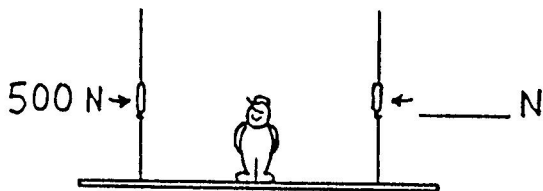
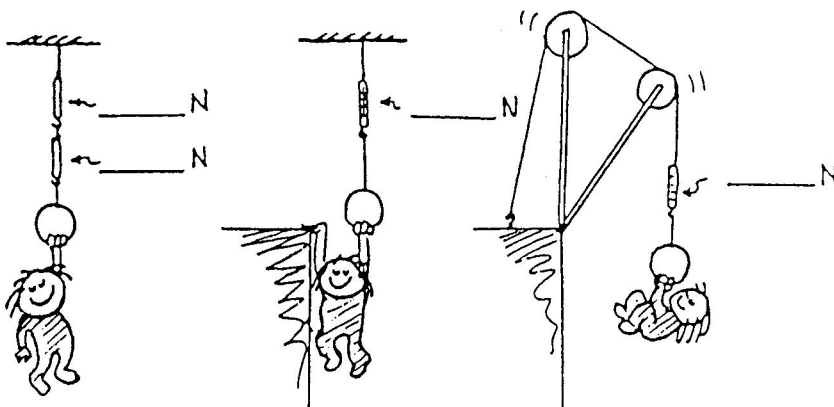
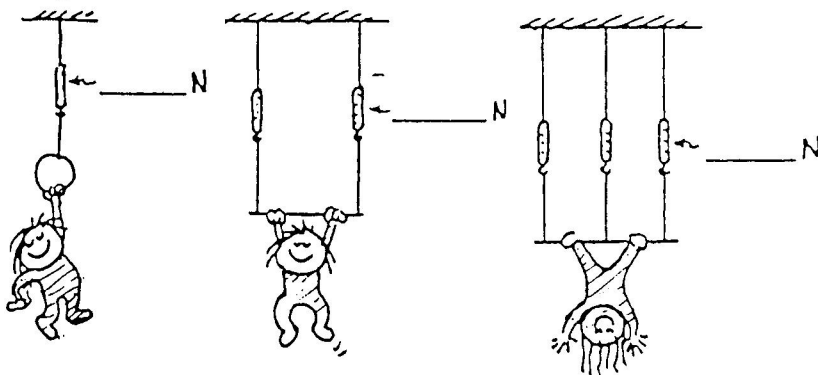


CONCEPTUAL **Physical Science** PRACTICE SHEET

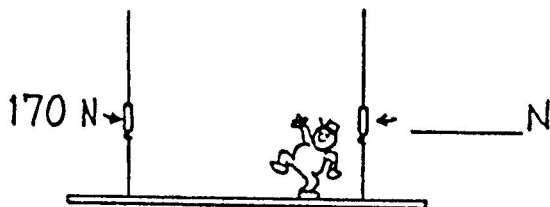
Chapter 1: Patterns of Motion and Equilibrium

The Equilibrium Rule: $\Sigma F = 0$

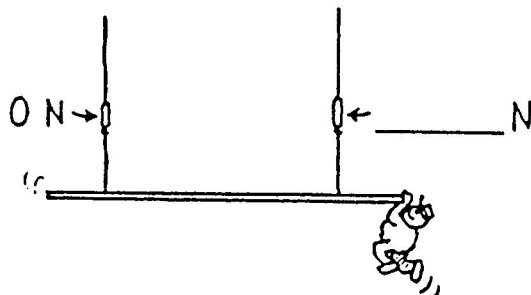
1. Gymnast Nellie Newton hangs from a variety of positions as shown. Since she is not accelerating, the net force on her is zero. This means the upward pull of the rope(s) equals the downward pull of gravity. She weighs 300 N. Show the scale reading for each case.



2. When Burl the painter stands in the exact middle of his staging, the left scale reads 500 N. Fill in the reading on the right scale. The total weight of Burl and staging must be _____ N.



3. Burl stands farther from the left. Fill in the reading on the right scale.



4. In a silly mood, Burl dangles from the right end. Fill in the reading on the right scale.