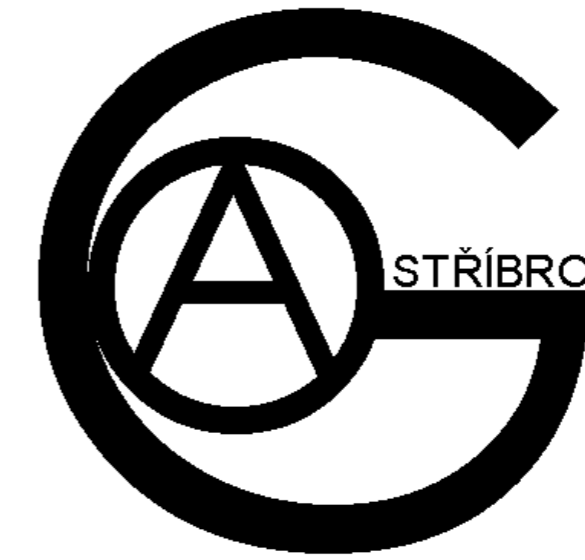


Jitka Soukupova | Gymnázium | Stříbro | Czechia

Janka Siskova | ZŠ a MŠ Nižná Brána | Kežmarok | Slovakia



The Science Garden

The Garden of Physical and Chemical Experiments for primary and secondary schools

The Science Garden is the second joint project of the Slovak ZŠ and MŠ Nižná Brána Kežmarok and the Czech Gymnázium Stříbro.

The project consists of 5 main steps:

- The first step is the joint selection and design of 12 + 2 experiments from the garden
- In the second step, students from both schools prepare and test experiments
- In the third step, students describe and photograph or film individual experiments
- In the fourth step, the children prepare information materials on the given topic and experiment in the form of small A5 leaflets in English for each month
- And the last fifth step and the final output is a calendar with the relevant set of experiments and photos

Project outputs:

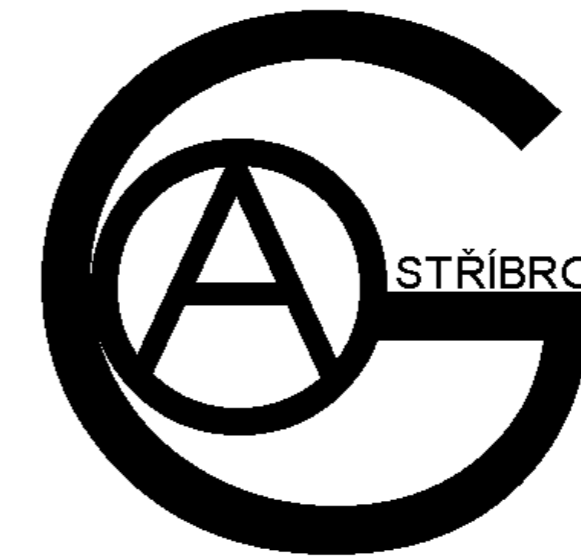
- Presentation of experiments on the topic Garden
- Information card for each experiment with a description of the experiment in Czech, Slovak and English
- The Garden of Experiments joint calendar for 2024
- Presentation of the project to the public – Science Week, Researchers Night, Science Day, Science Collection, Science Cup, Brain Awareness Week, ...



The Science Garden is a one-year school scientific project for children from 6 to 16 years old, including chemistry, physics, biology and IT.

Jitka Soukupova | Gymnazium | Stribro | Czechia

Janka Siskova | ZS a MS Nizna Brana | Kezmarok | Slovakia



The Science Garden

The Garden of Physical and Chemical Experiments for primary and secondary schools

Slovak team experiment:

June - Dry dandelion in water

Tools: a dandelion, glass of water

We immerse the dandelion (already with seeds) in a glass of water and then we take it out again. There is a thin layer of air between the dandelion and the water, which protects the dandelion from water. Each of the dandelion seeds is attached to a pappus, which is a parachute-like structure made of around 100 fine bristles, and this structure is mostly air (92%).

JUNE

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Dry dandelion in water

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JULY

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Levitating fruits and vegetables

Tools: water pearls, water, glass with a lid, plastic fruits and vegetables

We let the water pearls swell overnight and then we transfer them to a jar with a lid. We will place various fruits and vegetables between them. We pour water into the glass. Water has a similar index of refraction as water pearls, so light passes through them and does not refract, so we can't see water pearls in water and the plastic pieces look like they are levitating.

Czech team experiment:

July - Levitating fruits and vegetables

Tools: water pearls, water, glass with a lid, plastic fruits and vegetables

We let the water pearls swell overnight and then we transfer them to a jar with a lid. We will place various fruits and vegetables between them. We pour water into the glass.

Water has a similar index of refraction as water pearls, so light passes through them and does not refract, so we can't see water pearls in water and the plastic pieces look like they are levitating.

The Science Garden is a one-year school scientific project for children from 6 to 16 years old, including chemistry, physics, biology and IT.