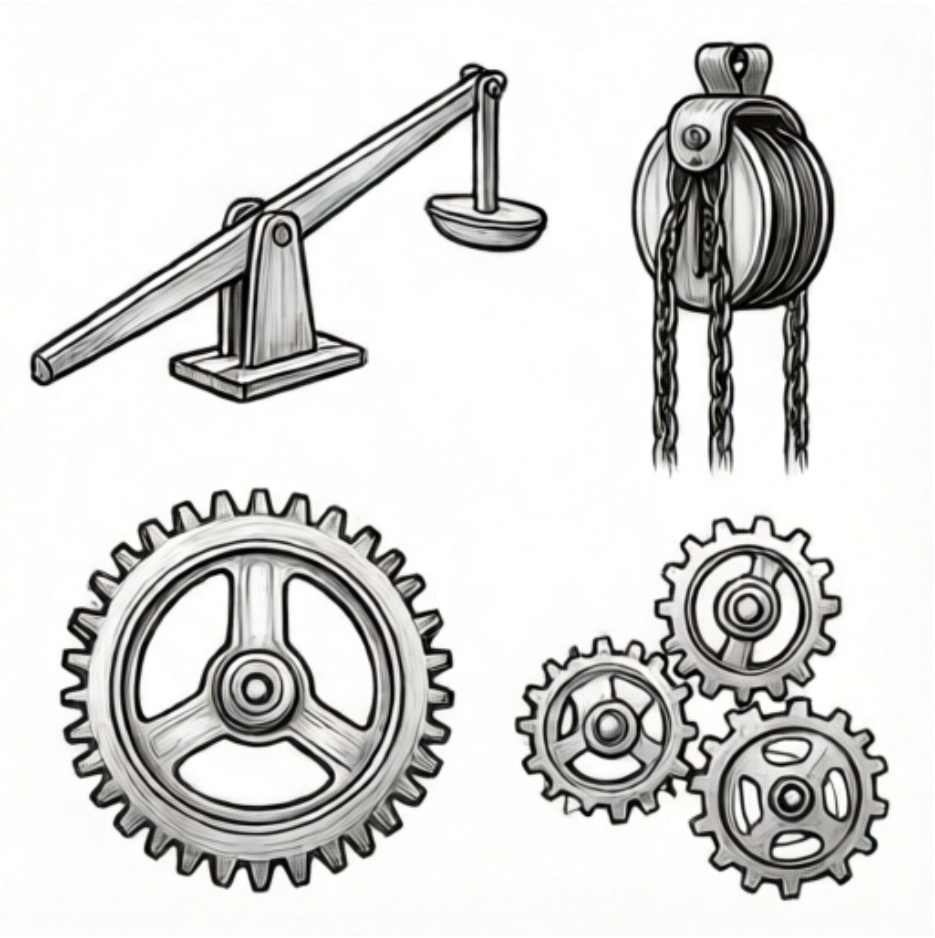
Simple Machines Drawings Worksheets: Label Six Machines

Ordinary topic reference / separately checked pixels



Simple Machines Drawings Worksheets: Label Six Machines

Original worked example / unchanged complete key

Prompt: Draw a lever in side view with a bar, a triangular fulcrum, a load box on the left end, and an effort arrow on the right end. Label fulcrum, effort arm, load arm, and load. Use solid outlines and place labels outside the drawing. Measure the effort arm as 12 cm and the load arm as 4 cm in a hypothetical example, then compute the arm ratio.

Answer: The drawing shows a horizontal bar resting on a triangle at the center-left. The load box sits on the left end, and an upward effort arrow points at the right end. Labels outside the drawing use straight leader lines: 'fulcrum' to the triangle tip, 'load' to the box, 'load arm' to the left segment, and 'effort arm' to the right segment. The effort arm measures 12 cm and the load arm measures 4 cm in this hypothetical example. The arm ratio is 12 divided by 4, which equals 3.