LEARNING THE LANDFORMS

Grade Level: Third
Presented by: Elizabeth Turcott, Endeavor Charter Academy, Springfield, Michigan
Length of Unit: 14 lessons

I. ABSTRACT
This unit develops an understanding of landforms and bodies of water as found in the Core Knowledge Sequence for 3rd graders, by building a deeper knowledge of geography. It uses a variety of activities to explore the geographical features of earth. The content areas of geography, reading, writing, and art are integrated throughout the unit. Students will have a strong background of landforms and bodies of water at the end of the unit.

II. OVERVIEW
A. Concept Objective(s):
1. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
2. The learner will understand how landforms change over time.
B. Content from the Core Knowledge Sequence:
1. Geographical Terms and Features: Review from Grade 1 and Grade 2: peninsula, harbor, bay, island, mountain, river, coast, valley, desert, oasis, prairie.
2. Geographical Terms and Features: Grade 3: boundary, channel, delta, isthmus, plateau, reservoir, strait.
3. Terms will be reviewed in most history and geography units throughout the year.
C. Skill Objectives:
1. The learner will classify landforms by shape, size, color, and other features.
2. The learner will present his/her ideas to the class.
3. The learner will define geographical terms.
4. The learner will draw and color geographical features.
5. The learner will research a specific landform.
6. The learner will write a small report on his/her landform.
7. The learner will design and construct his/her landform using play dough.
8. The learner will present his/her report and landform construction to the class.
9. The learner will categorize islands according to their features.
10. The learner will draw and label the different mountain climate zones.
11. The learner will experiment with sand to simulate what natural forces change the desert terrain.
12. The learner will create a cut-away model of the features of North America.
13. The learner will look for articles relating to landforms in the newspaper.
14. The learner will write a story about an adventure while exploring a landform.
15. The learner will be able to characterize landforms and bodies of water according to similar features.
16. The learner will identify how each landform and body of water was formed.
17. The learner will find places on a map/atlas.

III. BACKGROUND KNOWLEDGE
A. For Teachers:
1. Landforms:Experiments, Games, Art, and Writing Activities, EduPress
2. Geography A to Z, Jack Knowleton
3. Exploring Your World: The Adventure of Geography, National Geographic Society
IV. RESOURCES
A. Landforms: Experiments, Games, Art, and Writing Activities, EduPress
B. Geography A to Z, Jack Knowleton
C. Exploring Your World: The Adventure of Geography, National Geographic Society

V. LESSONS
Lesson One: Classifying Landforms
A. Daily Objectives
   1. Concept Objective(s)
      a. The learner will understand the unique characteristics of Earth’s landforms.
   2. Lesson Content
      a. Geographical Terms and Features: Review from Grade 1 and Grade 2: peninsula, harbor, bay, island, mountain, river, coast, valley, desert, oasis, prairie
      b. Geographical Terms and Features: Grade 3: boundary, channel, delta, isthmus, plateau, reservoir, strait
   3. Skill Objective(s)
      a. The learner will classify landforms by shape, size, color, and other features.
      b. The learner will present their ideas to the class.
B. Materials
   1. Poster board
   2. Pictures of landforms
   3. Magazines
   4. Markers, glue, and scissors
C. Key Vocabulary
   1. Geography – The study of earth as man’s home.
   2. Landforms – The elevation and depression of land surface relative to sea level.
   3. Topography – The shape of the surface features of a geographic area.
D. Procedures/Activities
   1. Write “Landforms” on the board. Ask the students to brainstorm what landforms are and about any type of landform they know.
   2. Do a K-W-L chart for what they think geography is.
   3. Tell the students they are geographers. They are going to research through magazines looking for the world’s natural landforms.
   4. Students will present to the class what they found. Discuss what landforms were found with the students.
   5. Have posters on the board with the following heading: Mountains and Canyons; Hills and Valleys; Deserts; Plains and Plateaus; Water. Have students glue their picture under the appropriate heading.
   6. Introduce the Landforms Bulletin Board. Have students look in the newspaper for articles relating to landforms and bring them in to class to post on the bulletin board for extra credit.
E. Assessment/Evaluation
   1. Observe students while posting and discussing pictures.

Lesson Two: Grade 1 Terms
A. Daily Objectives
   1. Concept Objective(s)
      a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
   2. Lesson Content
a. Geographical Terms and Features: Review from Grade 1: peninsula, harbor, bay, island, mountain, river

3. Skill Objective(s)
   a. The learner will define geographical features.
   b. The learner will draw and color geographical features.

B. Materials
1. White construction paper and colored construction paper to make book
2. Crayons
3. Pictures of landforms
4. *Geography A to Z* by Jack Knowleton or *Exploring Your World: The Adventure of Geography* from National Geographic Society
5. Appendix A

C. Key Vocabulary
1. Peninsula – a piece of land jutting out into a lake or ocean.
2. Harbor – a body of water sheltered by natural or artificial barriers.
3. Bay – a small area of sea or lake partly enclosed by dry land and smaller than a gulf.
4. Island – a piece of land smaller than a continent and surrounded by water.
5. Mountains – land rising 300 meters or more above the surrounding land.
6. Rivers – a natural stream of water larger than a brook or creek.

D. Procedures/Activities
1. Read the definition for peninsula, from *Geography A to Z* or *Exploring Your World*.
2. Show students pictures of peninsulas.
3. Draw a peninsula on the board and write the definition underneath the drawing.
4. Students will make their own drawing of a peninsula in their book and write the definition underneath.
5. Follow steps 1 – 4 for the rest of the geographical terms.

E. Assessment/Evaluation
1. Students can be assessed on their drawings in their books. Appendix A can also be used as a quiz.

Lesson Three: Islands

A. Daily Objectives
1. Concept Objective(s)
   a. The learner will understand the unique characteristics of Earth’s landforms and bodies of water.
2. Lesson Content
   a. Geographical Terms and Features: Review from Grade 1: peninsula, harbor, bay, island, mountain, river
3. Skill Objective(s)
   a. The learner will categorize islands according to their features.

B. Materials
1. *Landforms: Experiments, Games, Art and Writing Activities*
2. Island Categories Chart (page 33 in book listed above)
3. World Map
4. Pencils
5. Overhead Projector
6. Overhead Transparencies

C. Key Vocabulary
1. Continental Island – islands located near the continent from which they separated.
2. Oceanic Island – islands found in the open ocean far from any continent.
3. Land-tied Island – islands connected to the mainland by mud and gravel sandbars deposited by shore currents.
4. Inland Island – islands formed in rivers and lakes.

D. Procedures/Activities
1. Divide the class into small groups. Give each group the Islands Category Chart and a world map. Go over the types of islands on the chart.
2. Designate a period of time for locating islands on the world map. List each island on the chart according to its features.
3. When the designated time is up, compile the lists of islands on an overhead chart.

E. Assessment/Evaluation
1. Students can be assessed through observation during the activity.

Lesson Four: Mountains

A. Daily Objectives
1. Concept Objective(s)
   a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
2. Lesson Content
   a. Geographical Terms and Features: Review Grade 1: peninsula, harbor, bay, island, mountain, river
3. Skill Objective(s)
   a. The learner will label the different mountain climate zones.

B. Materials
1. Construction paper
2. Crayons
3. Reference materials

C. Key Vocabulary
1. Climate zones – different altitude levels that have unique climates and support different plant and animal life.

D. Procedures/Activities
1. Look up in an encyclopedia the climate zones of mountains. Discuss as a whole group the different climate zones and vegetation in mountain regions.
2. Have students draw a mountain and label the different climate zones and draw in the type of vegetation found at those altitudes.

E. Assessment/Evaluation
1. Students can be assessed by their drawings and labeling.

Lesson Five: Grade 2 Terms

A. Daily Objectives
1. Concept Objective(s)
   a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
2. Lesson Content
   a. Geographical Terms and Features: Review Grade 2: coast, valley, desert, oasis, prairie
3. Skill Objective(s)
   a. The learner will define geographical features.
   b. The learner will draw and color geographical features.

B. Materials
1. The landforms book students started in lesson two
2. Crayons
3. Pictures of landforms
4. The book *Geography A to Z* or *Exploring Your World*
5. Appendix B

C. **Key Vocabulary**
   1. coast – the edge of land that borders the ocean along a continent or island
   2. valley – an elongated natural depression in the earth bordered by higher land
   3. desert – very dry land that gets very little water
   4. oasis – an area made fertile by a source of fresh water in an otherwise arid region
   5. prairie – a grassland characterized by a rich variety of grasses

D. **Procedures/Activities**
   1. Repeat the procedures from lesson two of reading the definition, showing the landform, drawing it on the board, and writing the definition beneath it. Have students draw the landform in their books and write the definition below their picture.

E. **Assessment/Evaluation**
   1. Students’ books can be evaluated for understanding. Appendix B can be used as a quiz.

**Lesson Six: Deserts**

A. **Daily Objectives**
   1. Concept Objective(s)
      a. The learner will understand how landforms change over time.
   2. Lesson Content
      a. Geographical Terms and Features: Review Grade 2: coast, valley, desert, oasis, prairie
   3. Skill Objective(s)
      a. The learner will experiment with sand to simulate what natural forces change the desert terrain.

B. **Materials**
   1. A sandy area
   2. Water

C. **Key Vocabulary**
   1. None

D. **Procedures/Activities**
   1. Have students guess what they think makes the desert terrain change.
   2. In a sandy area, have students blow on the sand, pour water on the sand, and try other ways they think of to move the sand and change its shape.
   3. Discuss how wind, water, and other forces change the desert just as the students changed the sand.

E. **Assessment/Evaluation**
   1. Assess students through observation and discussion.

**Lesson Seven: Grade 3 Terms**

A. **Daily Objectives**
   1. Concept Objective(s)
      a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
   2. Lesson Content
      a. Geographical Terms and Features: Grade 3: boundary, channel, delta, isthmus, plateau, reservoir, strait.
   3. Skill Objective(s)
      a. The learner will define geographical features.
      b. The learner will draw and color geographical features.
B. Materials
1. The landforms book students started in lesson two
2. Crayons
3. Pictures of landforms
4. The book *Geography A to Z* or *Exploring Your World*
5. Appendix C

C. Key Vocabulary
1. Boundary – an imaginary line separating one country, state, or province from another
2. Channel – a wide strait or waterway between two landmasses that are close to each other
3. Delta – the flat, low-lying plain that sometimes forms at the mouth of a river
4. Isthmus – a narrow strip of land connecting two larger land areas and separating two bodies of water
5. Plateau – a large flat area that stands above the surrounding land
6. Reservoir – an artificial lake where large quantities of water are kept
7. Strait – a narrow passage of water that connects two larger bodies of water

D. Procedures/Activities
1. Repeat the procedure from lesson two of reading the definition, showing the landform, drawing the landform on the board, and writing the definition below it. Have students draw the landform in their books and write the definition under their picture.

E. Assessment/Evaluation
1. Use the students’ landforms book to assess their learning. Appendix C can be used as a quiz.

Lesson Eight: Plateaus
A. Daily Objectives
1. Concept Objective(s)
   a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
2. Lesson Content
   a. Geographical Terms and Features: Grade 3: boundary, channel, delta, isthmus, plateau, reservoir, strait
3. Skill Objective(s)
   a. The learner will create a cut-away model of the features of North America.

B. Materials
1. The book *Landforms: Experiments, Games, Art and Writing Activities*
2. Resource books
3. Topographical maps
4. Scissors
5. Marking pens
6. Index Cards
7. Black and white butcher paper

C. Key Vocabulary
1. None

D. Procedures/Activities
1. Using index cards, make a label for the following: Great Plains, Sierra Nevada Range, California Valleys, Pacific Ocean, Appalachian Highland, Piedmont Coastal Plain, Rocky Mountains, Great Basin, Coastal Ranges, Mississippi River, Atlantic Ocean.
2. Have students work in pairs to locate these areas on maps. Then arrange the cards on the board in order from east to west. Also arrange them according to high and low landforms.
3. Using black and white paper, cut the black paper to show the profile of the high and low points going across the country. Then glue the black paper to the white paper. This can be done whole group or in small groups.

E. Assessment/Evaluation
1. Assess students through their cut-away model and through observation.

Lesson Nine: Landforms Report (this will take several days)

A. Daily Objectives
1. Concept Objective(s)
   a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
   b. The learner will understand how landforms change over time.
2. Lesson Content
   a. Geographical Terms and Features: Review Grades 1 and 2: peninsula, harbor, bay, island, mountains, rivers, coast, valley, desert, oasis, prairie
   b. Geographical Terms and Features: Grade 3: boundary, channel, delta, isthmus, plateau, reservoir, strait
3. Skill Objective(s)
   a. The learner will research a specific landform.
   b. The learner will write a small report on his/her landform.
   c. The learner will design and construct his/her landform out of play dough.
   d. The learner will find places on a map/atlas.

B. Materials
1. Research materials
2. Play dough

C. Key Vocabulary
1. None

D. Procedures/Activities
1. Have the students select a specific landform (ex. Rocky Mountains, Hawaiian Islands, Pikes Peak, etc.).
2. Students will research their landform and write a small report on it including its location, how it was formed, and other interesting facts. Also include a map with the student’s landform located on it.
3. The student will construct his or her landform using play dough.

E. Assessment/Evaluation
1. Assess the students’ reports and their models.

Lesson Ten: Adventurer Story

A. Daily Objectives
1. Concept Objective(s)
   a. The learner will understand the unique characteristics of earth’s landforms and bodies of water.
2. Lesson Content
   a. Geographical Terms and Features: Review Grades 1 and 2: peninsula, harbor, bay, island, mountain, river, coast, valley, desert, oasis, prairie
   b. Geographical Terms and Features: Grade 3: boundary, channel, delta, isthmus, plateau, reservoir, strait
3. Skill Objective(s)
   a. The learner will write a story about an adventure while exploring a landform.

B. Materials
1. Writing paper and pencil
C. **Key Vocabulary**
   1. None

D. **Procedures/Activities**
   1. Have students imagine they are “adventurers.” Have students write a creative story about exploring a landform on one of their adventures. Have them include realistic details about the landforms.

E. **Assessment/Evaluation**
   1. Evaluate students’ stories for realistic details about landforms.

VI. **CULMINATING ACTIVITY**
   A. Have students present their landform reports and play dough landforms. Invite parents or other classes in for the presentations. Have a “Landforms Luncheon” afterwards. Use the recipes on page 47 of *Landforms: Experiments, Games, Art and Writing Activities*.

VII. **HANDOUTS/STUDENT WORKSHEETS**
   A. Appendices A-C – quizzes

VIII. **BIBLIOGRAPHY**
APPENDIX A

NAME____________________________________________________

Match the word with its definition. Put the correct letter on the line next to the word.

peninsula _____ A. a natural stream of water larger than a brook or creek
harbor ______ B. a piece of land smaller than a continent and surrounded by water
bay _______   C. a body of water sheltered by natural or artificial barriers
island _____   D. a piece of land jutting out into a lake or ocean
mountain _____   E. land rising more 300 meters or more above the surrounding land
river _____ F. a small area of sea partly enclosed by dry land.
APPENDIX B

NAME__________________________________________________________

Match the word with its definition. Put the correct letter on the line next to the word.

coast ______  A. very dry land that gets very little water

valley _____   B. the edge of land that borders the ocean along a continent or island

desert ______ C. a grassland characterized by a rich variety of grasses

oasis _____ D. an elongated natural depression in the earth bordered by higher land

prairie _____ E. an area made fertile by a source of fresh water in an otherwise arid region
Match the word with its definition. Put the correct letter on the line next to the word.

boundary _____ A. an artificial lake where large quantities of water are stored
channel _____ B. a wide strait or waterway between two landmasses that are close to each other.
delta _____ C. a narrow passage of water that connects two larger bodies of water
isthmus _____ D. an imaginary line separating one country, state, or province from another
plateau _____ E. a large flat area that stands above the surrounding land
reservoir _____ F. a narrow strip of land connecting two larger land areas and separating two bodies of water
strait _____ G. the flat, low-lying plain that sometimes forms at the mouth of a river