

# Science on the Move 2013 SimplyScience.ch School Class Competition

# PROJECT DESCRIPTION

# Introduction

SimplyScience.ch is sending the special nation-wide science competition for school classes at Secondary Level (Gymnasium, 10<sup>th</sup> and 11<sup>th</sup> grade) into a second round. The project, intended to inspire interest in life sciences for a broad spectrum of pupils, is noteworthy for its extraordinary top prize for the winning class, with their teacher, to spend a science day in Basel and a science week in California. 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** <u>www.simplyscience.ch</u>. It offers a lot of interesting and astounding information on natural sciences and consolidates a range of other commitments to motivate 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, practical phase, the goal is to conduct 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 made them satisfied or glad? 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 public school classes at Secondary Level (Gymnasium,  $10^{th}$  or  $11^{th}$  grade) in all regions of Switzerland. All competition activities will be in **English** - the language in which scientists communicate and publish around the globe.



#### **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 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.

With the number of participating classes limited to 50, the goal is also to have classes from all linguistic regions of Switzerland participate.

#### Organization

Each class will select its **team leader** and a back-up from 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 <a href="https://www.simplyscience.ch">www.simplyscience.ch</a> at the end of February 2013. 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 2013.

Each of the two tasks contains 4 to 5 different 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 rather than lengthy essays. The solutions and documenting material must be mailed as a single PDF according to a 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.

The PDF of the solutions and documentations have to include:

- Responses to the questions
- Activity List
- Photo documentation (3 digital photos showing the full class involvement)

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. It is the Project Team's task to determine first the top 25 and later the top 10 classes. For the determination of the top 10 classes, there will be an additional student voting. The top 25 classes at this point will have to vote on the documentations of their competitors. A scoring list will be provided showing the maximum points achievable for each subtask. The top 25 participating classes will be **notified on 24**<sup>th</sup> **May 2013** 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), in order to score the maximum number of points toward winning.



#### 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 **21<sup>th</sup> June 2013**. 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 slam, 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 five persons representing science and education**. They will judge the presentations according to the aspects outlined below and they will pose predefined and spontaneous questions to the classes.

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 ingenious? Is it thoughtful? Was it thought-provoking?)

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

#### **Prizes**

The first prize is a week-long trip to the Bay Area, California with a varied and exciting program reflecting the subject of 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 San Francisco. Each day, the class will write a brief blog to be published via SimplyScience.ch.

**2nd to 10th prizes** are also attractive. Each student of the classes winning  $2^{nd}$  to  $10^{th}$  place will receive a voucher for iTunes.

Additionally, all 10 top-rated classes will enjoy a one-day visit for the entire class to Roche. Their teachers are also entitled to request the well-known Genetics Education Experimental suitcase after participating in the complementary Teacher Workshop.

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 everyday school work. However, this experience is primarily intended to enrich learning and 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, 2012

Application deadline (Postponed from January 18, 2013!): NEW: January 31, 2013

Announcement of participating classes February 8, 2013

Phase 1 - Challenge

Publication Task 1: February 25, 2013
Closing date task 1 (submission of results): March 28, 2013
Publication Task 2: April 15, 2013
Closing date Task 2 (submission of results): May 10, 2013
Selection of the top 10 classes May 13-23, 2013

Phase 2 - Final

Announcement of the top 10 classes May 24, 2013
Final presentation and winner selection June 21, 2013
Publication of winning class (web and e-mail) June 21, 2013

Winning science trip to California Sept 7-14, 2013

# **Questions?** If you have any questions, please contact:

Hotline SimplyScience foundation:

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

Thomas Flüeler

# Additional Terms & Conditions

Eligible for the competition are Swiss residents. Application to the competition is only possible together with fellow students as whole class. Only classes enrolled in the 10<sup>th</sup> or 11<sup>th</sup> school year at a Swiss public school are eligible for the competition. Employees of SimplyScience, members of the jury or the project team, as well as their relatives, are not eligible for the competition. If a non-eligible person is affiliated with an applicant school, this will lead to the non-eligibility of the whole 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.