



Erasmus+  
Programme Your Future



## COMPUTATIONAL THINKING - LESSON SCRIPT

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<b>Lesson information:</b>	Aine: Physics
	Kestvus: 2x45 minutes
	Klass: 8
	Vanus: 14
	Teema: Solar System
<b>The curriculum specifications and requirements:</b>	The core curriculum requirement of teaching Physics for the 3rd educational stage. 8th grade Students: <ul style="list-style-type: none"><li>● explain the structure of the Solar System</li><li>● develop the skill of reading and understanding science texts and learn how to find physics-related information in encyclopedias and the Internet</li></ul>
<b>The aims of the lesson:</b>	Student: <ul style="list-style-type: none"><li>● forms the model of the Solar System</li></ul>
<b>Previous knowledge:</b>	Student <ul style="list-style-type: none"><li>● describes the Solar System as a whole</li><li>● names the planets of Solar System and knows the order of them</li></ul>
<b>The forms of work:</b>	<ul style="list-style-type: none"><li>● Individual work</li></ul>
<b>The methods of work:</b>	<ul style="list-style-type: none"><li>● modeling</li></ul>
<b>Teaching aids:</b>	<ul style="list-style-type: none"><li>● Internet connected computer</li><li>● projector</li><li>● computers for every student</li></ul>
<b>The range of using ICT:</b>	<ul style="list-style-type: none"><li>● Working with the web environment finding information</li><li>● The presentation and communication</li></ul>

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**The course of lesson:**

- Teacher activities
- Pupil activities
- The schedule

- **Introduction** (5 min)

- Greeting and informing the aims and objectives of the lesson

- **Learning and programming** (70 minutit)

- The students read a summary of the lesson learned last week as a reminder from the solar system

<http://opik.fyysika.ee/index.php/book/view/36#/section/9277>

- A teacher shows one possible solar system model

<https://www.youtube.com/watch?v=k87PRGaetBc>

- The students log in their *Tynker* account and open the project started by the teacher

<https://www.tynker.com/play/p-ikeses-steem-8-kl/5a4e33265ae029ba3c8b481d>

and make the copy

- The students follow the path given by the teacher and program their own solar system model

- The teacher will instruct and assist as necessary

- **Reflection** (15 minutit)

- Presentations of the students works
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**Specific information:**

- Programmid
- Failid

- a project started by a teacher with a working manual

[https://www.tynker.com/play/p-ikeses-steem-8-](https://www.tynker.com/play/p-ikeses-steem-8-kl/5a4e33265ae029ba3c8b481d)

[kl/5a4e33265ae029ba3c8b481d](https://www.tynker.com/play/p-ikeses-steem-8-kl/5a4e33265ae029ba3c8b481d). To see and use the manual they have to open the new window and find *Remix* order

- The original of model in Tynker in English is available on

<https://www.tynker.com/ide/?p=5a2a5a03f6994124458b46c3>

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**Attachments:**

- Worksheets
  - Programs
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