EXTREME ENVIRONMENTS

Get Organized Before You Start

Take your notes: Copy and paste this page into Google Docs and fill in the answers.
Start thinking about what kind of 3-dimensional project you will do for the last lesson. A diorama? A poster? Or...?

LESSON ONE: What do people need in order to stay alive?

- A. Is the source reliable? Go to <u>https://www.openschool.bc.ca/ocr/science/sc6ee/teacher/Gr6Sc_EE_ADST_Module.pdf</u> Read p. 1-2. Who published this unit? When was it published? Does it match the BC Science curriculum? How do you know?
- B. Go do some research. Read p. 12 -13.
- C. Make a list showing 6 requirements for survival. Add details for more credit.

LESSON TWO: What is an extreme environment?

- A. Is the source reliable? Go to https://www.openschool.bc.ca/ocr/science/sc6ee/teacher/Gr6Sc_EE_ADST_Module.pdf Read p. 1-2. Yes. You already used this source of information.
- B. Go do some research. Read p. 14
- C. Complete this sentence. An extreme environment is any place that...
- D. Is the source reliable? Go to <u>http://mrsdavieswebsite.weebly.com/uploads/5/3/8/9/53891741/science_probe_-</u> <u>exploring_extreme_environments.pdf</u> Yes. It is from a Science textbook called Science Probe which is published by Nelson, a reputable educational publisher.
- E. Go do some research.Read p. 6. (Note: all page numbers from this source are the PDF page numbers.)

- F. Complete this sentence. An extreme environment is a place where...
- G. Look at the map.

Use your background knowledge of continents and oceans. Use your knowledge of these words: north, south, east, west. What do you notice about the extreme environments on the map?

LESSON THREE: What are some extreme environments?

A. Is the source reliable?

Check 'About Us' https://www.mentalfloss.com/about-us Yes. Facebook fans and Youtube videos do not count. But it has won three Webby awards, which are awards for... [Do some research to find out the answer.]

B. Go do some research.

Check https://www.mentalfloss.com/article/89955/7-worlds-most-extreme-landscapes

- 1. Hottest place
 - a. <u>What</u> is it called?
 - b. Where is it?
 - c. <u>How</u> extreme did it get?
- 2. Coldest place
 - a. <u>What</u> is it called?
 - b. <u>Where</u> is it?
 - c. <u>How</u> extreme did it get?
 - d. <u>When</u> did it happen?
- 3. Driest place
 - a. <u>What</u> is it called?
 - b. <u>Where</u> is it?
 - c. <u>How</u> extreme does it get?
 - d. <u>When</u> did it first get recognized?
 - e. <u>Why</u> is it so dry? (4 reasons)
- 4. Wettest place
 - a. <u>What</u> is it called?
 - b. <u>Where</u> is it?
 - c. <u>How</u> extreme is it?
 - d. <u>How</u> many times more rainy is it than in Seattle? (Hint: you need to divide.)
- 5. Flattest place
 - a. <u>What</u> is it called?
 - b. <u>Where</u> is it?
 - c. <u>How</u> extreme is it?
 - d. How was it made?
 - e. When was it made?

- f. <u>What</u> is it made of?
- C. Is the source reliable? Go to

http://mrsdavieswebsite.weebly.com/uploads/5/3/8/9/53891741/science_probe_exploring_extreme_environments.pdf

Yes. It is from a Science textbook called Science Probe which is published by Nelson, a reputable educational publisher.

- D. Do some research. Find out at least 3 important facts about each of these extreme environments.
 - 1. Arctic: p. 7
 - 2. Antarctic: p. 7
 - 3. Deserts: p. 8
 - 4. Oceans: p. 8
 - 5. Volcanoes: p. 9
 - 6. Outer space: p. 10

LESSON FOUR: Why do people go to extreme environments?

- A. Is the source reliable? Go to <u>http://mrsdavieswebsite.weebly.com/uploads/5/3/8/9/53891741/science_probe_-</u> <u>exploring_extreme_environments.pdf</u> Yes. It is from a Science textbook called Science Probe which is published by Nelson, a reputable educational publisher
- B. Do some research. Read p. 11-14.
 Find out 5 major reasons to explore extreme environments.
 Provide evidence for your answers.

LESSON FIVE: How have indigenous people survived in the Arctic?

- A. Is the source reliable? Go to <u>http://mrsdavieswebsite.weebly.com/uploads/5/3/8/9/53891741/science_probe_-</u> <u>exploring_extreme_environments.pdf</u> Yes. It is from a Science textbook called Science Probe which is published by Nelson, a reputable educational publisher
- B. Do some research. Read p. 15-16.
 Find 6 technological inventions that have helped the Inuit survive in the Arctic.
 Provide details (description, drawing, benefit) that prove that the invention is helpful.

LESSON SIX: Can you test substances that insulate against cold?

A. Is the source reliable? Go to

https://www.teachengineering.org/activities/view/the_best_insulator Yes. The University of Colorado Boulder and Oregon State University publish this TeachEngineering site.

- B. Watch the video at the top of the page.
- C. Do the experiment yourself using supplies you have at home.

LESSON SEVEN: How do people survive in another extreme environment?

- A. Choose an extreme environment.
- B. Do some research.
 - 1. Find 3 reputable sources of information.
 - 2. Make a bibliography of your sources.
- C. Find answers to these questions.
 - 1. Where is this place?
 - 2. What makes this environment extreme?
 - 3. What are challenges people face in visiting this place or living in this place?
 - 4. Why do people choose to visit this place or live in this place?
 - 5. What do people do to survive in this place? What technologies assist them?
 - 6. How does exploration of this place benefit human life and the community of scientists in the world?