



During the International Year of Chemistry 2011 (IYC 2011), school students around the world are invited to explore one of Earth's most critical resources, water. The results of their investigations will contribute to a Global Experiment, which will possibly become the biggest chemistry experiment ever.

The **Global Experiment** consists of four experiments. It is expected that most teachers will work with their classes to carry out the four activities, which have explicit instructions and background materials. These will be helpful for teachers who do not have science backgrounds.

The activities cover important topics and conceptual understanding in science and also provide a variety of opportunities to learn important experimental and data gathering skills. The data obtained from the experiments can then be uploaded to this website to contribute to the global data collection.

Alternatively, teachers can select to undertake a single activity if they want their students to collect some data and contribute to the Global Experiment without using the other activities, perhaps because water is studied at a different year level. If, on the other hand, an existing curriculum unit studying water is part of the curriculum during 2011, appropriate parts of the Global Experiment activities can be added selectively to the existing curriculum and give students the chance to participate in the experiment

Visit the website of the Global Water Experiment!

water.chemistry2011.org



The Global Water Experiment consists of four component activities:

1. pH of the Planet: Students collect data measuring the pH of water using indicator solutions.
2. Salty Waters: Students explore the salinity of their local water.
3. Solar Still Challenge: Students will construct a solar still from household materials and experiment with its use to purify water.
4. Water: No Dirt, No Germs: Students will learn how chemistry is used to help provide safe drinking water.

Each downloadable activity includes a teacher's guide, a list of necessary material for carrying out the activities and explicit instructions on how to carry out the activities in class.

There are several ways to participate during the Global Water Experiment:

- Teachers may register themselves and their schools to join the project
- Teachers can share their stories and experiences using the forums
- Data obtained with students when carrying out the experiments can be uploaded to contribute to the global data collection.

A visualised world map with all the global data submitted till then on a local, regional and international level will be available from June 2011. From then on, data will contribute to the map as soon as it is uploaded.

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