TOPO BINGO

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What can you do with a large assortment of mismatched USGS topographic maps of various faraway places? – Play Topo Bingo

Grade level: 3rd – Adult

Materials needed:

- Class set of different USGS topographic maps (no two alike)
- Teachers may obtain free topographic maps from the Nevada Bureau of Mines and Geology at:
- www.nbmg.unr.edu
- Tokens or place markers (pennies, lima beans, buttons, 1-inch colored paper squares, and so on)
- Game pieces (or copies of them) cut up and put into a bag, bowl, or hat see below
- Legend or list of map symbols (optional)
- Available online at:
- http://erg.usgs.gov/isb/pubs/booklets/symbols/

Objective:

This exercise is intended to familiarize students with topographic maps, the symbols used on them, and some basic topographic features. It can be used as an entertaining introduction to topo maps or as an assessment tool to see how well students know maps. The techniques discussed below can be used to adapt the game from beginning to advanced levels.

Procedure:

It is assumed that both the teacher and the students are familiar with the basic procedures, rules, and objectives of the traditional Bingo game. Instead of using Bingo cards, each student uses a topo map. Instead of the leader calling out things like "I-28" or "B-5," in Topo Bingo the teacher, using the game pieces, calls out map symbols and topographic features. On the map, it will obviously be difficult to cover five squares lined up in a row, so the student only needs to cover any five items on the map. When the required number of items on a student's map are covered, the student shouts, "Topo!" (not "Bingo").

1. Make color printouts of the game pieces. Cut apart all the pieces along the solid lines and you may choose to fold each piece along the dotted line depending on whether or not you want to show the symbol for each land feature. Throw the game pieces into a hat (or bag, or bowl). Adjust the level of the game by choosing which pieces to put in the hat. Game pieces that say "church," "school," or "railroad" are simple, and all levels of students should be able to find them on a

map. "Depression contours" and "steep cliffs," which require a knowledge of topographic map reading, are for the intermediate or advanced student. They require a knowledge of topographic map reading. Game pieces such as "sand dunes" require a knowledge of the landform itself and what it looks like on a topographic map. The level of your students should dictate which of the game pieces to start with in the hat. You may choose to hide or show the symbol on the game pieces to students by folding them.

- 2. Distribute to each student a map, a half dozen tokens or place markers, and a map legend or key (optional see note below on whether or not to use a legend). You can download and print in color the maps provided by the Learning Web or use topographic maps that you already have.
- 3. Shake or mix up the bag of game pieces and draw one. Read it to your students. If they find that feature on their maps, they should use a token and cover the feature or symbol. The level of difficulty can be adjusted by allowing or not allowing the students to use a legend when searching on their maps for the feature or symbol that the teacher has just called.
- 4. Continue drawing game pieces out of the bag and calling them. Do not return the game pieces to the bag as they are called. Leave them out to avoid duplication and to verify student winners. When a student covers five items (or as many as the

teacher decides), he or she shouts "Topo!" and gets a prize (teacher's discretion). Play can continue to allow several student winners.

Further information and materials sources:

The U.S. Geological Survey publishes several general interest pamphlets on topographic maps and how to read them. The pamphlets, State map indexes, and a list of map symbols are available free of charge from USGS Map and Book Sales, P.O. Box 25286, Denver, CO 80225. Topographic maps may be purchased from the same address.

For more information, telephone: 1-800-USA-MAPS. Before purchasing new maps, teachers should contact the geology or geography departments of local colleges and universities to inquire about discarded or surplus maps that could be used for this activity.