Landformers

1. **DESCRIPTION:** Teams will identify landforms, describe their characteristics, explain how they were formed, and tell where certain landforms can be found.

2. **ESSENTIAL STANDARDS ALIGNMENT**: 3.E.2

3. **TEAM OF UP TO:** 2

4. **MAXIMUM TIME:** 60 min.

5. **TEAMS:** Must bring a writing instrument. No other resources are allowed.

6. **EVENT LEADERS:** Event leaders will provide an event with all necessary objects, materials, questions, and response sheets for participants to complete each exam. Examples include but are not limited to models, slides, maps, topographic maps, charts, aerial photographs, satellite images, and pictures.

7. **SAFETY REQUIREMENTS:** None

8. **IMPOUND:** No

9. **THE COMPETITION:** The competition will consist of an exam that covers any or all of the following topics.

   a. Identify and analyze forces that cause changes in landforms over time.
   b. Identify landforms and describe how they have changed over time.
   c. Investigate and describe the role of water and the water cycle in shaping landforms.
   d. Explain how weathering, erosion, transport, and deposition occur and how they shape landforms.
   e. Locate and describe the landforms in a specific area or region.
   f. Choose the most likely places to find certain landforms and explain why they formed where they did.
   g. Explain why certain landforms do not form in some areas.
   h. Interpret photos, images, etc. to describe the geologic history of an area and predict how it will change over time.
   i. Examine evidence of geologic change and predict its impact on human activities.

Example Challenges:

   a. Observe the landform shown in each picture. Name the type of landform and describe how it was formed.
   b. Compare the two photographs of the same area at different times. Describe how the area has changed and what caused the changes. How might these changes affect human activities in the area in the future?
   c. Look at this world map with numbered locations. Match each landform on the given list with the number where it would most likely be found on Earth.

10. **SCORING:** Points will be awarded for the accuracy of responses. Ties will be broken by the accuracy or quality of responses to pre-selected questions chosen by the event leader.

11. **EVENT RESOURCES**:
See the Event Resources tab on our website (ncscienceolympiad.ncsu.edu) for instructions, videos and more.