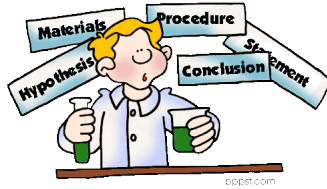


Name _____



Science Experiment:

Rock Bridge (#138) Cycle 1, Week 17

Purpose: To demonstrate how natural _____ stand.

Hypothesis: _____

Materials: 2 flat chairs the same height
books

Procedure:

- Move the chairs about 12 inches apart.
- Lay one book on each chair with the edge of the books even with the edges of the chairs.
- Stack books on top of each other so that each book extends farther over the edge than the one below it.
- Continue stacking the books until one book overlaps the stack from both chairs to form a bridge.

Draw/Write **Observations** in the box.

Results:

No part of the bottom books overlaps the edge of the chair.
Each book above the bottom book _____
over the chair's edge until the top book is completely past
the edges of the chairs.

Why:

All objects behave as if their weight is located in one spot called the _____ of
_____. The book bridge is supported because the center of gravity of each side
of the bridge is over a chair. In nature, natural rock bridges are formed by
_____ and erosional processes. These bridges balance because the
particles making up the bridge overlap in such a way that they place the center of gravity of
the structures over the supporting sides.