Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

www.kelvin.com  KELVIN®, 280 Adams Blvd., New York 11735, USA  Copyright © Kelvin L.P.  Prices in this catalog represent discounted pricing for educational institutions.
**Project Motors with Solder Tabs**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>NOM. VOLT. (V)</th>
<th>VOLT. RANGE (V)</th>
<th>CURRENT (A)</th>
<th>SPEED (rpm)</th>
<th>TORQUE (g/cm)</th>
<th>SHAFT DIA. (mm)</th>
<th>SHAFT L. (mm)</th>
<th>DIMENSIONS (mm)</th>
<th>$ 1-9</th>
<th>$ 10-99</th>
<th>$ 100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>851255</td>
<td>[A]</td>
<td>6</td>
<td>1-6</td>
<td>0.041</td>
<td>10,500</td>
<td>4.3</td>
<td>1.5</td>
<td>4</td>
<td>15.5 x 24.1</td>
<td>2.45</td>
<td>2.25</td>
<td>1.95</td>
</tr>
<tr>
<td>851256</td>
<td>[B]</td>
<td>2.4</td>
<td>1.5-3</td>
<td>0.096</td>
<td>15,800</td>
<td>2.7</td>
<td>1</td>
<td>3.6</td>
<td>12 x 15</td>
<td>2.95</td>
<td>2.75</td>
<td>2.45</td>
</tr>
<tr>
<td>851257</td>
<td>[C]</td>
<td>1.5</td>
<td>0.9-1.6</td>
<td>0.1</td>
<td>6,500</td>
<td>—</td>
<td>1.5</td>
<td>3.5</td>
<td>18 x 10 x 19</td>
<td>3.45</td>
<td>3.25</td>
<td>2.95</td>
</tr>
<tr>
<td>851165</td>
<td>[D]</td>
<td>6</td>
<td>1.5-6</td>
<td>—</td>
<td>12,000</td>
<td>—</td>
<td>1.5</td>
<td>3</td>
<td>20 x 25</td>
<td>1.15</td>
<td>.89</td>
<td>.79</td>
</tr>
<tr>
<td>850646</td>
<td>[E]</td>
<td>1.5</td>
<td>1.2-3</td>
<td>0.34</td>
<td>10,200</td>
<td>6.8</td>
<td>2</td>
<td>8.1</td>
<td>20 x 25</td>
<td>.85</td>
<td>.79</td>
<td>.59</td>
</tr>
<tr>
<td>851254</td>
<td>[E]</td>
<td>3</td>
<td>1.5-3</td>
<td>0.7</td>
<td>14,400</td>
<td>12.4</td>
<td>2</td>
<td>8.1</td>
<td>20 x 25</td>
<td>2.45</td>
<td>2.25</td>
<td>1.95</td>
</tr>
<tr>
<td>850647</td>
<td>[F]</td>
<td>6</td>
<td>3-6</td>
<td>0.26</td>
<td>17,000</td>
<td>20.7</td>
<td>2</td>
<td>6.5</td>
<td>23.5 x 27</td>
<td>.85</td>
<td>.79</td>
<td>.69</td>
</tr>
<tr>
<td>850887</td>
<td>[G]</td>
<td>12</td>
<td>6-12</td>
<td>0.14</td>
<td>12,500</td>
<td>44.2</td>
<td>2</td>
<td>10</td>
<td>24 x 32</td>
<td>1.75</td>
<td>1.50</td>
<td>1.35</td>
</tr>
<tr>
<td>850941</td>
<td>[H]</td>
<td>12</td>
<td>6-12</td>
<td>0.7</td>
<td>16,200</td>
<td>236.5</td>
<td>3</td>
<td>8.5</td>
<td>35.7 x 71.5</td>
<td>6.95</td>
<td>6.25</td>
<td>5.75</td>
</tr>
<tr>
<td>850962</td>
<td>[H]</td>
<td>30</td>
<td>12-30</td>
<td>1.31</td>
<td>12,800</td>
<td>238.4</td>
<td>3</td>
<td>8.5</td>
<td>35.7 x 71.5</td>
<td>9.95</td>
<td>8.95</td>
<td>8.45</td>
</tr>
<tr>
<td>851934</td>
<td>[I]</td>
<td>12</td>
<td>6-18</td>
<td>0.75</td>
<td>7,205</td>
<td>587</td>
<td>2.2</td>
<td>13.7</td>
<td>37.5 x 27.8</td>
<td>6.95</td>
<td>6.25</td>
<td>5.75</td>
</tr>
</tbody>
</table>

**As Low As 59¢ Per Motor**

**Project Motors with Wire Leads**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>NOM. VOLT. (V)</th>
<th>VOLT. RANGE (V)</th>
<th>CURRENT (A)</th>
<th>SPEED (rpm)</th>
<th>TORQUE (g/cm)</th>
<th>SHAFT DIA. (mm)</th>
<th>SHAFT L. (mm)</th>
<th>DIMENSIONS (mm)</th>
<th>WIRE LENGTH (mm)</th>
<th>$ 1-9</th>
<th>$ 10-99</th>
<th>$ 100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>851105</td>
<td>[J]</td>
<td>2</td>
<td>0.7-5</td>
<td>0.018</td>
<td>2,200</td>
<td>2.8</td>
<td>2</td>
<td>6</td>
<td>25 x 13.5</td>
<td>125</td>
<td>2.95</td>
<td>2.75</td>
<td>2.45</td>
</tr>
<tr>
<td>851258</td>
<td>[K]</td>
<td>4.5</td>
<td>3.6-6</td>
<td>0.029</td>
<td>28,580</td>
<td>9.4</td>
<td>1</td>
<td>2.8</td>
<td>10 x 12.4</td>
<td>30</td>
<td>3.45</td>
<td>3.25</td>
<td>2.95</td>
</tr>
<tr>
<td>851259</td>
<td>[L]</td>
<td>1.5</td>
<td>1-2.4</td>
<td>0.056</td>
<td>21,300</td>
<td>6.4</td>
<td>1</td>
<td>4</td>
<td>7 x 16.6</td>
<td>30</td>
<td>2.95</td>
<td>2.75</td>
<td>2.45</td>
</tr>
<tr>
<td>851949</td>
<td>[M]</td>
<td>1.5</td>
<td>1.2-3</td>
<td>0.34</td>
<td>10,200</td>
<td>6.8</td>
<td>2</td>
<td>8.1</td>
<td>20 x 25</td>
<td>125</td>
<td>1.05</td>
<td>.99</td>
<td>.79</td>
</tr>
<tr>
<td>851230</td>
<td>[N]</td>
<td>1.5</td>
<td>1.5-3</td>
<td>0.30</td>
<td>10,000</td>
<td>6.0</td>
<td>2</td>
<td>8.5</td>
<td>23.5 x 27</td>
<td>125</td>
<td>1.25</td>
<td>1.15</td>
<td>.89</td>
</tr>
<tr>
<td>851950</td>
<td>[O]</td>
<td>6</td>
<td>3-6</td>
<td>0.26</td>
<td>17,000</td>
<td>20.7</td>
<td>2</td>
<td>6.5</td>
<td>23.5 x 27</td>
<td>125</td>
<td>1.05</td>
<td>.99</td>
<td>.89</td>
</tr>
</tbody>
</table>

**Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.**

www.kelvin.com • KELVIN® © • 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

www.kelvin.com  KELVIN®, 280 Adams Blvd., New York 11735, USA  Copyright © Kelvin L.P.  Prices in this catalog represent discounted pricing for educational institutions.

### Motor/Syringe Mounts

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>INSIDE DIA. IN.</th>
<th>FITS</th>
<th>QTY.</th>
<th>$1-9</th>
<th>$10+</th>
</tr>
</thead>
<tbody>
<tr>
<td>282424</td>
<td>[A]</td>
<td>5/8</td>
<td>—</td>
<td>1</td>
<td>.49</td>
<td>.46</td>
</tr>
<tr>
<td>390968</td>
<td>[A]</td>
<td>7/8</td>
<td>Motors: #850647, 851950, 851230, 850887, 851105, Syringes: 30cc Luer, #390979</td>
<td>1</td>
<td>.59</td>
<td>.56</td>
</tr>
<tr>
<td>390963</td>
<td>[B]</td>
<td>1/2</td>
<td>Syringes: 10cc Straight, Syringes #390977</td>
<td>1</td>
<td>.75</td>
<td>.66</td>
</tr>
<tr>
<td>390967</td>
<td>[B]</td>
<td>3/4</td>
<td>Motors: #850647, 851950, 851230, 850887, 851105, Syringes: 30cc Luer, #390979</td>
<td>1</td>
<td>.75</td>
<td>.69</td>
</tr>
<tr>
<td>390962</td>
<td>[B]</td>
<td>1</td>
<td>Syringes: 60cc Luer, Syringes #390981</td>
<td>1</td>
<td>1.69</td>
<td>1.60</td>
</tr>
<tr>
<td>390726</td>
<td>[C]</td>
<td>3/4</td>
<td>—</td>
<td>10</td>
<td>1.25</td>
<td>.99</td>
</tr>
<tr>
<td>390727</td>
<td>[C]</td>
<td>1-1/4</td>
<td>—</td>
<td>2</td>
<td>.79</td>
<td>.69</td>
</tr>
<tr>
<td>390588</td>
<td>[D]</td>
<td>3/4</td>
<td>Motors: #850646, 851949, Syringes: 20cc Luer, Syringes #390979</td>
<td>10</td>
<td>5.95</td>
<td>5.65</td>
</tr>
<tr>
<td>390572</td>
<td>[D]</td>
<td>7/8</td>
<td>Motors: #850647, 851950, Motors: 851230, 850887, Motors: 851105, Syringes: 30cc Luer, Syringes #390979</td>
<td>10</td>
<td>5.95</td>
<td>5.65</td>
</tr>
</tbody>
</table>

### Luer Lock Project Syringes
Provides plunger movement for robotic arms, science activities, etc. All syringes fit 1/8 in. inside diameter vinyl tubing. 10/pkg.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>CAPACITY</th>
<th>QTY.</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>390975</td>
<td>3cc</td>
<td>10cc</td>
<td>$3.95</td>
</tr>
<tr>
<td>390979</td>
<td>10cc</td>
<td>5.95</td>
<td></td>
</tr>
<tr>
<td>390976</td>
<td>6cc</td>
<td>20cc</td>
<td>$4.95</td>
</tr>
<tr>
<td>390978</td>
<td>20cc</td>
<td>8.95</td>
<td></td>
</tr>
<tr>
<td>390979</td>
<td>30cc</td>
<td>14.95</td>
<td></td>
</tr>
</tbody>
</table>

### Connectors
Use with 1/8 in. diameter vinyl tubing.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>390398</td>
<td>[A]</td>
<td>2-Way</td>
<td>$1.35</td>
</tr>
<tr>
<td>390399</td>
<td>[B]</td>
<td>3-Way ‘Y’</td>
<td>$1.35</td>
</tr>
<tr>
<td>390400</td>
<td>[C]</td>
<td>3-Way ‘T’</td>
<td>$1.35</td>
</tr>
<tr>
<td>390401</td>
<td>[D]</td>
<td>4-Way</td>
<td>$2.45</td>
</tr>
</tbody>
</table>

### Control Valves
Use with 1/8 in. diameter vinyl tubing.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>390617</td>
<td>[E]</td>
<td>3-Way</td>
<td>$2.95</td>
</tr>
<tr>
<td>390618</td>
<td>[F]</td>
<td>No-Return</td>
<td>$12.95</td>
</tr>
</tbody>
</table>

### Vinyl Tubing
Vinyl tubing for projects and experiments. 100 feet/package.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>390314</td>
<td>1/8 in. Inside Dia.</td>
<td>$15.95</td>
</tr>
<tr>
<td>390696</td>
<td>3/16 in. Inside Dia</td>
<td>$18.95</td>
</tr>
<tr>
<td>390697</td>
<td>1/4 in. Inside Dia</td>
<td>$19.95</td>
</tr>
</tbody>
</table>

### Vinyl Tube Cutter
Cuts vinyl tubing measuring 1/16 in. to 1/2 in. in diameter.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>390452</td>
<td></td>
<td>$9.95</td>
</tr>
</tbody>
</table>

### Luer Lock Project Syringes

- **3cc** Syringes: $3.95
- **6cc** Syringes: $4.95
- **10cc** Syringes: $5.95
- **20cc** Syringes: $8.95
- **30cc** Syringes: $14.95
- **35cc** Syringes: $15.95
- **60cc** Syringes: $15.95

### Motor/Syringe Mounts

- **5/8 in.** Mounts: $0.49
- **7/8 in.** Mounts: $0.59
- **1/2 in.** Mounts: $0.75
- **3/4 in.** Mounts: $0.75
- **1 in.** Mounts: $1.69

### Experimenting with Syringes

Accessory pack includes a large (60cc) syringe, [3] medium (20cc) syringes and [3] small (6cc) syringes along with 25 ft. of 1/8 in. dia. tubing.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>842420</td>
<td></td>
<td>$9.95</td>
</tr>
</tbody>
</table>
### Gearboxes

#### Economy Gearbox & Inline Motor
Economy motorized gearboxes w/ mounting holes. Shaft size (oval): 13/64 x 9/64 in. 3V DC (6V DC max.).

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>282396</td>
<td>1:120, 100 RPM</td>
<td>$7.95</td>
</tr>
<tr>
<td></td>
<td>or $7.45 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### 2-in-1 Gearbox
This set includes a motor, two sets of gears, metal shafts, gearbox, and other accessories in this kit. Use a different gear setting and you will have a different speed.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>282394</td>
<td>Kit</td>
<td>$9.95</td>
</tr>
<tr>
<td></td>
<td>or $9.45 ea./3+</td>
<td></td>
</tr>
</tbody>
</table>

#### Motor & Gearbox Kit
Eight different transmission ratios, from 5:1 up to 1125:1. Kit includes an RC20 motor (that runs on 1.5-4.5V DC) and instructions. The output shaft is 3mm in diameter.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>280411</td>
<td>Kit</td>
<td>$12.95</td>
</tr>
<tr>
<td></td>
<td>or $11.95 ea./3+</td>
<td></td>
</tr>
</tbody>
</table>

#### Tug-of War Gearbox Kit
Axles connects to 2 wheels for the Tug-of-War activity. It includes a long threaded rod axle for attachment to wheels (not included). The assembly lends itself to forward and backward motion with both wheels being driven by the same gearbox. Kit includes a pre-punched U-shaped bracket, motor, axles, gears, washers and instructions. 2.5 in. W x 6.75 in. L x 1.70 in. H. You must enlarge holes in the gears.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>283122</td>
<td>Kit</td>
<td>$19.95</td>
</tr>
<tr>
<td></td>
<td>or $17.95 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### SUMO Wrestler® Gearbox Kit
Connects to one wheel for SUMO Wrestler® vehicle. Ideal where many directional changes will to be made. The box includes a screw and nut axle that connects to the wheel (sold separately). Two gearboxes are required to transmit power to each wheel. Kit includes a pre-punched U-shaped bracket, motor, axles, gears, washers and instructions. 2.5 in. W x 6.75 in. L x 1.70 in. H. You must enlarge holes in the gears.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>282360</td>
<td>Kit</td>
<td>$18.95</td>
</tr>
<tr>
<td></td>
<td>or $16.95 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Heavy Duty Gearbox & Motor
Use for robotic activities. Motor: 1 in. dia. x 2-7/8 in. L. Shaft: 0.15 in. dia. x 3/8 in. L.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>851100</td>
<td>100:1, 6-12V DC</td>
<td>$12.95</td>
</tr>
<tr>
<td>851494</td>
<td>15:1, 1-3V DC</td>
<td>$12.95</td>
</tr>
</tbody>
</table>

#### Swing Friction Gear Motor
Design and build a dragster with power from gears and a swing friction motor. Attach wheels and watch the dragster go!

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>280413</td>
<td></td>
<td>$6.95</td>
</tr>
<tr>
<td></td>
<td>or $6.25 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Gearbox Motor with Clear Cover
Clear cover lets you see how the gears work, calculate gear ratios, etc. Fitted with adjustable gears. 6-12V DC. Shaft is 0.15 in. dia. x 3/8 in. L. The motor dimensions are 1 in. dia. x 2-7/8 in. L.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>850716</td>
<td></td>
<td>$22.95</td>
</tr>
<tr>
<td></td>
<td>or $21.95 ea./3+</td>
<td></td>
</tr>
</tbody>
</table>

#### Reduction Unit Kit
50:1 reduction unit. Includes 6V DC motor and an axle. Shaft is 5/32 in. diameter.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>280367</td>
<td></td>
<td>$5.95</td>
</tr>
<tr>
<td></td>
<td>or $5.45 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Clunk-Click Gearbox Kit
This gearbox system is easy to assemble and take apart. Comes with motor holder and gears. Ideal for transportation projects. 1-6V DC, 0.1-1.0 A (load dependent). 2mm dia. shaft.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>281739</td>
<td></td>
<td>$5.95</td>
</tr>
<tr>
<td></td>
<td>or $5.45 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Universal Gearbox
Expand this universal gearbox by adding gears up to 6 gear ratios. It has metal side plate. Output shaft is 4mm diameter. 1.5-4.5 VDC.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>281740</td>
<td></td>
<td>$16.95</td>
</tr>
<tr>
<td></td>
<td>or $16.10 ea./3+</td>
<td></td>
</tr>
</tbody>
</table>

#### Large Gearbox
Larger gear is easier to mash. Use with solar cell project designs or battery car models. 6-12V DC. Has a 3mm diameter shaft.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>841219</td>
<td></td>
<td>$3.95</td>
</tr>
<tr>
<td></td>
<td>or $3.45 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Economy Gearbox & Motor
Economy motorized gearboxes w/ mounting holes. Shaft size (oval): 13/64 x 9/64 in. 3V DC (6V DC max.).

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>282396</td>
<td>1:120, 100 RPM</td>
<td>$7.95</td>
</tr>
<tr>
<td></td>
<td>or $7.45 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Reduction Unit Kit
50:1 reduction unit. Includes 6V DC motor and an axle. Shaft is 5/32 in. diameter.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>280367</td>
<td></td>
<td>$5.95</td>
</tr>
<tr>
<td></td>
<td>or $5.45 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Swingo Friction Gear Motor
Design and build a dragster with power from gears and a swing friction motor. Attach wheels and watch the dragster go!

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>280413</td>
<td></td>
<td>$6.95</td>
</tr>
<tr>
<td></td>
<td>or $6.25 ea./10+</td>
<td></td>
</tr>
</tbody>
</table>

#### Gearbox Motor with Clear Cover
Clear cover lets you see how the gears work, calculate gear ratios, etc. Fitted with adjustable gears. 6-12V DC. Shaft is 0.15 in. dia. x 3/8 in. L. The motor dimensions are 1 in. dia. x 2-7/8 in. L.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>850716</td>
<td></td>
<td>$22.95</td>
</tr>
<tr>
<td></td>
<td>or $21.95 ea./3+</td>
<td></td>
</tr>
</tbody>
</table>

#### Universal Gearbox
Expand this universal gearbox by adding gears up to 6 gear ratios. It has metal side plate. Output shaft is 4mm diameter. 1.5-4.5 VDC.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>281740</td>
<td></td>
<td>$16.95</td>
</tr>
<tr>
<td></td>
<td>or $16.10 ea./3+</td>
<td></td>
</tr>
</tbody>
</table>

---

**Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.**

[www.kelvin.com](http://www.kelvin.com) • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
KELVIN® Educational

Power Drive Gearbox

A worm drive power gearbox in an aluminum housing powered by a solar motor. Gearbox as viewed from rear of the motor.

- 283217 [A] Power Drive Gearbox ............................................................ $12.25
- 283218 Power Drive Gearbox with Left Shaft .............................................. $12.25
- 283219 Power Drive Gearbox with Right Shaft ...................................................... $12.25

High Torque Linear Actuator

Pulling or pushing forces are delivered through movement of a threaded 3mm shaft passing in either direction through the central pinion gear. The unit is supplied complete with two brackets that can be fixed with 4mm screws to the part(s) being moved. Ordinary 3mm studding can be substituted for the 150mm length supplied with the unit.

- 283220 [B] .......................................................................................... $13.95

KELVIN® Gearbox Activity

Learning about gears and what they can be used for (gearing for speed or for power) is an important aspect of many crane and vehicle activities and this kit enables students to do just that.

Gearbox Activity Includes: Gear Set, Motor & Motor Holder, Creative Crane Pulley, Wood, Pulley Set, and Instructions. The teacher will need to supply string, glue, screws and a c-clamp (the Gearbox Activity must be clamped to a table).

841810 ........................................ $8.95 or $7.95 ea./10+
841811 Bulk Pack for 20 .............................. $125

As Low As $6.25 Per Kit

Gears and Mechanisms Set

This set is guaranteed to make it easy to learn the basics of mechanical gear assemblies. Numerous working examples can be built and put into action. The clear instruction booklet (20 pages) ensures that each model has a clear explanation. Includes 235 parts.

283685 ................................................................. $345

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
**SAVE Money!**

**KELVIN® Advanced Gear Set**

Evenly spaced holes near the edge, which can be used with a slotted optocoupler (#270115) to measure velocity, acceleration or distance of the gear or vehicle. Holes can also be used to attach the gear to a wheel, pulley or other objects.

- **Gear A** has a 9/16 in. dia. with 13 teeth,
- **Gear B** has a 3/4 in. dia. with 18 teeth,
- **Gear C** has a 1-9/16 in. dia. with 38 teeth and
- **Gear D** has a 2-11/32 in. dia. with 58 teeth.

Set includes four center hole inserts to 1/8 in. and one insert to 2mm. Gears are 1/4 in. thick.

**KELVIN® Super Economy Gear Sets**

Set of [4] different-sized gears with holes to attach to each other with screws. Large gear measures 1-5/8 in. in diameter. The small gear fits 2mm toy motor shafts. Other gears push-fit 3mm (or 1/8 in. dia.) shaft/axle. 1/4 in. thick durable plastic.

- 990179 Black .................................................. $0.95 or $0.85 ea./10+ or $0.80 ea./50+
- 990174 Colors ..................................................... $1.45 or $1.25 ea./10+

**Build Your Own® Gear Combinations!**

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

- [4] 10-Tooth Gears
- [4] 20-Tooth Gears
- [4] 30-Tooth Gears
- [4] 50-Tooth Gears
- [2] Racks: 8-teeth per inch, 2 in. long

**KELVIN® Gear and Motor Mounting Bracket**

Specially designed to be used with the KELVIN® Super Economy Gear Set (#990179 or #990174) and KELVIN® 3-6V DC motor part (#850647). **NOTE:** Wheels, Gears, Battery and Motor or Complete Kit are available separately. Mounting hardware for motor, bracket and gears is listed below. 5/pkg.

- 990204 .................................................. $9.95 or $8.95 ea./10+ or $7.95 ea./25+

**To Attach Motors and Gears To The Bracket, Use The Following:**

- #6x3/8 in. Screw for Gears, 100/pkg. .......................... $2.40
- #4x1/4 in. Screw for Motors, 100/pkg. .......................... $2.45
- #4-40x1/2 in. Screw for Motors, 100/pkg. $4.95 or $4.45 ea./3+
- # Nylox Nut for Motors, 100/pkg. .......................... $4.95 or $4.75 ea./3+

**KELVIN® Gear Combinations**

**PP6**

For power transmission. Small gear and worm gears fit a toy motor. Includes:

**Includes:**

- [2] Racks: 8-teeth per inch, 2 in. long

**Slotted Optocoupler**

For Advanced Gear Set. Can be used with your circuit to measure gear rotation speed. 5V DC. Shown right.

270115 .................................................. $3.95

**Gear/Pulley Combo Unit**

Fits 2mm (toy motor) shaft.

390585 20/pkg. .................................................. $3.95 or $3.45 ea./3+

**KELVIN® Inertia Welder**

Make your own gear combination for all your design needs. Includes a special KELVIN® jig, class pack of gears to start welding and a PowerPoint presentation that explains how it works. Requires drill stand or drill press and teacher supervision.

841310 .................................................. $145
Double Molded Gears
Two gears molded together. Fits 1/8 in. or 3mm dia. shaft, sprocket chain and most gears listed on these two pages.

30-tooth (5/8 in. dia.) w/ 10-tooth (1/4 in. dia.) Gears
390624 [A] 10/pkg. ............................................ $1.95

50-tooth (1 in. dia.) with 10-tooth (1/4 in. dia.) Gear
390620 [B] 10/pkg. ............................................ $1.95

Sprocket Chain
5 links per inch. 1/4 in. wide and 36 in. long.
Chain can be cut to your desired length. 750113 .........................................................$9.95 or $8.95 ea./3+

Axle Hole Reducers
391091 4mm to 2mm, 10/pkg. .................. $4.95 or $4.45 ea./3+
391294 4mm to 3mm, 10/pkg. .................. $4.95 or $4.45 ea./3+

Beveled Gears
20mm diameter gears with beveled edges. Fits a 1/8 in. or 3mm diameter shaft. 390622 10/pkg. .................................$6.95 or $6.45 ea./3+

Gear Rack
50mm (2 in.) long with 1/16 in. mounting holes. 390626 10/pkg. .............................................$5.95 or $5.45 ea./3+

Rack Worm Gear
Use with racks. Fits 2mm shaft. White. 390621 10/pkg. ..............................$9.95 or $9.45 ea./3+

Toy Motor Worm Gear
750133 10/pkg. ..................................................$4.95

Crank Handle
Use this crank handle to turn pulleys, gears, etc. Fits 3/16 in. diameter shaft. 390610 30/pkg..................$19.95 or $18.95 ea./3+

Set Screw Gears
Gears with brass hubs and locking grub screw. All gears have 4mm center holes and also work with Axle Hole Reducers below.

391290 [A] Bevel Gear, 4/pkg. .................. $9.95 or $9.45 ea./3+
391284 [B] 10 tooth, 10mm, 5/pkg. .............. $11.95 or $11.45 ea./3+
391285 [C] 20 tooth, 20mm, 5/pkg. .............. $9.95 or $9.45 ea./3+
391286 [D] 30 tooth, 30mm, 5/pkg. .............. $9.95 or $9.45 ea./3+
391287 [E] 40 tooth, 40mm, 5/pkg. .............. $12.95 or $12.45 ea./3+
391288 [F] 50 tooth, 50mm, 5/pkg. .............. $9.95 or $9.45 ea./3+
391289 [F] 60 tooth, 60mm, 5/pkg. .............. $9.95 or $9.45 ea./3+
391291 [G] Rack, 100 mm, 5/pkg. ............... $9.95 or $9.45 ea./3+

Metal Wheels
Perfect for the KELVIN® "Eggsellent" Adventure Unit (see pg. TC20) and other vehicle designs. 1-7/8 in. diameter metal wheel with low friction ball bearings. Push-fits 1/4 in. axle. 390735, $1.95 or $1.50 ea./10+

Caterpillar Track
A new soft durable track with a transverse tread; ideal for microrovers, robots, etc. Can be used with #391144 or #391143. Approx. 30mm x 180mm long. 391140 ..........$2.75 or $2.45 ea./10+

Steering Wheel
Use these small steering wheels to add a touch of realism to your model cars and trucks. 1/2 in. dia. x 1/8 in. W. Fits 1/8 in. dia. 50/pkg. 390609 .............................................$9.95

Track Wheel
75mm dia. with 3mm Hole. 391143, 99¢

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required. www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

**Front Wheels - Racing Style - Thin**
- Black: $9.95 or $8.95 ea./5+
- Colors: $10.95 or $9.95 ea./5+

**Front Wheels - Racing Style - Thick**
- Black: $9.95 or $8.95 ea./5+
- Colors: $10.95 or $9.95 ea./5+

**Rear Wheels - Racing Style**
1-1/2 in. dia., 5/8 in. tread width. Center hole fits 1/8 in. axle. With end cap. Pack of 100 wheels.
- Black: $13.95 or $12.95 ea./5+
- Colors: $14.95 or $13.95 ea./5+

**Rear Wheels - Racing Style**
- Black: $10.45 or $9.45 ea./5+

**Rubber Tires w/Rims** fit 3/16 in. shaft.
1-5/8 in. dia. Wheel, Red Rim, 5/16 in. W
- Black: $15.95 or $15.15 ea./3+
- Colors: $16.95 or $15.95 ea./3+

**Hi-Traction Rubber Wheels**
5/8 in. thick rubber wheels. Black rim with black tire.
1-5/8 in. dia. Wheel, Fits 1/8 in. Shaft
- Black: $19.95 or $18.95 ea./3+
- Colors: $21.95 or $20.95 ea./3+

**Wood Wheels**
100 pkg.
- 3/4 in. dia.: $10.95
- 1 in. dia.: $19.95
- 1-1/2 in. dia.: $39.95
- 2 in. dia.: $39.95

**Gear Wheels**
Use 36-tooth gear wheel in tandem with small motor gears. 1-3/4 in. dia. wheel is 1/2 in. thick and push-fits a 1/8 in. dia. axle. Pack of 100 wheels.
- Black: $29.95 or $24.95 ea./5+

**Big Wheels**
Turn big 3 in. dia. wheels into gear wheels using the center holes to mount gears (below) with screws and nuts. Push fits 1/8 in. axle. Pack of 4 wheels.
- Colors: $2.95 or $2.75 ea./10+
- Screws: $2.50
- Nuts: $2.35

**Super Economy Gear Set**
Set of [4] gears ranging from 10- to 40-teeth. Use holes to attach to each other with screws. Large gear measures 1-5/8 in. dia. Small gear fits 2mm motor shafts. Other gears fit 3mm shaft.
- Black: $0.95 or $0.85 ea./10+ or $0.80 ea./50+
- Colors: $1.45 or $1.25 ea./10+

**Front Wheels**
For use with Gear Wheel above. Can also use it for other purposes. 1-3/16 in. dia. wheel is 3/8 in. thick and push-fits a 1/8 in. dia. axle. Pack of 100 wheels.
- Black: $19.95 or $14.95 ea./5+
### KELVIN® Educational

#### KELVIN® Super Lightweight Wheels Set
Lightweight wheels (2.9 grams without adapters) for projects where reduced weight and friction are important. Fit on a 3mm axle or by using adapters they can fit on a 2mm or 1/8 in. axle. Set includes [2] 2-1/2 in. dia. wheels along with [2] 2mm adapters and [2] 1/8 in. adapters.

990323 ......................................$2.45 or $1.95 ea./10+

#### KELVIN® CD to Wheel Adapter
Cleverly converts outdated or unwanted CDs into a project wheel. Use adapter to fit a wheel or CD with a 5/8 in. hole onto a 1/4 in. diameter axle. Can be combined with the adapter above to fit a 1/8 in. diameter axle.

990182 [A] 20/pkg. ..................$2.95 or $2.45 ea./10+

#### Wheel to 1/8 in. Axle Adapter
Use to fit a wheel with a 1/4 in. hole onto a 1/8 in. dia. axle. Can be used with adapter above.

990317 [B] 10/pkg. ...............$2.45 or $1.95 ea./10+

#### KELVIN® High Speed Wheels Set
High speed wheels measure 1-1/8 in. diameter with a 3/8 in. wide tread. Fits a 3/32 in. dia. axle. Comes with [4] 1 in. long plastic axles that can be used with foam vehicles.

990211 4/pkg. ...........................................$1.95 or $1.65 ea./10+

**Speed Axles for High Speed Wheels**
These axles are not nails; they are precision machined. Axles can be used with the High Speed Wheels above.

0.0870 in. OD, 0.2 in. dia. head, 1 in. long, Zinc-coated steel.

391087 100/pkg. ......................................$19.95 or $16.95 ea./3+

### KELVIN® WHEELS

#### KELVIN® Big Project Wheels
Ideal wheel for your mousetrap dragster or other projects. This wheel measures 4-3/4 in. dia. (same size as a CD) fits 1/4 in. dia. axle. Includes our 1/8 in. insert.

990181 10/pkg. ...........................................$5.95 or $4.95 ea./10+

#### KELVIN® Project Wheels Kit
Ideal for KELVIN® Solar Racers® and more. Kit includes [2] 1-3/8 in. dia. front wheels with a rim (optional rubber O-ring tire, #390983, can be added). In addition, [2] 1-3/4 in. dia. back wheels with a rim and a built-in gear with 2-gear ratio. Built-in gear fits a 2mm toy motor shaft and matches the big back wheels. Also includes [3] axles (you can also use 1/8 in. axles for wheels). 990199 ...........................................$2.95 or $2.45 ea./10+ or $1.95 ea./50+

#### White Plastic Milk Straw
Use as bushing for 1/8 in. dia. axles. Approx. 9/64 in. dia. x 5 in. L 500/pkg.

330358 ..................$3.95 or $3.60 ea./4+

#### White Plastic Art Straw
Approx. 1/4 in. dia. x 16 in. L 250/pkg.

330372 ...............$19.95 or $18.95 ea./4+

#### Plastic Straws
The 19/64 in. dia. straw can be used as bushing for 1/4 in. dia. axle. Approx. 1/4 in. dia. x 7-3/4 in. L 500/pkg.

330327 ...........$4.25 or $3.75 ea./10+

Approx. 19/64 in. dia. x 7-3/4 in. L 150/pkg.

330408 ...........$4.95 or $4.45 ea./10+

### Materials for Axles & Bushings

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delrin Rod</td>
<td>Lightweight, self-lubricating rod. Easily cuts to size for axles and bumpers. 1/8 in. dia. x 24 in. long. 750162 ...$2.25 or $1.95 ea./4+</td>
</tr>
<tr>
<td>Steel Rods</td>
<td>1/8 in. dia. x 2-1/2 in. L, 100/pkg. 390361 ......$4.25 or $3.95 ea./10+ 1/8 in. dia. x 2-1/4 in. L, 100/pkg. 390349 ......$5.95 or $5.35 ea./10+</td>
</tr>
<tr>
<td>Welding Rod</td>
<td>1/8 in. dia. x 36 in. long, 80/pkg. 391136 ......$38.95 or $35.95 ea./4+</td>
</tr>
<tr>
<td>White Plastic Milk Straw</td>
<td>Use as bushing for 1/8 in. dia. axles. Approx. 9/64 in. dia. x 5 in. L 500/pkg. 330358 ..................$3.95 or $3.60 ea./4+</td>
</tr>
<tr>
<td>White Plastic Art Straw</td>
<td>Approx. 1/4 in. dia. x 16 in. L 250/pkg. 330372 ...............$19.95 or $18.95 ea./4+</td>
</tr>
<tr>
<td>Plastic Straws</td>
<td>The 19/64 in. dia. straw can be used as bushing for 1/4 in. dia. axle. Approx. 1/4 in. dia. x 7-3/4 in. L 500/pkg. 330327 ...........$4.25 or $3.75 ea./10+ Approx. 19/64 in. dia. x 7-3/4 in. L 150/pkg. 330408 ...........$4.95 or $4.45 ea./10+</td>
</tr>
</tbody>
</table>

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required. www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
**PROJECT PARTS**

**WHEELS**

**Wheel Halves**
Glue these hollow, plastic wheel halves together to make a full wheel or use as halves. Package of 50 wheel halves make 25 full wheels.

- 850929 1 in. Dia. (7/16 in. thick assembled) .......... $7.95
- 850927 2 in. Dia. (1/2 in. thick assembled) .......... $14.95

**Rubber Spike Tires**
Great looking tires are also functional because turning and rolling resistance is virtually zero. Great for climbing vehicles and robots.

- 391138 75 x 20 x 38mm .......... $3.25 or $2.95 ea./10+
- 391144 39mm Hub Wheel for 391138 .......... $65¢
- 391139 80 x 35 x 42mm .......... $3.45 or $3.25 ea./10+

**Treaded Wheels**
2 in. dia. x 3/4 in. thick; Fits 1/8 in. Axle, 2/pkg.
- 283090 ........ $7.95
3 in. dia. x 1 in. thick; Fits 3/32 in. Axle, 2/pkg.
- 283091 ........ $8.45

**6-Spoke Polythene Wheels**
Use where weight reduction is important — or a more traditional retro-engineered look is needed. (They also look great as flywheels). The wheels are 75mm (2.95 in.) in diameter, 5.5mm (0.21 in.) in thickness, with a center hole to push-fit onto a 3mm shaft. The center can be drilled out to accommodate other diameters.

- 990339 2/pkg. ................ $3.95

**Plastic Wheels w/Holes**
Make 3-wheeled vehicles! Use a wheel by itself in front and pushing the axle through. 1-9/16 in. dia. x 5/8 in. T Wheel. Fits 1/8 in. axle. Black.

- 840910 100/pkg. ..................... $14.95

**Mini Plastic Wheels**
3/4 in. dia. x 5/16 in. T. Fits 1/8 in. dia. axle. Black.

- 390613 100/pkg. ............... $25.95 or $24.65 ea./3+

**Mini Wheels**
1 in. dia. wheel fits 1/16 in. axle (included), 10/pkg.

- 990218 .......... $5.95 or $5.55 ea./10+ or $4.95 ea./25+

**Plastic Wheels**
1-1/2" dia. x 3/8 in. T. Fits 3mm axle. Assorted Colors.

- 390424 60/pkg. ............... $21.95 or $20.95 ea./3+

**Heavy Duty Project Wheel**
Big, blue 2 in. diameter wheel is 5/8 in. thick. The white insert holds the dowel tightly in place while allowing the wheel to turn freely.

- 990202 20/pkg. .................... $10.95 or $9.95 ea./4+

**Landing Wheels**
Create your own landing gear for model planes or other activities. Fits thin wire (music wire). 100 wheels per package. All dimensions in inches.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>TYPE</th>
<th>D in.</th>
<th>T in.</th>
<th>$ ea.</th>
</tr>
</thead>
<tbody>
<tr>
<td>850935</td>
<td>A</td>
<td>Wood</td>
<td>7/16</td>
<td>1/8</td>
<td>9.95</td>
</tr>
<tr>
<td>850934</td>
<td>B</td>
<td>Wood</td>
<td>5/8</td>
<td>3/16</td>
<td>9.95</td>
</tr>
<tr>
<td>850933</td>
<td>C</td>
<td>Wood</td>
<td>3/4</td>
<td>7/32</td>
<td>14.95</td>
</tr>
<tr>
<td>850931</td>
<td>D</td>
<td>Plastic</td>
<td>3/4</td>
<td>1/8</td>
<td>7.45</td>
</tr>
<tr>
<td>850930</td>
<td>E</td>
<td>Plastic</td>
<td>1</td>
<td>1/8</td>
<td>3.95</td>
</tr>
</tbody>
</table>

**Landing Wheels Set**
1-1/16 in. dia. x 5/16 in. thick wheels. Does not include thin wire (see below).

- 390459 2/pkg. .................. 75¢

**Thin Wire**
0.032 in. dia. x 12 in. long wire can be used to create landing gear for model planes.

- 330337 30/pkg. ................ $6.45 or $5.95 ea./10+
- 850932 Pre-Shaped, 50/pkg. ... $11.95 or $10.75 ea./10+

**Tail Wheels**
3/4 in. dia. x 1/4 in. thick; Fits 1/16 in. Axle

- 283092 .................... $2.45
1 in. dia. x 3/16 in. thick; Fits 3/32 in. Axle

- 283093 .................... $2.40
1-1/4 in. dia. x 3/8 in. thick; Fits 3/32 in. Axle

- 283094 .................... $2.95

**Dura-Collars**
Will hold wheels onto axles and allows them to spin freely. Use for airplanes or model vehicles.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>INNER DIA. in.</th>
<th>QTY.</th>
<th>$ 1-2</th>
<th>$ 3+</th>
</tr>
</thead>
<tbody>
<tr>
<td>283095</td>
<td>1/16</td>
<td>4</td>
<td>1.95</td>
<td>1.75</td>
</tr>
<tr>
<td>283096</td>
<td>3/32</td>
<td>4</td>
<td>1.95</td>
<td>1.75</td>
</tr>
<tr>
<td>283099</td>
<td>1/8</td>
<td>4</td>
<td>1.95</td>
<td>1.75</td>
</tr>
<tr>
<td>283097</td>
<td>5/32</td>
<td>4</td>
<td>1.95</td>
<td>1.75</td>
</tr>
<tr>
<td>283100</td>
<td>3/16</td>
<td>4</td>
<td>1.95</td>
<td>1.75</td>
</tr>
<tr>
<td>283098</td>
<td>7/32</td>
<td>4</td>
<td>4.95</td>
<td>4.70</td>
</tr>
<tr>
<td>283101</td>
<td>1/4</td>
<td>4</td>
<td>2.25</td>
<td>1.95</td>
</tr>
</tbody>
</table>

**Wheels for Your Model Planes**

<table>
<thead>
<tr>
<th>ABCDE</th>
<th>STOCK #</th>
<th>FIG.</th>
<th>TYPE</th>
<th>D in.</th>
<th>T in.</th>
<th>$ ea.</th>
</tr>
</thead>
<tbody>
<tr>
<td>850935</td>
<td>A</td>
<td>Wood</td>
<td>7/16</td>
<td>1/8</td>
<td>9.95</td>
<td></td>
</tr>
<tr>
<td>850934</td>
<td>B</td>
<td>Wood</td>
<td>5/8</td>
<td>3/16</td>
<td>9.95</td>
<td></td>
</tr>
<tr>
<td>850933</td>
<td>C</td>
<td>Wood</td>
<td>3/4</td>
<td>7/32</td>
<td>14.95</td>
<td></td>
</tr>
<tr>
<td>850931</td>
<td>D</td>
<td>Plastic</td>
<td>3/4</td>
<td>1/8</td>
<td>7.45</td>
<td></td>
</tr>
<tr>
<td>850930</td>
<td>E</td>
<td>Plastic</td>
<td>1</td>
<td>1/8</td>
<td>3.95</td>
<td></td>
</tr>
</tbody>
</table>

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
**Economy Pulley Set**
An economical set of four pulleys. 10mm dia. pulley fits 2mm shaft. 20mm dia. pulley fits 1/8 in. shaft. 30mm dia. pulley fits 7/32 in. shaft. 40mm dia. pulley fits 1/8 in. shaft.

841538 …………………… $1.95 or $1.75 ea./10+ or $1.45 ea./100+
841539 Bulk Pack of 20 Sets (4/Set) …………………$9.95

**Set Screw Pulleys**
Pulleys with set screws, brass hubs and 4mm hole. Works with drive belts and hole reducers below.

391099 [A] 20 mm dia. …………………$11.95 or $11.35 ea./3+
391090 [B] 40 mm dia. …………………$11.95 or $11.35 ea./3+
841537 [C] 60 mm dia. …………………$13.95 or $13.25 ea./3+

**Hole Reducers**
10/pk.
391091 4mm to 2mm …………………$4.95 or $4.45 ea./3+
391294 4mm to 3mm …………………$4.95 or $4.45 ea./3+

**Drive Belts for Pulleys**
For precise motion transfer. 5/pk.
841937 60mm …………………$3.95 or $3.75 ea./3+
841429 90mm …………………$3.95 or $3.75 ea./3+

**Metal Hanging Pulleys**
For mounting or hanging models and experiments.

390455 [D] 1 in. dia. …………………$3.45 or $3.25 ea./3+
390743 [E] Small Single Pulley …………………$5.95

**Pulley Packs**
Each pulley is sized to fit a 3/16 in. diameter shaft.

390580 20mm, 20/pkg. …………………$7.95
390581 30mm, 20/pkg. …………………$7.95
390582 50mm, 20/pkg. …………………$7.95

**Ball Bearing Pulley**
1-1/2 in. dia. sized to fit a 1/4 in. diameter shaft.

390457 2/pk. …………………$9.95

**Ball Bearing Pulley**
Use it for incline plane or other apparatus. 8mm shaft diameter w/ plastic case.

710071 …………………$5.95 or $4.95 ea./3+

**High Quality Pulleys**
High quality pulleys for all your experiments. Style may vary. 50mm.

710062 [G] Single …………………$1.65 or $1.45 ea./10+
710063 [H] Double …………………$2.45 or $2.25 ea./10+
710064 [I] Triple …………………$2.95 or $2.75 ea./10+
710065 [J] Quadruple …………………$3.45 or $3.25 ea./10+
710066 [K] Double Tandem …………………$2.75 or $2.45 ea./10+
710075 [L] Triple Tandem …………………$3.45 or $3.25 ea./10+

**Pulley on a Rod**
Use it for incline plane or other apparatus. 8mm shaft diameter w/ plastic case.

710071 …………………$5.95 or $4.95 ea./3+

**Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.**

© Kelvin L.F. Prices in this catalog represent discounted pricing for educational institutions.
Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

**Project Propellers**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>DIA. in.</th>
<th>AXLE DIA.</th>
<th>QTY.</th>
<th>$ 1-4</th>
<th>$ 5-9</th>
<th>$ 10-24</th>
<th>$ 25-49</th>
<th>$ 50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>851102 [A]</td>
<td>1</td>
<td>2 mm</td>
<td>1</td>
<td>1.35</td>
<td>1.25</td>
<td>1.05</td>
<td>.99</td>
<td>.95</td>
<td></td>
</tr>
<tr>
<td>850651 [B]</td>
<td>1-1/4</td>
<td>3 mm</td>
<td>1</td>
<td>1.65</td>
<td>1.35</td>
<td>1.25</td>
<td>1.05</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>851166 [B]</td>
<td>1-3/4</td>
<td>3 mm</td>
<td>1</td>
<td>1.45</td>
<td>1.35</td>
<td>1.25</td>
<td>1.20</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>990324 [C]</td>
<td>2-1/4</td>
<td>2 mm</td>
<td>1</td>
<td>1.95</td>
<td>1.85</td>
<td>1.75</td>
<td>1.65</td>
<td>1.55</td>
<td></td>
</tr>
</tbody>
</table>

**Safety Propellers**

The propellers force fit onto any small electric motor but have the advantage of a safety ring preventing contact with spinning blade tips. Black propeller push-fits 2mm shaft. 125mm (4.92 in.) dia.

- 990338 10/pkg. ...................................................... $8.95 or $8.10 ea./5+

**Nose Hook Propellers**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>DIA. in.</th>
<th>FITS WOOD in.</th>
<th>QTY.</th>
<th>$ 1-4</th>
<th>$ 5-9</th>
<th>$ 10-24</th>
<th>$ 25-49</th>
<th>$ 50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>851219 [A]</td>
<td>5</td>
<td>0.21 x 0.45</td>
<td>1</td>
<td>.69</td>
<td>.66</td>
<td>.63</td>
<td>.59</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>850654 [B]</td>
<td>6</td>
<td>0.135 x 0.35</td>
<td>1</td>
<td>.49</td>
<td>-</td>
<td>.45</td>
<td>.42</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>851460 [C]</td>
<td>7</td>
<td>0.15 x 0.23</td>
<td>4</td>
<td>3.39</td>
<td>3.20</td>
<td>3.05</td>
<td>2.89</td>
<td>2.70</td>
<td></td>
</tr>
</tbody>
</table>

PP12 KELVIN® Educational Project Parts

Adult supervision required.
Boat Propeller
Rubber Band attachment below boat. With hook. Ideal for balsa or foam kits.
851461 ...$1.95 or $1.75 ea./10+ or $1.45 ea./25+

Motor Propulsion Kit
1 in. propeller, motor, shaft and mounting bracket.
280412 ....$8.95 or $8.50 ea./6+

Plastic Propellers
Push-fits 2mm Diameter Shaft,
851314 3 in. Dia., 8/pkg. ...$5.95 or $5.75 ea./5+ or $5.45 ea./10+ or $5.25 ea./25+ or $4.95 ea./50+

Low Torque, High Speed Propeller
This propeller provides greater airflow for use with hovercrafts and light model planes. 9cm long x 1cm wide (3.5 x 0.393 in.). Fits tightly 2mm dia. shafts.
990332 3.5 in. Dia., 5/pkg.......................................................$4.95

Red Plastic Propellers
Push-fits 3/64 in. Diameter Shaft

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>W in.</th>
<th>$1-4</th>
<th>$5-9</th>
<th>$10-24</th>
<th>$25-49</th>
<th>$50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>850632</td>
<td>5</td>
<td>.45</td>
<td>.40</td>
<td>.63</td>
<td>.35</td>
<td>.32</td>
</tr>
<tr>
<td>850889</td>
<td>6</td>
<td>.75</td>
<td>.70</td>
<td>.45</td>
<td>.65</td>
<td>.63</td>
</tr>
<tr>
<td>850890</td>
<td>7</td>
<td>.85</td>
<td>.80</td>
<td>.75</td>
<td>2.89</td>
<td>.70</td>
</tr>
</tbody>
</table>

Indoor Flight Propeller
Adjustable pitch for indoor flights 150 mm (5.9 in.) diameter, light construction (1.1 gm). Includes bearing and hook.
990337 6.9 in. Dia..............................................$8.95 or $8.45 ea./10+

Rigid Black Plastic Propellers
990334 6 in. Dia. ....$2.95 or $2.75 ea./5+ or $2.45 ea./10+
990335 7 in. Dia. ....$3.95 or $3.75 ea./5+ or $3.45 ea./10+

Adjustable Pitch Propeller
851458 7 in. Dia. 4/pkg. ..........$5.95 or $5.55 ea./10+ or $5.45 ea./25+

Propeller
9 in. Dia.
Push-fits 3/64 in., 850926, 95¢ ea./5+ or 90¢ ea./10+ or 85¢ ea./25+ or 80¢ ea./50+

Rubber Band Propeller
Propeller freewheels when Rubber Band power runs out. Includes a rubber band hook. 1/2 in. diameter mounting hole to attach to the fuselage. Requires a rubber band and winder.
851108 9.8 in. Dia.......$5.95 or $5.45 ea./5+ or $5.25 ea./10+ or $5.15 ea./25+ or $5.05 ea./50+

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.
www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
Design A Clock & Decorate It How You Want

Quartz Clock Kit
Design your own clock for Mother's Day, Father's Day or other occasions. Includes digital quartz clock movement, washers, nuts, Arabic numbers, seconds, hours, and minute shafts.

The clock body measures 2-1/4 x 2-1/4 x 5/8 in. with a 3/8 in. L x 5/16 in. diameter threaded shaft. The clock hands have a diameter of 6-3/8 in. The numbers are 1/2 in. high. Requires a AA battery (#220016).

Quartz Pendulum Mechanism
3-3/4"x2-1/4"x7/8"
890014
5/16 in. dia. x 1/4 in. L bushing
$9.95

Central Screw Spanner Tool
890017
[E] $5.95

Quartz Clocks Only
All include attached hanging loop, rubber washer and mounting nut. All require a 'AA' battery (#220016). The housing measures 2-1/4 x 2-1/4 x 5/8 in. 10/pkg.

890012 [A] 5/16 in. dia. x 1/2 in. L Bushing
$39.95
890013 [A] 5/16 in. dia. x 3/16 in. L Bushing
$39.95
890016 [B] 5/16 in. dia. x 1/4 in. L Bushing - COUNTERCLOCKWISE
$49.95

Quartz Pendulum Mechanism
3-3/4"x2-1/4"x7/8"
890014 [C] 5/16 in. dia. x 1/4 in. L bushing
$9.95

Pendulum Only
890015 [D] 10-1/4 in. long w/ 2-1/8 in. dia. disc...
$5.95

Clock Faces

Clockwise Cardboard Clock Face
890023 [E] 5-1/2 sq. with 4-3/4 in. dia. Clock Face, 10/pkg.
$7.50

Clockwise Brass Clock Face
890026 [F] 5-1/8 sq. with 4-3/4 in. dia. Clock Face, 10/pkg.
$9.95

Counter-Clockwise Cardboard Clock Face
890024 [G] 5-1/4 x 5-1/8 in. with 4-3/4 in. dia. Clock Face, 10/pkg.
$7.50

Pre-Drilled Plain Faceplates
Paint or decorate as you wish.

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>FIG.</th>
<th>SHAPE</th>
<th>MATERIAL</th>
<th>SIZE in.</th>
<th>T in.</th>
<th>HOLE D. in.</th>
<th>$1-9</th>
<th>$10+</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMING A</td>
<td>Circle</td>
<td>Chipboard</td>
<td>8-1/2</td>
<td>3/8</td>
<td>5/16</td>
<td>2.95</td>
<td>2.45</td>
<td></td>
</tr>
<tr>
<td>COMING B</td>
<td>Square</td>
<td>Chipboard</td>
<td>8-1/2</td>
<td>3/8</td>
<td>5/16</td>
<td>2.95</td>
<td>2.45</td>
<td></td>
</tr>
<tr>
<td>970241 C</td>
<td>Circle</td>
<td>Wood</td>
<td>10</td>
<td>3/8</td>
<td>5/16</td>
<td>4.95</td>
<td>4.45</td>
<td></td>
</tr>
<tr>
<td>970226 D</td>
<td>Square</td>
<td>Wood</td>
<td>10</td>
<td>3/8</td>
<td>5/16</td>
<td>4.95</td>
<td>4.45</td>
<td></td>
</tr>
</tbody>
</table>

Pointed Hands Set
60/46mm Radius. 10/pkg.
890005 $18.95

Offset Hands Set
80/60mm Radius. 10/pkg.
890019 $19.95

Fancy Hands Set
80/55mm Radius. 10/pkg.
890006 $19.95

Wave / Second Hands
60mm Radius. 10/pkg.
890008 $18.95

Antique Hands Set
60/42mm Radius. 10/pkg.
890020 $24.95

Victorian Hands Set
103/73mm Radius. 10/pkg.
890021 $29.95

Offset Second Hand
70mm Radius. 10/pkg.
890009 $12.95

Metal Cap
890025 $7.95
**4-Sided Dice**
Assorted Colors, 20/pkg.  
210002 [A] ......$7.95

**6-Sided Dice**
Assorted Colors 20/pkg.  
210001 [B] ......$7.95

**Doubling Dice** 10/pkg.  
210008 [C] ......$5.95

**Backgammon Chips**
210076 [D] ......$7.95

**Simple Pawns**
11/16 in. High pawns in assorted colors. 500/pkg.  
210011 [I] ......$28.95

**Knob Pawns**
1 in. High pawns in five assorted colors. 500/pkg.  
210010 [J] ......$29.95

**Rocket Pawns**
1 in. High pawns in four assorted colors. 100/pkg.  
210026 [K] ......$9.95

**Airplane Pawns**
1 in. High pawns in four assorted colors. 100/pkg.  
210027 [L] ......$12.95

**Horse/Rider Pawns**
Assorted Colors, 200/pkg.  
210009 ......$29.95

**Bingo Chips**
3/4 in. dia. in assorted Colors. 500/pkg.  
210019 [T] ......$12.95

**Poker Chips**
7/8 in. dia., 500/pkg.  
210018 [U] ......$19.95

**Cribbage Pegs**
1-1/8 in. L in Assorted Colors, 2600/pkg.  
210012 [W] ......$19.95

**Game Marbles**
Assorted colors. 12/pkg.  
870037 [V] ......$14.95

**Sand Timers**
10 Second Timer, 5/pkg.  
210023 ......$6.95

**Fake Paper Money**
7 denominations (30 ea. for 210 bills). Assorted colors.  
210020 ......$2.95

**Design-A-Game Classroom Challenge™**
Challenge your students to design and construct a board game. Students begin by sketching and describing their game (the rules, how many can play, why it would be fun, etc.). Your students then continue to design the game mechanically or use desktop publishing software and a computer. Students can then use the products below and other materials to build a prototype. Students evaluate the game by playing it. With feedback from participants, students should make any adjustments needed to make the game a success. To take the activity further, students can rank the games and choose the best one to market. Grades 2-12.

**Design-A-Game™ Class Pack**
This class pack contains: 120 Assorted Dice (20 ea. of 4-, 6-, 8-, 10-, 12- and 20-sided), 500 Large Pawns, 500 Novelty Pawns (100 ea. of Rocket, Airplane, Horse and Rider, House and Hotel), 100 Scoring Pencils, 10 pkgs. of Paper Money, 20 Sand Timers (10 ea. of 10-second and 30-second), 35 sheets of 24 x 36 in. Chipboard for the game board, and 50 sheets of DesignGrid™ Paper and 20 cardboard boxes for game storage.  
840998 Design-A-Game™ Class Pack ..............................................................$245

**Design-A-Game™ Parts**
Both sets include playing board, unassembled blank game box, large game pawns (assorted colors), spinner, [2] backgammon dice, sand timer, blank paper and DesignGrid™ Paper. The Advanced Set also includes Additional Pawns (rocket, horse, hotel, house, airplane), Fake Money and Doubling Dice. Use your color printer to design the box cover!  
841049 Basic Design-A-Game™ Parts ..................................................$7.95 or $6.95 ea./24+  
841050 Advanced Design-A-Game™ Parts .................................................$9.95 or $8.95 ea./24+

**Design-A-Game™ Board Parts**
Top and bottom boxes for 8 x 11 in. size box. Ready for design, cutting, assembly and decoration. Printed on cardboard.  
430158 20/pkg. ......$49.95

**Building Cards**
From participants, students should make any adjustments needed to make the game a success. To take the activity further, students can rank the games and choose the best one to market. Grades 2-12.

**Design-A-Game™ Card Kit**
Top and bottom boxes for 8 x 11 in. size box. Ready for design, cutting, assembly and decoration. Printed on cardboard.  
430158 20/pkg. ......$49.95

**Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.**

www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
**KELVIN® Magnets Pack**
- [10] Maglev Magnets, Fig. D
- [13] Disc Magnets, Fig. A
- [13] Ring Magnets, Fig. B
- [13] Cube Magnets, Fig. C
- [13] Bar Magnets, Fig. G

841584, $9.95 or $8.95 ea./6+

**Disc Magnets [A]**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>Dia.in.</th>
<th>THICK in.</th>
<th>1-49</th>
<th>$50-99</th>
<th>$100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>640097</td>
<td>1/2</td>
<td>1/4</td>
<td>.22</td>
<td>.20</td>
<td>.19</td>
</tr>
<tr>
<td>640098</td>
<td>3/4</td>
<td>3/16</td>
<td>.17</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>640099</td>
<td>1</td>
<td>5/32</td>
<td>.30</td>
<td>.27</td>
<td>.25</td>
</tr>
</tbody>
</table>

**Ring Magnets [B]**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>O.D. in.</th>
<th>I.D. in.</th>
<th>THICK in.</th>
<th>1-99</th>
<th>$100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>640096</td>
<td>1/2</td>
<td>3/16</td>
<td>1/8</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>640095</td>
<td>3/4</td>
<td>1/4</td>
<td>1/4</td>
<td>.22</td>
<td>.19</td>
</tr>
</tbody>
</table>

**Ceramic Set of 6 Ring Magnets in Assorted Colors**
640115 1-1/8 in. O.D., 3/8 in. I.D., 1/4 in. T.................$4.95 or $4.45 ea./10+

**Rectangular Magnets [C] [D]**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>LENGTH in.</th>
<th>THICK in.</th>
<th>QTY.</th>
<th>1-99</th>
<th>$100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>640100</td>
<td>1/4 x 1/4</td>
<td>3/32</td>
<td>1</td>
<td>39¢</td>
<td>35¢</td>
</tr>
<tr>
<td>640091</td>
<td>1/4 x 1/2</td>
<td>3/16</td>
<td>1</td>
<td>16¢</td>
<td>14¢</td>
</tr>
<tr>
<td>640090</td>
<td>1 x 3/4</td>
<td>3/16</td>
<td>250</td>
<td>$36.95</td>
<td>$32.50 ea./3+</td>
</tr>
</tbody>
</table>

**Horseshoe Magnets [E]**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>W in.</th>
<th>T in.</th>
<th>TYPE</th>
<th>1-9</th>
<th>$10+</th>
</tr>
</thead>
<tbody>
<tr>
<td>282155</td>
<td>1</td>
<td>5/16</td>
<td>Alnico</td>
<td>4.95</td>
<td>4.45</td>
</tr>
<tr>
<td>640108</td>
<td>1-1/4</td>
<td>—</td>
<td>Ceramic</td>
<td>1.25</td>
<td>.95</td>
</tr>
<tr>
<td>282156</td>
<td>2</td>
<td>1/4</td>
<td>Alnico</td>
<td>6.95</td>
<td>6.45</td>
</tr>
<tr>
<td>640126</td>
<td>3-1/2 x 1-3/4</td>
<td>1/4</td>
<td>—</td>
<td>5.49</td>
<td>4.95</td>
</tr>
<tr>
<td>640112</td>
<td>8</td>
<td>1</td>
<td>Giant</td>
<td>6.95</td>
<td>6.45</td>
</tr>
</tbody>
</table>

**Adhesive Magnet Strips [F]** Use only 640102, 640103 & 640104 for Maglevs

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>W in.</th>
<th>T in.</th>
<th>LENGTH</th>
<th>N OR S?</th>
<th>QTY.</th>
<th>1-2</th>
<th>3+</th>
</tr>
</thead>
<tbody>
<tr>
<td>640102</td>
<td>3/4</td>
<td>1/8</td>
<td>10 ft.</td>
<td>No</td>
<td>Pair</td>
<td>39.95</td>
<td>38.95</td>
</tr>
<tr>
<td>640103</td>
<td>3/4</td>
<td>1/8</td>
<td>10 ft.</td>
<td>No</td>
<td>1</td>
<td>19.95</td>
<td>17.95</td>
</tr>
<tr>
<td>640104</td>
<td>3/4</td>
<td>1/8</td>
<td>10 ft.</td>
<td>No</td>
<td>1</td>
<td>19.95</td>
<td>17.95</td>
</tr>
<tr>
<td>282170</td>
<td>1/2</td>
<td>—</td>
<td>10 ft.</td>
<td>No</td>
<td>1</td>
<td>4.95</td>
<td>4.45</td>
</tr>
<tr>
<td>640107</td>
<td>1/2</td>
<td>1/16</td>
<td>25 ft.</td>
<td>No</td>
<td>1</td>
<td>13.95</td>
<td>12.25</td>
</tr>
<tr>
<td>282172</td>
<td>1</td>
<td>—</td>
<td>10 ft.</td>
<td>No</td>
<td>1</td>
<td>7.95</td>
<td>6.45</td>
</tr>
<tr>
<td>282173</td>
<td>1/2</td>
<td>—</td>
<td>30 in.</td>
<td>No</td>
<td>48</td>
<td>39.95</td>
<td>38.95</td>
</tr>
</tbody>
</table>

**Super-Powerful Magnets!**

<table>
<thead>
<tr>
<th>STOCK #</th>
<th>DIA. (MM)</th>
<th>THICK (MM)</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>640116</td>
<td>1/4</td>
<td>1/8</td>
<td>$1.25</td>
</tr>
<tr>
<td>640118</td>
<td>3/16</td>
<td>3/16</td>
<td>49¢</td>
</tr>
<tr>
<td>640119</td>
<td>3/16</td>
<td>3/8</td>
<td>95¢</td>
</tr>
<tr>
<td>640120</td>
<td>1/4</td>
<td>1/4</td>
<td>59¢</td>
</tr>
<tr>
<td>640121</td>
<td>1/2</td>
<td>1/4</td>
<td>$1.59</td>
</tr>
<tr>
<td>640122</td>
<td>3/4</td>
<td>1/8</td>
<td>$2.25</td>
</tr>
<tr>
<td>640124</td>
<td>1</td>
<td>3/4</td>
<td>$12.95</td>
</tr>
<tr>
<td>640123</td>
<td>1</td>
<td>3/8</td>
<td>$6.39</td>
</tr>
<tr>
<td>640125</td>
<td>1-1/2</td>
<td>1/4</td>
<td>$11.95</td>
</tr>
</tbody>
</table>

**Rare Earth Magnets**
These magnet discs are the most powerful made! Demonstrate phenomena that’s impossible with ordinary magnets.

**Neodymium Magnets**
Neodymium magnets also contain Iron and Boron, making them some of the strongest magnets around.

- [A] 1/4 in. dia. x 1/4 in. thick Disc, 2/pkg...........................................$1.25
- [B] 3/8 in. dia. x 1/8 in. thick Disc, 4/pkg............................................$3.25
- [C] 1/2 in. dia. x 1/8 in. thick Disc, 2/pkg............................................$1.95
- [D] 1/2 in. dia. x 1/2 in. thick Disc, 1/pkg............................................$2.95
- [E] 3/4 in. outer dia. x 1/4 in. inner dia. x 1/4 in. thick Ring, 1/pkg..............$4.95

**Magnet Set**
This set of 70 magnets includes 7 different types (10 of each type of magnet).
640106 ....$17.95 or $16.95 ea./3+

**Loadstone**
Loadstones are useful for a variety of science experiments.
640113 ......$1.10 or $1.05 ea./6+

**Iron Filings**
Demonstrate magnetic field patterns and separation technology. Ideal for general science experiments.
640111 Small Vial..............................................$1.95
282176 Shaker Bottle, 12 oz. .......$6.95

---

**Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.**

www.kelvin.com • KELVIN®: 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

Magnetic Marbles
For a variety of projects. Set of assorted colors.
640114 100/pkg. ................................................... $17.95

Magnetic Wand & Counting Chips
You explore the forces of magnetism with this wand and [20] colorful counting chips (transparent discs with a thin metal rim). Can be used to teach colors & counting, plot graph points on overhead projector and explore magnetism.
280593 ................................................... $3.95

Classroom Attractions I Magnet Set
5 magnet wands, 15 magnet rings, 5 compasses, 5 plastic encased block magnets, 5 horseshoe magnets, 5 sets of polished steel shapes, 5 pencils, 5 N/S bar magnets, 5 button magnets, 1 demo alnico bar and teacher activity guide.
282146 Kit, Gr. 1-3 ................................................... $49.95

Classroom Attractions II Magnet Set
5 wooden dowels, 5 nails, 5 lodestones, 10 magnet discs, 5 pieces of magnet viewing film, 5 alnico bar magnets, 5 alnico horseshoe magnets, 5 compasses, 15 latch magnets, 10 ceramic block magnets, 5 flexible magnet discs, 5 corks, 5 sets of iron filings, 1 demo alnico bar and teacher activity guide.
282147 Kit, Gr. 4-6 ................................................... $49.95

Classroom Attractions III Magnet Set
This set includes 200 Magnet Pattern Blocks: 20 yellow hexagons, 20 orange squares; 40 green triangles, 40 red trapezoids, 40 blue parallelograms (or rhombi) and 40 white parallelograms (or rhombi) packed in a handy storage bucket, along with colorful booklet full of fun activities.
282148 Kit, Gr. 6+ ................................................... $74.95

KELVIN® Build An Electromagnet Kit
Explore basic electricity & magnetism by building an electro-magnet and then completing several activities. Includes conductive nails, copper wire, Fahnestock clips, battery holder and instructions. Requires [8] “AA” size batteries (not included).
840709 Kit .............................................................. $5.95

KELVIN® Kel-View™ Film & Magnetic Investigation Kit
Demonstrate unusual magnetic fields with man-made magnet samples and view magnetic fields with special 2” x 2” in. film. Includes magnets, film, and a reproducible information sheet proposing a new theory of magnetism and magnetic fields.
840815 Kit .............................................................. $12.95

KELVIN® SUPER-SIZED Parts Bulk Pack
A variety of parts you need for your mechanical and prototype design needs with a BONUS Storage Cabinet!
841328 .............................................................. $359

Wood, balsa and foam blanks require shaping with tools and sanding. Kits may require soldering and advanced assembly. Adult supervision required.

www.kelvin.com • KELVIN®, 280 Adams Blvd., New York 11735, USA • Copyright © Kelvin L.P. • Prices in this catalog represent discounted pricing for educational institutions.
## Control Parts for Your Model Plane, Model Car, Robot, SUMO® Car or Invention

### L-Control Bracket
1 in. with 1/8 in. hole. For attaching cables and control. 6/pkg.  
281869... $3.75 or $3.60 ea./3+

### Landing Gear Clamps
Use 1/8 in. clamps to keep cables attached to project body. 4/pkg.  
281867... $2.15 or $1.95 ea./3+

### E-Z Connectors
283106 ......$2.15 or $1.95 ea./3+

### Pull-Pull Cable System
281875 .......$9.95 or $9.45 ea./3+

### Turntable Base
Make a turntable, storage caddy, and much more!  
390715  3 in. dia. base........... $2.95

### Flexible Cable
Heavy duty, single cable and sleeve for model planes. With a metal Kwik connect, a plastic connect and a coupling screw. 20 in. long.  
281876 .................$2.95 or $2.75 ea./4+

### Flexible Control Cable
Extra long 48 in. Nylon cable. (Type 2-56 size) includes inside tubes, outside tube, connectors and screws (2 sets).  
281878 .................$7.95 or $7.65 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Threaded Rod
3/8 in. dia. x 2 ft. long  
390864 ...$4.45 or $3.95 ea./10+

### Threaded Base Plate
Fits 3/8 in. dia. rod (above).  
390958 ...$2.25 or $1.95 ea./10+

### Turntable Base
Make a turntable, storage caddy, and much more!  
390715  3 in. dia. base........... $2.95

### Plastic Rivets
4mm diameter rivet and locking ring for easy joining of roll tubes. Approx. 75 rivets and rings.  
391142... $3.25 or $2.95 ea./3+

### Plastic Rivets
4mm diameter rivet and locking ring for easy joining of roll tubes. Approx. 75 rivets and rings.  
391142... $3.25 or $2.95 ea./3+

### Landing Gear Clamps
Use 1/8 in. clamps to keep cables attached to project body. 4/pkg.  
281867... $2.15 or $1.95 ea./3+

### Pull-Pull Cable System
281875 .......$9.95 or $9.45 ea./3+

### Turntable Base
Make a turntable, storage caddy, and much more!  
390715  3 in. dia. base........... $2.95

### Flexible Cable
Heavy duty, single cable and sleeve for model planes. With a metal Kwik connect, a plastic connect and a coupling screw. 20 in. long.  
281876 .................$2.95 or $2.75 ea./4+

### Flexible Control Cable
Extra long 48 in. Nylon cable. (Type 2-56 size) includes inside tubes, outside tube, connectors and screws (2 sets).  
281878 .................$7.95 or $7.65 ea./4+

### Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+

### Flexible Control Cable
Extra Flexible Control Cable
Use as cable for: rudder, elevator, flaps, tail wheels, throttle, nose gear retract, powerboat rudder, outboard steering, or a sail. 2-56 size, 32 multi-strand. Measures 36 in. long.  
281879 .................$11.95 or $10.95 ea./4+