2

**Name:** ..... **Form:** .....

Based on **pages 6 and 7** of *Friction*

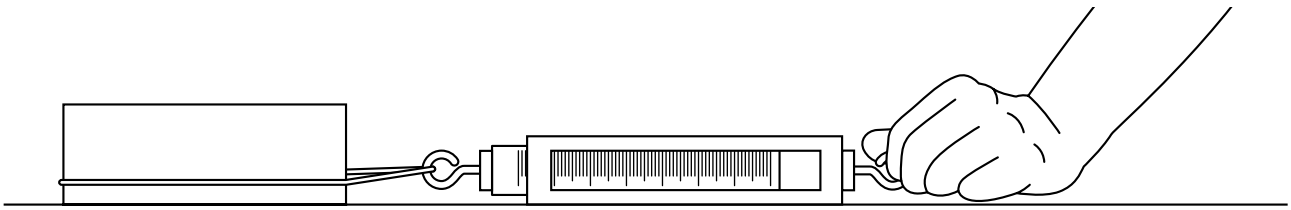
# Does load and area affect friction?

**Try this...**

**1.** Read this:

**The load on a surface is the force pushing down on it. You can increase the load on a block by putting more blocks on top of it.**

**2.** Set up a block and forcemeter as the diagram shows.



**3.** Pull gently on the forcemeter until the block just starts to move.
Look at the force measured by the forcemeter and record it here. ✎.....

**4.** How does the force change if you use two, three or more blocks stacked on top of each other? Design a test to answer this question and record your results on a separate piece of paper.

**5.** Turn a rectangular block so that its largest surface is touching the table.

**6.** Pull gently on the forcemeter until the block just starts to move.
Look at the force measured by the forcemeter and record it here. ✎.....

**7.** Turn the rectangular block on its side so that its smallest surface is touching the table.

**8.** Pull gently on the forcemeter until the block just starts to move.
Look at the force measured by the forcemeter and record it here. ✎.....

**Looking at the results.**

**9.** How does friction change as you increase the load on a block?

✎.....

**10.** How do the forces you measured in steps 6 and 8 compare?

✎.....