

# Mountain Building & Folding

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Name: \_\_\_\_\_ Date: \_\_\_\_\_

## LEARNING OBJECTIVE

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Students will model rock folding caused by tectonic compression and relate it to mountain formation.

## MATERIALS NEEDED

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- 3-4 strips of different colored fabric, felt, or layered play dough
- a flat surface
- paper
- colored pencils

## HANDS-ON ACTIVITY

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1. Stack 3-4 strips of different colored fabric, felt, or thin layers of clay flat on top of each other on a table to represent horizontal rock layers.
2. Place your hands on both ends of the stack and slowly push them toward each other, observing the layers fold, bend, or buckle upward.
3. Sketch the folded shape you created, labeling the upward folds (anticlines) and downward folds (synclines).
4. On the same paper, research or recall and label one real mountain range formed by this type of folding (such as the Himalayas or the Appalachians).

## QUESTIONS

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1. What force did you apply to your layers to make them fold, and what is this force called in geology?
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2. What is the difference between an anticline and a syncline?
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3. Name a real mountain range formed by folding and the plate collision that created it.
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**4. Why do folded mountains tend to form at convergent plate boundaries rather than divergent ones?**

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