mathematics
	Duration:	45 min
	Grade/level:	6 th /2 nd
	Age:	12
	Topic:	Multiplication of fractions

The curriculum specifications and requirements:	The core curriculum of teaching Mathematics for the 2 nd educational stage. Pupil: <ul style="list-style-type: none">▲ calculate mentally and in writing with integers and positive - rational numbers and know the order of operations
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The aims of the lesson:	Pupil: <ul style="list-style-type: none">● multiply common fractions;● write a linear algorithm of multiplication of common fractions;● use digital study materials and computer programs under the guidance of the teacher and independently.
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Previous knowledge:	The core curriculum of teaching Maths for the 1 st - 2 nd educational stage Pupil: <ul style="list-style-type: none">● know common fractions - meaning of numerator and denominator● know the rule for multiplication of common fractions● know the meaning of irreducible common fraction
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The forms of work:	<ul style="list-style-type: none">● working in pairs● individual working
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- The methods of work:**
- brainstorm
 - exercise method
 - informal discussion

- Teaching aids:**
- computer with access to the Internet, projector
 - word editor (Word or Writer or GoogleDoc)
 - tablets/laptops/computers for pupils

- The range of using ICT:**
- writing an algorithm
 - presenting and processing information

The course of lesson:

- Teacher activities
- Pupil activities
- The schedule

1. Introduction - organisational activities
Greeting the pupils, checking the register, giving the topic of the lesson and introducing the aims of the lesson.
Up to 5 min

2. Recalling information about multiplication of common fractions.
The teacher asks pupils about their previous knowledge of multiplication of common fractions. Pupils have a discussion about it. One of the pupils does the exercise on the blackboard:
Teacher asks other pupils to say the following instructions: Draw a fraction line! Write 2 into the numerator! Write 3 into the denominator!
Up to 5 min

3. Coding. Writing an algorithm
Teacher open the [video guide](#) and introduce the meaning of the algorithm. Teacher and pupils have a discussion about it (up to 5 minutes).
Up to 5 min
Pupils open the word editor. Pupils write an algorithm in a document. Teacher supervise and help.
Up to 25 min

4. Evaluation
Pupils present their work. After each presentation teacher and pupils analyze presented algorithm. The teacher sums up pupils' work.
5min

Specific information:

- Programs
- Links
- Etc

- An algorithm must be written for irreducible common fractions.
- It is better to use Google.Docs redactor and easier to share the written algorithms.

Attachments:

- Worksheets
- Programs

Video guide (in English)

- <https://www.khanacademy.org/partner-content/dartmouth->



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- **files necessary**
- **Etc**

[college/dartmouth-algorithms/v/what-are-algorithms](https://college.dartmouth-algorithms/v/what-are-algorithms)
