

## Local Challenge Rubric

(short version)

	Criteria	Points
<b>Portfolio Rubric</b>  <i>Total possible points: 50</i>	<ul style="list-style-type: none"> <li>• Quality of portfolio’s presentation including title and index pages</li> <li>• A detailed outline of each team member’s participation in the production of the portfolio and planned production of the device</li> <li>• At least three illustrations of the initial design concepts of a possible device</li> <li>• List of materials used to build a prototype from the Workshop Kit</li> <li>• Description of the use of principles of structural strength and stability</li> <li>• Rationale used to decide on the type of fluid power used and where to place the piston-syringes</li> <li>• An isometric drawing of the portion of the prototype used to grab the object</li> <li>• An orthographic drawing showing dimensions and construction notes</li> <li>• A list of alternative materials that would have been useful with reasons why they would have been so</li> <li>• Evaluation of a prototype including conclusions from making it</li> </ul>	0 – 5  0 – 5  0 – 5  0 – 5  0 – 5  0 – 5  0 – 5  0 – 5  0 – 5
<b>Teamwork &amp; Work Habits</b>  <i>Total possible points: 10</i>	<ul style="list-style-type: none"> <li>• Members of the team work independently and co-operatively in an organized way</li> <li>• Members of the team demonstrate safe working practices</li> </ul>	0 – 5  0 – 5
<b>Device Design, Construction &amp; Operation</b>  <i>Total possible points: 10 + placement points</i>	<ul style="list-style-type: none"> <li>• The device uses materials effectively and is well constructed with parts securely attached</li> <li>• The device itself operates efficiently and is operated in an organized way</li> <li>• Object placement points accumulated in designated time period</li> </ul>	0 – 5  0 – 5
<b>Interview Questions</b>  <i>Total possible points: 20</i>	<ul style="list-style-type: none"> <li>• See detailed <i>Challenge Rubric</i> for wording of questions</li> </ul>	0 – 20