

Introduction to Engineering

Catalogue Number	77-3095-0000
Category	Manufacturing and Engineering
Duration	15 Hours

Hardware	N/A
Software	N/A
Additional Materials	<p>Access to the Internet or library</p> <p>8.5 inches x 11 inches paper white (one per team member)</p> <p>8.5 inches x 11 inches paper colored (one per team)</p> <p>0.5 inches wide x 12 inches long piece of scotch tape</p> <p>Scissors</p> <p>Ruler</p> <p>Pencil</p> <p>Balloon Racer:</p> <p>Notebook (dedicated to team and challenge)</p> <p>Pen/pencil</p> <p>Safety glasses</p> <p>Graph paper and/or CAD system for design sketches</p> <p>Ruler, tape measure, or architect's scale</p> <p>Wood (lightweight)</p> <p>Cutting tools</p> <p>Cardboard</p> <p>Glue, fasteners</p>

Additional Materials	<p>Bridge - Fixed:</p> <ul style="list-style-type: none">NotebookPen/pencilGraph paper or CAD system for design sketchesModelling kit (K'NEX, Erector Set, VEX, etc.)Ruler/tape measureString/cable/chainClothes hangersDowel rodsBalsa/bass woodCutting tools TapeCardboardGlue/fasteners <p>Cardboard Chair:</p> <ul style="list-style-type: none">Notebook (dedicated to team and challenge)Pen/pencilSafety glassesGraph paper and/or CAD system for design sketchesRecycled corrugated cardboardGlue, fastenersRuler, tape measure, or architect's scale
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Additional Materials	<p>Flight Endurance:</p> <ul style="list-style-type: none">NotebookPen/pencilGraph paper or CAD system for design sketchesRuler/tape measureCutting toolsGlue/fastenersRubber bandsPropeller and accessoriesBalsa woodPaper or mylarLanding gear <p>Rube Goldberg Machine:</p> <ul style="list-style-type: none">NotebookPen/pencilGraph paper for design sketchesDesign hardwareTwo sheets of paper to be stapled
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