# Understanding Topographic Features

## OVERVIEW & OBJECTIVES

Students demonstrate their understanding of landforms and bodies of water by completing a handout and constructing a relief map. This lesson may be adapted for elementary through high school students depending on the terms used, definitions required, and task expectations.

*Students will be able to...*

- Define topographical features
- Identify topographical features
- Construct topographical features

## GRADES

4th – 9th

## TIME

1-2 class periods

## REQUIRED MATERIALS

- ✓ Handout: "Understanding Topographical Features"; "Topographical Features Task"
- ✓ Play-Doh or clay
- ✓ Optional: newspaper or wax paper, plastic knives, scissors

## MINNESOTA SOCIAL STUDIES STANDARDS & BENCHMARKS

**Standard 1.** People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.
(4th GRADE)
**4.3.1.1.1** Create and use various kinds of maps, including overlaying thematic maps, of places in the United States, and also Canada or Mexico; incorporate the "TODALS" map basics, as well as points, lines and colored areas to display spatial information.
(5th GRADE)
**5.3.1.1.1** Create and use various kinds of maps, including overlaying thematic maps, of places in the North American colonies; incorporate the "TODALS" map basics, as well as points, lines and colored areas to display spatial information.
(6th GRADE)
**6.3.1.1.1** Create and use various kinds of maps, including overlaying thematic maps, of places in Minnesota; incorporate the "TODALSS" map basics, as well as points, lines and colored areas to display spatial information.
(7th GRADE)
**7.3.1.1.1** Create and use various kinds of maps, including overlaying thematic maps, of places in the United States; incorporate the "TODALSS" map basics, as well as points, lines and colored areas to display spatial information.
(8th GRADE)
**8.3.1.1.2** Create and use various kinds of maps, including overlaying thematic maps, of places in the world; incorporate the "TODALSS" map basics, as well as points, lines and colored areas to display spatial information.
(9th GRADE)
**9.3.1.1.1** Create tables, graphs, charts, diagrams and various kinds of maps including symbol, dot and choropleth maps to depict the geographic implications of current world events or to solve geographic problems.

## SUGGESTED PROCEDURE

Students complete the handout, "Understanding Topographical Features", to identify topographical features. They will complete each column by writing their definition and including a representative picture of each feature. The picture may be drawn, pasted, or posted from the Internet. Students complete the

handout in preparation for making the relief map. The list of features may be modified according to the students' grade level. In addition, the handout may be given as a homework assignment or completed during class.

Students should be told that they will be assessed on their understanding of topographical features and be given time to study their handout, "Understanding Topographical Features", before the task. The task will take one class period. Each student (or pair of students) will be given a large can of Play-Doh and the list of features. Students will cut or tear the labels from the handout, "Topographical Features Task". When the teacher says begin, students will mold the Play-Doh to construct each feature. Students will attach the label to the feature as each is created. The teacher will meanwhile walk through the classroom and examine each student's model. If the feature was correctly formed, the teacher will remove the label. The teacher may also have a checklist to record completion of the features for each student, affixing the label to the checklist with double-sided tape. At the end of the class, all students should have completed the assessment.

**Assessment**

"Understanding Topographical Features" handout
Completion of topographical features relief map

# Understanding Topographical Features

| Topographical Feature | Definition of Topographical Feature | Illustration of Topographical Feature |
|---|---|---|
| Mountain | | |
| Hill | | |
| Plain | | |
| Plateau | | |
| Escarpment | | |
| Cliff | | |
| V-Shaped Valley | | |
| U-Shaped Valley | | |
| Mountain Pass | | |
| Mountain Gap | | |
| Fault | | |
| Peninsula | | |
| Cape | | |
| Island | | |
| Archipelago | | |
| Isthmus | | |
| River | | |
| Source of a River | | |
| Mouth of a River | | |
| Meandering River | | |
| Tributary | | |
| Confluence | | |
| Delta | | |
| Estuary | | |
| Lake | | |
| Basin | | |
| Butte | | |
| Canyon | | |
| Bluff | | |
| Headland | | |
| Fjord | | |
| Dune | | |
| Erg | | |
| Bay | | |
| Drainage Basin | | |
| Floodplain | | |

# Topographical Features Task

**Directions**: Your task is to construct a relief map with each of the topographical features by the end of the class. Separate the names of each of the following features so they can be used as labels. Using the can of Play Doh, construct each of the topographical features listed below. As each feature is constructed, place the label at each. The teacher will be checking your features as you construct them and remove the label if the feature was correctly constructed. Continue working on the topographical features throughout the class period as I come to your relief map.

| Topographical Features |
|---|
| Mountain |
| Hill |
| Plain |
| Plateau |
| Escarpment |
| Cliff |
| V-Shaped Valley |
| U-Shaped Valley |
| Mountain Pass |
| Mountain Gap |
| Fault |
| Peninsula |
| Cape |
| Island |
| Archipelago |
| Isthmus |
| River |
| Source of a River |
| Mouth of a River |
| Meandering River |
| Tributary |
| Confluence |
| Delta |
| Estuary |
| Lake |
| Basin |
| Butte |
| Canyon |
| Bluff |
| Headland |
| Fjord |
| Dune |
| Erg |
| Bay |
| Drainage Basin |
| Floodplain |