Title: The Many Shapes of the Earth
Grade(s): 4th
Subject(s): Science, English, Social Studies, and Technology
Author: King, Ward, McDaniel
Overview: During this lesson students will focus on landforms near and far - how they might have been formed, how they go through changes and how they affect the lives of people around them.

Content Standards:
SC (4) 7. Describe geological features of Earth, including bodies of water, beaches, ocean ridges, continental shelves, plateaus, faults, canyons, sand dunes, and ice caps.
TC (3-5) 2. Use various technology applications, including word processing and multimedia software.
TC (3-5) 12. Create a product using digital tools.

Local/National Standards:
Primary Learning Objectives: Students will describe characteristics of various landforms, explore local landforms, create models of landforms, and write about famous landforms.

Additional Learning Objectives: The student will use the internet as a resource to gain information and to express acquired knowledge.

Approximate Duration of Lesson: 3 hrs. (Does not include culminating event)

Materials and Equipment: Maps, pictures, globes, posters
Technology Resources Needed: Computer with Scratch program and internet connection.

Background/Preparation: Review structure of the Earth and landforms, collect local topographic maps.

Procedures/Activities:

Day 1 Review the structure of Earth:
- Earth’s surface and layers (crust, mantle, and core).
- The many shapes of the Earth’s surface – Landforms
- Changes in the Earth’s surface

Show these mini movies found at brainpopjr.com.

Day 2 Students will create a relief or topographical map of their neighborhoods. Teacher will provide different examples of maps and discuss different landforms and map features. Teacher will provide blackline maps of
the area from the Internet. Students color in different landforms. Students will create a key for their maps to indicate the different heights and depths of landforms such as hills and mountains, and canyons and chasms.

Day 3 **Landform Travel Fair Planning (Collaborative)**

Students work with their group to pick a specific landform they might like to visit (e.g., Cape Cod, Mt. St. Helens, Grand Canyon, or a specific island) and research exciting facts about their chosen place. They will prepare an electronic travel guide using Scratch or Xtranormal to attract vacationers to their landform.

- Students should research the location, characteristics, and formation of their landform *(not cultural and historical events that might have taken place there)* to create travel guides or Scratch or Xtranormal presentations.
- Their animation or video should include pictures or diagrams of how the landform was created and what it looks like today.
- Their presentation should be designed to show vacationers why they should come to this landform for their vacation.

Day 4 Hold a Class Travel Fair in which each group presents their travel guide. Have class vote on which landform they would choose for a vacation.

**Attachments:**
- Assessment Strategies
- Extension:
- Remediation:

**Assessment Strategies:**
Rubrics or checklists for multimedia projects.

**Extension:**
Have students research how landforms affect our lives.

**Remediation:**
Provide differential instructions for special needs students.
Reteach.