Lazy Bones

In this experiment you might expect the thin threads that support the stick to break, but instead...

**What to do:** Tie a piece of thread to each end of the stick. Then tie the other end of each thread to the hanger so the stick is suspended underneath. Use clove hitch knots (see instructions) if you like. Strike the stick with the metal edge of the ruler.

**What happens:** The threads do not break. If you strike hard enough, the piece of wood will break.

**Why:** You are applying force not to the threads but to the stick. The stick resists moving—so much that it would rather break than move. It is the law of inertia again: bodies at rest tend to stay at rest.

**YOU NEED**
- two long pieces of thread
- thin wooden stick
- wooden clothes hanger
- metal edged ruler