



SfS Away from the Classroom!

SCIENCE
FROM SCIENTISTS

ES05: Topographic Maps (Recommended for Grades 3-5)

Please use the following resources to learn about Topographic Maps!

Watch this Video: <https://www.youtube.com/watch?v=pvw5ZM1OKcY>

Answer these questions:

- What unique features do topographic maps show you?
- Most maps have a scale and a compass rose. What third feature do topographic maps have?
- Who could use a topographic map and when would it be helpful?

Activities: Follow these directions to explore the topography of your hand

You will need:

- | | |
|---------|-------------|
| • a pen | • your hand |
|---------|-------------|

1. Just like hills and mountains, your fist has its own topography! Make a fist with one hand: your knuckles represent hilltops. Now with a pen in the other hand, start drawing contour lines at the top of your knuckles. The hilltops will be smaller circles and start to be farther and farther apart (more gradual slope) as the contour lines make their way down from your knuckles to your wrist.
2. After you have completed the full topography of the back of your hand, lay your hand down flat. Just like a topographic map, you are able to see what the conditions of the area are like based on the contour lines.



Explore topographic maps of your neighborhood – or anywhere in the U.S.!

Go to: <https://viewer.nationalmap.gov/basic/>

Make observations & use Claims, Evidence, and Reasoning!

1. **Claim:** All mountains are the same
 - **Evidence:**
 - **Reasoning:**
2. **Claim:** Contour lines show how steep mountains are
 - **Evidence:**
 - **Reasoning:**