



Water Temperature

Температура води е-тренінг



THE GLOBE PROGRAM

ENGLISH



THE GLOBE PROGRAM

ENGLISH

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Main Menu

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- [Join](#)
- [Get Trained](#)
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The screenshot shows the top navigation bar of the GLOBE Program website. It includes the logo, the text 'THE GLOBE PROGRAM', a search icon, the language 'ENGLISH' with a dropdown arrow, and a close icon 'X'. Below this is a 'Sign In' button. The main menu is titled 'Main Menu' and lists several options: 'About', 'Join', 'Get Trained', 'Do GLOBE', 'GLOBE Data', 'Community', 'News & Events', and 'Support'. Each menu item has a downward-pointing arrow icon to its right. The 'Get Trained' item is circled in red.

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Home > Get Trained

Share

Get Trained

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Workshop in
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Using the
GLOBE
Website

Protocol
eTraining



Get Trained

GLOBE offers trainings around the world. In order to provide high-quality data to the scientific community, teachers are trained in GLOBE data-collection procedures. GLOBE protocols are written and reviewed by scientists.



Home > Get Trained > Protocol eTraining



Protocol eTraining

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Protocol eTraining

To enter GLOBE data on this website or through the GLOBE data entry app, GLOBE users must complete the necessary training either by attending a [GLOBE workshop](#) or by completing the required online eTraining modules and assessment tests in this section. Please review the [eTraining Requirements](#) to learn which modules are required to become a trained GLOBE teacher or GLOBE Observer. Once your training is complete, you will be ready to start entering your measurements and will be joining a community of thousands teachers around the world!

Existing GLOBE teachers can continue to expand their GLOBE protocol knowledge by completing additional modules and assessment tests. Click on the [Trained GLOBE Users](#) link below to learn which tests are required to become certified in a particular GLOBE protocol.

The GLOBE community looks forward to welcoming you. Please [contact us](#) if you have any questions. Your question may also be answered in one of our [Discussion Forums](#), so check there as well.

A [summary document](#) about GLOBE eTraining is available for download.



Protocol eTraining

[Atmosphere](#)

[Biosphere](#)

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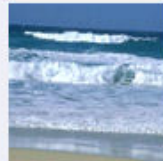
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Hydrosphere



INTRODUCTION TO HYDROSPHERE

This introductory module introduces GLOBE's hydrosphere investigation area. You will learn why it is important to document and monitor the hydrosphere. You will be introduced to the different GLOBE protocols used to collect hydrosphere data. Step

WATER TEMPERATURE

Learn how to take water temperature measurements at your GLOBE hydrosphere study site. This module provides a step by step introduction of the Water Temperature Protocol, using an alcohol-filled thermometer. After completing this module, you will be able to define water temperature and explain how changing environmental conditions will result in different measurements. You will learn the procedure for measuring water temperature using an alcohol-filled thermometer. You will know how to upload your data to GLOBE and be able to visualize water temperature data submitted from around the world using GLOBE's Visualization System.

[Download Module](#)

[Assessment Test](#)

Test not completed



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Ukraine



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Protocol eTraining Assessment Test

Temperature Thermometer Module

Click the "Start Quiz" button to begin. Good luck!

[Start Quiz](#)



How far should the thermometer be placed in the water sample?

Як глибоко потрібно занурювати термометр у воду?

- 2 cm
- 5 cm
- 10 cm
- 20 cm

Submit All

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How long should you keep the thermometer in water before first reading it?

- 1 minute
- 2 minutes
- 3 minutes
- 4 minutes

Скільки часу потрібно тримати термометр у воді під час першого заміру температури?

Submit All

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When calculating the average of the 3 measurements, each measurement should be within _____ of the average value.

Коли вираховується середнє значення вимірів, вони не повинні відхилитися більше, ніж на _____

- 0.5 °C
- 1 °C
- 2 °C
- 5 °C

Submit All

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How many measurements should you take?

- 1
- 2
- 3
- 4
- All of the above

Скільки вимірів потрібно зробити?

Submit All

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Яке твердження невірне?

Which of these is false?

- It is not important to take the temperature at the same time of day each week Важливо вимірювати температуру в один і той самий час дня кожного тижня.
- Take the temperature quickly after collecting the water sample
- Read the thermometer while the bulb of the thermometer is in the water
- Take the temperature at the same place each week

Submit All

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Alcohol-Filled Thermometer Temperature

How often should you calibrate your thermometer?

Як часто потрібно калібрувати термометр?

- Every time you use it
- Every week
- Every 3 months
- Every 6 months
- Only once after you buy it

1 раз в 3 місяці

Submit All

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Alcohol-Filled Thermometer Temperature

What are possible ways to cause errors when reading the thermometer?

В якому випадку можна зробити помилку при зчитуванні вимірів температури?

Not reading the thermometer at eye level

Якщо тримати термометр не на рівні очей

Reading the thermometer out of the water

Якщо термометр вийняти з води

Reading the thermometer with air bubbles in the alcohol

Якщо в скляній трубці термометра є бульбочки повітря

All of the above

Все вище перелічене

Submit All

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Alcohol-Filled Thermometer Temperature

When checking the accuracy of the alcohol-filled thermometer in an ice water bath, what should the thermometer read?

- Between -1 and +1 °C
- Between -1.5 and +1.5 °C
- Between -0.5 and +0.5 °C
- Between -2 and +2 °C

Перевіряючи точність показання спиртового термометра у воді з льодом, яке відхилення може показувати термометр?

Submit All

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Alcohol-Filled Thermometer Temperature

When checking the accuracy of the alcohol-filled thermometer in an ice water bath, the reading should be _____ °C.

- Between -1.5 and +1.5 °C
- Between -1.5 and +1.5 °C
- Between -0.5 and +0.5 °C
- Between -2 and +2 °C

Are you sure you want to submit all answers and finish the quiz?

Yes No

Submit All



Congratulations! You successfully completed the Temperature Thermometer module. Click 'Finish' to record your results.

Quiz Result

Your Score: **100%**

Passing Score: **80%**

Review Quiz

Finish



My eTraining Requirements



Recently completed module: **WATER TEMPERATURE**

Our records indicate that you are already trained in this protocol.

[View your training records](#)

Assessment Test

Supporting Material:

[Water Temperature Interactive](#)

Practice taking water temperature measurements with an alcohol-filled thermometer or a digital water temperature probe.



WATER TRANSPARENCY

Learn how to take water transparency measurements at your GLOBE hydrosphere study site. This module provides a step by step introduction of the Water Transparency Protocol using a piece of scientific equipment.



Learn how to take water temperature measurements at your GLOBE hydrosphere study site. This module provides a step by step introduction of the Water Temperature Protocol, using an alcohol-filled thermometer. After completing this module, you will be able to define water temperature and explain how changing environmental conditions will result in different measurements. You will learn the procedure for measuring water temperature using an alcohol-filled thermometer. You will know how to upload your data to GLOBE and be able to visualize water temperature data submitted from around the world using GLOBE's Visualization System.

[Download Module](#)

[Assessment Test](#)

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10/08/2018

Supporting Material:

[Water Temperature Interactive](#)

Practice taking water temperature measurements with an alcohol-filled thermometer or a digital water temperature probe.
