



## High School Class Competition Science on the Move 2019



### PROJECT DESCRIPTION

#### Introduction

The SimplyScience Foundation (SimplyScience.ch) is launching the fifth 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 life 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 in London and Cambridge or Oxford (England). 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 the subjects of **biology or biochemistry** through a two-phase competition.

In the first **practical phase (Phase 1)**, the goal is to conduct **one task in the field of biology or biochemistry** and to discuss the results.

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

#### Team work

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 performing the experiments, designing and formatting documenting material, translating, executing research 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 10<sup>th</sup> and 11<sup>th</sup> 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 must not get involved themselves in solving and correcting the task in Phase 1. To ensure this, a signed agreement by the respective teacher and the class team leader must be submitted. Their signatures will confirm that they will comply with these rules.

#### **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. However, teachers can also allow the project to take place during their normal teaching time. The project is very close to the curriculum and would, therefore, fit well with the students' education.

#### **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 required for any questions or issues regarding the competition.

#### **Phase 1 Challenge**

In Phase 1, the experimental task will be published on [www.simplyscience.ch](http://www.simplyscience.ch) in the first half of **February 2019**.

This year's experimental challenge will involve the building of a non-digital 3D model, attempting to explain a subject or a process in biology, biochemistry or pharmacy.

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 the experimental part. We recommend that the classes organize themselves, assigning and sharing tasks among themselves. It is not necessary for each student to perform all the tasks.

Every participating class will receive a financial contribution for materials used for 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 task. The **project team** will then determine the **top 10 classes**.

The 10 top-rated classes will be announced in the middle of **April 2019**. At this point, they will be expected to compete again in the Final Event (Phase 2).

***Information on rank and points achieved will only be communicated after the end of the competition and only upon request.***

#### **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 24th May 2019** at the Roche headquarters in Basel.

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 perfor-

mance. Personal live performance on stage is required. It is up to the class how many people from their class will perform on stage.

In addition, each class will exhibit their **scientific work** made in Phase 1.

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

## Phase 2 Scoring

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

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

**Persuasive power, enthusiasm and dedication.** How convincing was the presentation? 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 **week-long trip to London and Cambridge or Oxford (England)** with a diverse and exciting science program. The winning class will visit state-of-the-art businesses and colleges, famous science museums and of course get to see the city of London. Each day, the class will write a brief **blog post** to be published via **SimplyScience.ch**.

**2<sup>nd</sup> prize:** a three-day science field trip in Switzerland

**3<sup>rd</sup> prize:** a two-day science field trip in Switzerland

**4<sup>th</sup>–10<sup>th</sup> prize:** a one-day science field trip in Switzerland

Additionally, all 10 top-rated classes will have the opportunity to experience a **science visit** at Roche in Basel, Kaiseraugst, Rotkreuz or the remediation centre in Grenzach.

All participants in the final phase will also receive a **certificate** to confirm their participation in “Science on the Move”.

## Timeline

Competition invitation posted on SimplyScience.ch and sent to schools:	November 2018
<b>Application deadline:</b>	<b>January 18, 2019 (Week 3)</b>
Announcement of participating classes:	January 25, 2019 (Week 4)
<b>Phase 1 – Challenge</b>	
Publication experimental task:	February 11, 2019 (Week 7)
Closing date (submission of results):	April 5, 2019 (Week 14)
Selection of top 10 classes:	April 8 - 17, 2019
<b>Phase 2 – Final Event</b>	
Announcement of top 10 classes:	April 18, 2019 (Week 16)
Final Event and winner selection:	May 24, 2019 (Week 21)
<b>Winning class: Science trip to London</b> (students + 1 teacher)	<b>Sept 8 - 14, 2019 (Week 37)</b>

**Questions?**E-Mail: [scienceonthemove@simplyscience.ch](mailto:scienceonthemove@simplyscience.ch)**Contacts**

Sarah Menzi (Project Manager)

+41 (0) 44 368 17 48

Thomas Flüeler (Managing Director)

+41 (0) 44 368 17 46

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 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 allowed to share any additional information about the competition with friends and teachers of any school.

Any appeal to a court of law is excluded.

There will be no correspondence concerning the results of the competition. 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](http://www.simplyscience.ch). It is intended for all Swiss children and young people between 8 and 18 years of age. Texts, 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.