

What is CLIVAR and EPIC?

OBJECTIVES

1. Through internet research, students will learn about international efforts to investigate climate
2. Students will demonstrate understanding of the current Ronald H. Brown mission by mapping the EPIC2001 cruise within the CLIVAR framework
3. Through internet research, students will learn that scientific research is often a joint effort internationally, and many countries work together to improve the world's scientific understanding
4. Through independent writing, students will demonstrate understanding about why climate research is of international interest
5. Students will practice their internet search skills by determining what key words to use in a search engine

AGE

Grades 9-12

TIME ALLOWANCE

1-2 hours

MATERIALS

Internet access
Copies of student handout

INSTRUCTION:

1. Introduce the lesson by explaining that the research being conducted by the various research groups on the Ronald H. Brown are part of the EPIC program, sponsored by NOAA and the National Science Foundation. Tell students that EPIC is the United States' way of contributing to the CLIVAR program. Students will be researching CLIVAR and EPIC to understand the framework within which this cruise exists.
2. Students may work individually or in groups, depending on the number of computers available and teacher preference. Hand out the student worksheet to each student. Have the students read the questions, then as a class

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generate a list of appropriate internet search terms. Make sure the students copy the list onto their handout as reference.

3. Allow the students 30-45 minutes to do their research and complete the handout. Teacher should circulate among the students to ensure they are on track and making progress. If students are genuinely working, but having difficulty, allow them additional time to work.
4. Review responses as part of a class discussion.
5. As homework, or as a silent in-class activity, have students write a 1-2 page essay responding to the following question:

“Why is climate research an international interest?”

EVALUATION / ASSESSMENT

Successful completion of student handout

Name: _____

CLIVAR and EPIC Student Handout

Use the internet, Mrs. Richards' daily logs (www.ogp.noaa.gov/epic), and any library materials you have to answer the following questions. Hint: The "C" in both terms refers to "Climate"- this will help you with your internet research.

What are some appropriate key words to search for using for favorite internet search engine?

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1. What do the acronyms CLIVAR and EPIC stand for?

CLIVAR _____

EPIC _____

2. When was CLIVAR established, and by whom?

3. What are the various research components of CLIVAR?

4. What is the main goal of CLIVAR?

5. Who is in charge of the EPIC program? Is there a specific organization, or certain people that are the leaders of EPIC?

Name: _____

CLIVAR and EPIC Student Handout

6. What is the main goal of EPIC?

7. How is the Ronald H. Brown research cruise from San Diego, CA to the Galapagos Islands, from September 5, 2001 to October 6, 2001, related to EPIC?

8. What countries are participating in CLIVAR?

9. How will the research being conducted in the CLIVAR and EPIC programs help the world?

10. In some way, EPIC is imbedded in the CLIVAR framework. Diagram this relationship below.