grades 1-9
students 7 – 15 years
700 students
57 teachers

Mari Spanos
Vice-principal, class teacher, 6

Merja Tuurala
Biology and geography, 7 - 9

Jaakko Salmi
Mathematics, chemistry, physics, 7-9
Science teaching in Keravanjoki school

Primary school
1st – 4th grade
Environment and nature studies

5th – 6th grade
Biology and geography
Physics and chemistry

Lower secondary school
7th – 9th grade
Biology
Geography
Physics
Chemistry
Weekly hours in Keravanjoki school

<table>
<thead>
<tr>
<th></th>
<th>1ST</th>
<th>2ND</th>
<th>3RD</th>
<th>4TH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENT AND NATURE STUDY</td>
<td>2 HOURS</td>
<td>2 HOURS</td>
<td>2 HOURS</td>
<td>3 HOURS</td>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>5TH</th>
<th>6TH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY AND GEOGRAPHY</td>
<td>2 HOURS</td>
<td>1 HOURS</td>
</tr>
<tr>
<td>CHEMISTRY AND PHYSICS</td>
<td>1 HOUR</td>
<td>1 HOURS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>7TH</th>
<th>8TH</th>
<th>9TH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY</td>
<td>1</td>
<td>1</td>
<td>1,5</td>
</tr>
<tr>
<td>GEOGRAPHY</td>
<td>1</td>
<td>1</td>
<td>1,5</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
## Themes

<table>
<thead>
<tr>
<th>Environment and nature studies</th>
</tr>
</thead>
</table>
| **1st grade**                | Me and the environment around me  
|                               | We live in Finland  
|                               | Winter and spring  
|                               | Everyday life  
| **2nd grade**                | Where do we get our food?  
|                               | What is a map?  
|                               | Planets  
|                               | How to find information?  
| **3rd grade**                | Plants and animals near your home  
|                               | What do you see in the map?  
|                               | Finland (geography)  
|                               | At home and at school  
| **4th grade**                | Life at a farm  
|                               | Scandinavian and Baltic countries  
|                               | Life in water  
|                               | Healthy life  
| **5th grade**                | Europe  
|                               | Africa (desert, savannah and rain forest)  
|                               | Spring and summer in the garden  
|                               | Human biology  
| **6th grade**                | Healthy living  
|                               | Life in the forest  
|                               | Asia, Oceania and Australia  

### Biology and geography

| Physics and chemistry  
|-------------------------------|
| **5th grade**                | Water  
|                               | Air  
|                               | Space  
|                               | Power  
| **6th grade**                | Organic and inorganic materials  
|                               | Home chemistry  
|                               | Electricity  
|                               | Energy  

## Biology and geography

- Europe
- Africa (desert, savannah and rain forest)
- Spring and summer in the garden
- Human biology

## Physics and chemistry

- Water
- Air
- Space
- Power
- Organic and inorganic materials
- Home chemistry
- Electricity
- Energy
<table>
<thead>
<tr>
<th>Grades</th>
<th>Biology</th>
<th>Geography (Physical and Human)</th>
<th>Chemistry</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th</td>
<td>Waters of Finland: Lakes, rivers and the Baltic See</td>
<td>The Earth, Continents</td>
<td>Basics: Elements, compounds; water, oxygen, hydrogen</td>
<td>Voice, light; astronomy</td>
</tr>
<tr>
<td>8th</td>
<td>Forests of Finland</td>
<td>Europe</td>
<td>Periodical table of elements; structure of atoms; reactions acids, bases, salts</td>
<td>Mechanics, thermodynamics (+ environmental effects)</td>
</tr>
<tr>
<td>9th</td>
<td>Human biology</td>
<td>Finland</td>
<td>Organic chemistry: Structures, nomenclature, use. e.g. circulation of carbon in nature; green house effect</td>
<td>Electricity, radioactivity, nuclear physics</td>
</tr>
</tbody>
</table>