

**11-13 year old 12 lessons****Clean water and sustainability - A trip to Friðheimar****Objectives:**

- Water cycle - Clean water, source and source of water
- Learn about sustainability and the use of water in crops

**Materials Needed:**

- ❖ Different materials of some sorts

**Lesson structure****Lessons 1-4: 160 mín (4 lessons)**

Discussion in class about the local environment of the school.

Terms: Clean water, water source, source, water conservation area.

Discuss whether there is a source of water in our vicinity and the importance of having good access to water.

K - V - L with pupils

- What do we knowHvað vitum við
- What do we want to know
- What have we learnt

Discussions and data collection: Students collect information and how we use water and where we get water from and which way the water goes before it reaches our tap.

Task: Students prepare a poster to explain the way and the process

Experiment: Filter water from a river or lake with a coffee filter and boil it. Let it cool. Taste of the water. Is it different than the taste of tap water. In Vatnsendaskóli, students take samples from Elliðavatn.

Final product: Students collect all information in a project folder in BookCreator

Among other things, students should understand how the water becomes potable, as well as having gained an insight into the water cycle, be able to tell where the water comes from and how it is potable.

Teacher reviews K - V - L with students and adds what students have learned

**Cultivation using water - Field trip - 320 min (8 lessons)**

The concept of sustainability introduced by students and explained in more detail. Students prepare a concept map where they write down ideas and explanations of the concept of sustainability.

Students go on a field trip to Friðheimar. There, the owners welcome the students and introduce them to Friðheimi's operations and how and why the operation is sustainable.

Students take the cards with them and record in the Book Creator what is revealed during the visit.

At the end of the visit, the students taste tomato soup.

Assessment:

- ❖ Student self-assessment. Students submit a self-assessment to the teacher on how the work went and whether they knew all the items that were being worked on
- ❖ Concept card/poster - Where does the water come from?
- ❖ Report from an experiment - Filtering water
- ❖ K-V-L - results
- ❖ Reflections from a field trip