

Science on the Move 2015

SimplyScience.ch School Class Competition

PROJECT DESCRIPTION

Introduction

SimplyScience.ch is starting the third round of its special nation-wide science competition for high school classes at Secondary Level (one or two years prior to the Swiss Matura). The project, intended to inspire interest in life sciences for a broad spectrum of pupils, is noteworthy for its top prize for the winning class, with their teacher, to spend a science week in London, Cambridge and Oxford (England). The concept and content for this competition have been developed by a special project team as part of the SimplyScience foundation.

SimplyScience.ch is an internet platform www.simplyscience.ch. It offers a lot of interesting information on natural sciences and motivates young people for science and technology.

Objective

The objective of this competition is to identify the class with the greatest dedication and greatest commitment in the subjects of Biology / Science (e.g. basic science subject Biology, special subject Biology-Chemistry, complementary option Biology etc.) through a two phase competition.

In the first and practical phase, the goal is to conduct **two classical biological and biochemical tasks** and to discuss the results. In contrast, the second phase of the competition calls for different capabilities. In a brief five-minute live **presentation**, the top 10 classes will illustrate the experiences they had while conducting the tasks. What highs and lows did they go through? What gave them satisfaction or simply made them happy? What stressed or baffled them? How did they experience teamwork while experimenting? How did they organize themselves? How did their parents, their teachers and the school administration react to their activities? How were they able to motivate the whole class? How can they correlate these experiences with the title of the competition "Science on the Move"?

Target audience

For once, this is not a competition that seeks individual pupils with distinct strengths in natural sciences (for example: the Science Olympics). Instead the **entire class shall compete**. Good organisation, clever division of tasks, strong communication in the group and mutual support are all indispensable aspects in order to do well in this competition. People with different strengths should be able to contribute. Apart from performing the tasks, other skills such as preparing layouts, translating, and doing research, for example are also expected.

This competition is intended for school classes at Secondary Level one or two years prior to the Swiss Matura in all regions of Switzerland. Generally, this corresponds to the 10th and 11th school year. All competition activities will be in **English** - the language in which scientists communicate and publish around the globe.

The number of participating classes is limited to 50. First come, first serve. The goal is also to have classes from all linguistic regions of Switzerland participate.

- Teacher Involvement** Participants in this competition are exclusively pupils in the participating classes, and not their teachers. Teachers can, of course, provide logistical support to their classes; this is even desirable, especially for Phase 2.
It is, however, explicitly forbidden for teachers *themselves* to get involved in solving and correcting the tasks in Phase 1. In order to enforce this requirement, a signed statement 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** The effort required per task is estimated at approximately 5 half-days, inasmuch this is possible within the organization of the participating classes. We recommend that the teachers should allow the project should take place during their normal time with their class. The project is very close to the curriculum and would therefore fit well within the entire aspects of the pupils' training.

Each class has 5 weeks to complete the project. The reason for this is that school holidays in Switzerland differ from one Canton to another and that we do not wish to penalize any of the participating classes. This is only an estimate of the time needed and it is possible for classes to continue working on the project outside of their normal classroom hours.
- Organization** Each class will select its **team leader** and a back-up among the pupils. These individuals will be the contacts for the "Science on the Move" organizers. Contact information for the respective teachers is also requested in order to offer assistance in case of any competition questions or problems (see application form).
- Phase 1: Challenge** In the first phase, two different tasks will be issued for the participating classes; the first task assignment will be published on www.simplyscience.ch in the second half of February 2015. All participating classes will perform the first task. The 25 best classes will have the chance to show their skills again by solving the second task, published on our webpage in the middle of April 2015.

Each of the two tasks contains several subtasks to be solved or answered. Based on this particular section, multiple hypotheses should be considered, examined and discussed, and smaller problems must also be solved. The expected scope of the solutions will be provided for each task. In general, short answers are preferred to lengthy essays. The solutions and documenting material must be mailed as a **single PDF** according to the specifications and time schedule given by the organizers.

On the designated form (**Activity List**) each class needs to report which member was or is responsible for which portion or aspect of the work. Each pupil should be assigned a number on the table provided. Each person in the class must have participated at least *once* in the experimental portion (= Phase 1). We recommend that the classes organize themselves and share the tasks among the pupils. It is not necessary for each pupil to perform all the tasks.

Additionally, there will be an optional photo contest during the first experiment of phase 1, open to all participating classes.
- Phase 1: Scoring** All eligible submissions received on time will be reviewed and scored quickly by the Project Team. A scoring list will be provided showing the maximum points achievable for each sub-task. The Project Team will determine first the top 25 and later the top 10 classes. There will be an additional student voting for the determination of the top 10 classes.
The top 25 participating classes will be **notified at the end of May 2015** whether they are among the **10 top-rated**. At this point, the best ten classes will be expected to compete again in the final round (phase 2)

Ranking and marking information will only be communicated after the deadline of the competition.

Phase 2: Final Event Only the 10 top-rated classes will proceed to the second part of the competition which is organized very differently. For this, the individual classes will each have **5 minutes** assigned for live presentation on **26th June 2015 at Roche in Basel**. How this time is used is up to the individual class. The objective is for pupils to link their experiences during the first phase of the competition as imaginatively and convincingly as possible with the subject of the competition "Science on the Move".

Teams will be encouraged to be creative!
Music, literature, poetry, a discussion theatre, show, or straight forward presentation... anything goes. However, personal delivery is required. Homemade videos are welcome, but may only be a *part* of the presentation. It is up to the class to determine how many people from their class will participate on stage during Phase 2. The presentations will be judged by a specially assembled **expert jury of persons representing science and education**. They will judge the presentations according to the aspects outlined below (Criteria).

Additionally, there will be a special award given to the class with the best performance on stage.

Phase 2: Criteria **Content, relevance to the issue** (Is the presentation directly connected with the issue? Are the aspects addressed relevant?)

Creativity, depth, level (Did the presentation engage? Is it creative? Is it thoughtful? Was it thought-provoking?)

Persuasive power, enthusiasm, dedication (How convincing was the presentation? How much passion and dedication was exhibited? How strong was the will to win this competition **as a team?**)

Prizes The first prize is a **week-long trip to London – Cambridge - Oxford, England** with a varied and exciting program around **science**. 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** to be published via **SimplyScience.ch**.

2nd to 10th prizes are also attractive. The classes winning 2nd and 3rd place will receive a substantial contribution for a science trip for the whole class.

Additionally, all 10 top-rated classes will enjoy a science visit for the entire class at Roche in Basel or Rotkreuz.

All participants in the final phase will also receive a certificate to affirm their participation in "Science on the Move".

Reminder All participants entering this competition should recognize that it presents a certain amount of additional effort, on top of their everyday school work. However, this experience is primarily intended to enrich learning and to be fun! **A hotline is available for support in case of ambiguities or questions.**

We are looking forward to an interesting encounter with pupils and hope they have success in answering the questions.

Timeline	Competition invitation posted on SimplyScience.ch and sent to schools	November, 2014
	Application deadline:	January 30, 2015 (Week 5)
	Announcement of participating classes	February 6, 2015 (Week 6)
	Phase 1 - Challenge	
	Publication Task 1:	February 23, 2015 (Week 9)
	Closing date task 1 (submission of results):	March 27, 2015 (Week 13)
	Publication Task 2:	April 13, 2015 (Week 16)
	Closing date Task 2 (submission of results):	May 13, 2015 (Week 20)
	Student Voting & Selection of the top 10 classes	May 18-22, 2015 (Week 21)
	Phase 2 – Final	
	Announcement of the top 10 classes	May 22, 2015 (Week 21)
	Final presentation and winner selection	June 26, 2015 (Week 26)
	Publication of winning class	June 26, 2015 (Week 26)
	Winning science trip to England (pupils + 1 teacher)	Sept 12-19, 2015 (Week 38)

Questions?

If you have any questions, please contact:

Hotline SimplyScience foundation:
Tel: +41 (0) 44 368 17 46 (Mo-Fr 9 am - 5 pm)
Mail: scienceonthemove@simplyscience.ch

Thomas Flüeler

Additional Terms & Conditions

Eligible for the competition are pupils residing in Switzerland. Application to the competition is only possible together with fellow students as a whole class. The minimum number of participants in one class is 12 (recommendation: 20 students per applying class). It is also possible to build a “new” class consisting of students from different classes. Only classes enrolled in the school year one or two years before the Matura at a Swiss public “Gymnasium” are eligible for the competition. Employees of SimplyScience 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 recourse to courts of law is excluded.

There will be no correspondence concerning the competition. Winning classes will be informed directly by the SimplyScience team.

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

SimplyScience is allowed to publish all photos and videos received or taken in the frame of the competition for publication in any print or electronic media.

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