

Lesson Plan Template

Name: _____ Course: Earth Science Grade: 8

Unit: Exploring Planet Earth

Big Idea (Key concept): Topographic maps are a special type of map that shows elevation, relief and slope using contour lines.

Literacy Strategy(s): Silent discussion, whole class discussion, small group discussion, two-column notes

Lesson: Topographic maps Date Taught: 9/30/2010

Learning Objective(s):

Students will be able to	Identify and use topographic maps.
Students will be able to	Explain when and how topographic maps are used.

Idaho Standards (or National Standards if no Idaho Standards exist):

1.2.2 Develop models to explain concepts or systems.

Lesson in Context:

Students have learned about the four Earth systems (geosphere, hydrosphere, atmosphere and biosphere) and that the geosphere is our emphasis this semester. They have learned the terminology necessary to describe the Earth's surface and that maps and globes are models. They understand that maps are less accurate models of the Earth than globes because of distortion. Students previewed this material yesterday with a vocabulary activity.

Instructional Materials, Resources:

Student Notebooks. Textbook. Silent discussion questions. A topographic map for each group.

Procedures:

- **Engage/Introduction:** (*approximate time: 5-10 min*)
- Students will be given silent discussion instructions and work on this as we enter. They will be required to write twice on each topic.

- **Explore/Learning Activities:** (*approximate time: 25 min*)
- Give detailed, step-by-step instructions on how you will implement the lesson plan and what students will do during the lesson. Include clear directions for activities.

Table groups will be given one silent discussion poster. They will need to summarize the written ideas on the poster into a single cohesive statement/answer. These will be written on the board.

We will do two-column notes on this section. As we discuss the material, we will refer to the maps on their desks.

After the notes, we will return to the silent discussion questions and answers and the class will decide if each question now has a “correct”, “incorrect” or “incomplete” answer. If incorrect, we will correct it. If incomplete, we will complete it. Students will place these questions and answers in their notes.

➤ **Explanation/Closure:** (*approximate time: 10 min*)

- Explain how you will guide students to share what they have learned and connect their learning to key concepts.

Students will share what they learned by creating a simple topographic map in their notebooks given simple guidelines. They will also create a key for their simple map.

Silent Discussion Questions

How are topographic maps different from other maps?

How do topographic maps show relief?

What types of symbols would you expect to see on a contour map?

What is a contour line and what does it show?

When would you most likely use a contour map?