

High School Class Competition Science on the Move 2023



PROJECT DESCRIPTION

Introduction

The SimplyScience Foundation (SimplyScience.ch) is launching the seventh edition of the nation-wide science competition for high school classes one or two years prior to the Swiss Matura. The project is intended to inspire interest in sciences for a broad spectrum of students. The competition is especially attractive because of its top prize for the winning class and their teacher to spend a science week abroad. The concept and content of this competition have been developed by a special project team as part of the SimplyScience Foundation.

Objective

The objective of this competition is to identify the class with the **greatest dedication** and greatest commitment in science subjects through a two-phase competition. Interdisciplinarity is welcome.

In the **first, practical, phase (Phase 1)**, the goal is to develop a model for sustainable production of biomass without sunlight. Think "Vertical Gardening", "Aquacultures", etc. This ecological topic fits well into the curriculum and the students will perform experiments and document the whole project (model, poster, video clip). **The topic is also well suited for an interdisciplinary project e.g. biology-chemistry or biology-geography.**

In contrast, the **second phase (Phase 2)** of the competition calls for different capabilities. In a brief five-minute live **performance on stage**, the top 10 classes will illustrate the experiences they had while conducting the task.

Teamwork

The **entire class shall participate** in this competition. Good organisation, clever division of tasks, strong communication in the group and mutual support are indispensable aspects in order to do well. It is expected that students perform a variety of tasks such as executing research, performing experiments, designing and formatting documenting material, and performing on stage. This requires a variety of different strengths and abilities, which should allow all students to actively participate.

Target group

Science on the Move is intended for high school classes (level "Gymnasium"), one or two years prior to the Swiss Matura in all regions of Switzerland. Generally, this corresponds to the 10th and 11th school year. It is also possible to build a "new" class consisting of students from different classes. The number of participating classes is limited and they will be considered in the order of their application. Classes with more than 14 students will be prioritised. To ensure equal chances for all language regions, all competition activities will be in **English** – the international language of science.

Teachers/Mentoring

The **teachers play a crucial role in Science on the Move.** Besides coaching their students, they encourage and motivate them throughout the phases of the competition. They should promote inclusion, creativity, innovation, confidence and fun and empower students to handle their problems independently. They also provide

guidance and reassurance on research topics and methodology. It is also desirable that they contribute with logistical support, especially in Phase 2.

Teachers should not get involved themselves in solving and correcting the task in Phase 1. To ensure this, a signed agreement by the respective teacher must be submitted.

Time Management

Each class has **8 weeks** to complete the project in **Phase 1**. The effort required for Phase 1 is estimated at **10 half-days**. It is possible for classes to continue working on the project outside of their normal classroom hours.

Team Leader

Each class will select its **team leader** and a deputy team leader among the students. These students will be the contacts for the "Science on the Move" organizers. Contact information of the teacher is also required.

Phase 1 Challenge

In Phase 1, the task will be published on www.simplyscience.ch on February 6, 2023. The solutions and documenting material must be submitted according to the specifications and time schedule provided by the organizers.

Each class needs to keep an "Activity List" which records which student was or is responsible for each part or aspect of the work. Each student in the class must have participated at least once in Phase 1. We recommend that the classes organize themselves, assigning and sharing responsibilities among themselves. It is not necessary for each student to be involved in every aspect of the task.

Every participating class will receive a financial contribution of CHF 500.- for the material they need to fulfil the task.

Phase 1 Scoring

All eligible submissions received on time will be reviewed and evaluated by the project team. A **scoring list** will be provided showing the maximum points achievable for each subtask. The **project team** will then determine the **top 10 classes**.

The 10 top-rated classes will be announced in the middle of **April 2023**. At this point, they will be expected to compete again in the Final Event (Phase 2).

Phase 2 Challenge

Only the 10 top-rated classes will proceed to Phase 2 of the competition (which is organized very differently than Phase 1) and take part in the **Final Event** on **Thursday, 8th June 2023** at Roche in Basel/Kaiseraugst.

At the Final Event, the individual classes will each have to deliver a five-minute live **performance** on stage. The objective of the performance is for students to link, as imaginatively and convincingly as possible, their experiences during the first phase of the competition with the subject of the competition "Science on the Move".

Music, literature, poetry, theatre, a debate or a straightforward presentation ... anything goes. Homemade videos are welcome but may only be a part of the performance. Personal live performance on stage is required. It is up to the class how many people from their class will perform on stage.

All performances will be judged by an expert jury according to the scoring aspects outlined below.

Phase 2 Scoring

Content, relevance to the topic of Phase 1. Is the performance relevant to the topic? Are the aspects addressed relevant to the topic?

Creativity, depth, level. Is the performance engaging? Is it creative? Is it thoughtful? Is it thought-provoking?

Persuasive power, enthusiasm and dedication. How convincing was the performance? How much passion and dedication were shown? How strong was the will to win this competition **as a team?**

Prizes The **first prize** is a **science week abroad** with a diverse and exciting science program

for the whole class.

2nd prize: a three-day science field trip in Switzerland
 3rd prize: a two-day science field trip in Switzerland
 4th—10th prize: a one-day science field trip in Switzerland

All participating classes will receive a **certificate** to confirm their participation in

"Science on the Move".

Timeline Start Application period: November 1, 2022

Application deadline:January 20, 2023Announcement of participating classes:January 27, 2023

Phase 1 - Challenge

Publication of task: February 6, 2023
Closing date (submission of project documentation): March 31, 2023
Selection of the top 10 classes: April 3 - 14, 2023

Phase 2 - Preparation Stage Performance & Final Event

Announcement of the top 10 classes: April 14, 2023
Stage performance and winner selection: June 8, 2023

Winning class: Science trip abroad September 2023

(students + teacher)

Questions? E-mail: <u>scienceonthemove@simplyscience.ch</u>

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We look forward to being in touch with you and we wish everyone great success in the Science on the Move challenge.

Diversity & Inclusion

Creativity and innovation are at the core of this competition, therefore we value inclusion and diversity, such as different thinking styles, experiences, gender, ethnicity, nationality and all Swiss language regions. Additionally, we are committed to accommodating participants with disabilities or special needs.

Terms & Conditions

Students must reside in Switzerland to be eligible for the competition. Application to the competition is only possible with a class or a group of students. The number of participating classes is limited and they will be considered in the order of their application. Classes with more than 14 students will be prioritised. It is also possible to build a "new" class with teachers and students from different classes. Only classes enrolled in the school year one or two years before the Matura at a Swiss "Gymnasium" are eligible for the competition. Employees of the SimplyScience Foundation and members of the jury or the project team are not al-

lowed to share any additional information about the competition with friends and teachers of any school. Information on rank and points achieved will only be communicated after the end of the competition and only upon request. Any appeal to a court of law is excluded.

Winning classes will be informed directly by the SimplyScience Foundation.

The exchange of prizes for cash or any other prize is not possible.

SimplyScience.ch is allowed to publish all photos and videos received or taken during the competition in any print or electronic media channels.

By applying for this competition, each person agrees to the terms and conditions stated above.

About SimplyScience

The SimplyScience Foundation operates the online platform www.simplyscience.ch. It is intended for all Swiss children and young people between 8 and 18 years of age. Articles, images, videos, experiments and competitions establish a connection between natural science or technology topics and everyday life in an easy-to-understand manner.

The goal of the SimplyScience Foundation is to promote science and technology and inspire the next generation of innovators. SimplyScience encourages public awareness of science and technology for students, parents and teachers.