

Energy Zone

Key Ideas: What is the source of energy and how it is stored/transferred/released.

<p>Loco Pull Try and move the locomotive 1 metre.</p> <p><i>Completed</i> <input type="checkbox"/></p>	<p>Lightmoor Beam Engine Turn the flywheel one complete circle.</p> <p><i>Completed</i> <input type="checkbox"/></p>
<p>Electrical Energy Find out which appliance uses the most energy.</p> <p><i>Completed</i> <input type="checkbox"/></p>	<p>Wind Energy Find the most efficient turbine in the wind tunnel.</p> <p><i>Completed</i> <input type="checkbox"/></p>
<p>Scan-it Click on the rocket and see how a massive amount of fuel can be used in a short burst to great effect.</p> <p><i>Completed</i> <input type="checkbox"/></p>	<p>Scan-it Click on the Mileage Marathon car - see how it is designed to get the most out of a tiny amount of fuel.</p> <p><i>Completed</i> <input type="checkbox"/></p>

Now go to the Design Zone and complete your Design Challenge!



School Challenge Sheet

This is a booklet of challenges that we hope will make your visit to Enginuity a fun and interesting experience.

Take a look around you and be amazed by the inspiring worlds of Science, Engineering and Technology.

Find out how you can pull a real Steam Engine, control water, generate electricity, test your speed against a robot and work as a team to make the crazy boiler blow its top.

As you complete your challenges get the Enablers (staff) to stamp your booklet

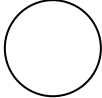
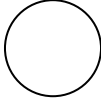
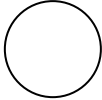
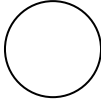
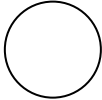
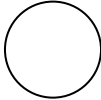
If you don't understand an exhibit then please ask one of the Enablers and they will be only too happy to help you and show you how the display works.



The **IRONBRIDGE GORGE MUSEUM TRUST** Coach Road Coalbrookdale Shropshire TF8 7DQ
Tel 01952 435 900 Fax 01952 435 999

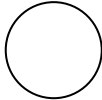
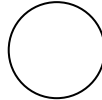
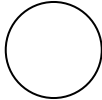
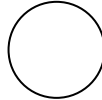
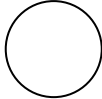
Materials & Structures Zone

Key Ideas: What materials have been used to create certain products and why.
Why structures are built in certain ways.

<p>X-Ray Machine Scan the Teddy Bear and find out how many pieces of metal are used to put him together.</p> <p><i>Completed</i></p> 	<p>Ball Bounce Have a guess which ball is going to bounce the highest. Find out if you were right.</p> <p><i>Completed</i></p> 
<p>Wobble Proof Build a two storey tower that will survive the simulated earthquake.</p> <p><i>Completed</i></p> 	<p>Build-an-Arch Build the giant arch.</p> <p><i>Completed</i></p> 
<p>Scan-it Click on the crushed car and see what you can find out about recycling metal.</p> <p><i>Completed</i></p> 	<p>Scan-it Click on the Model Boats and find out about joining sheet materials.</p> <p><i>Completed</i></p> 

Systems & Control Zone

Key Ideas: Making Complicated machines by joining simple mechanisms together.

<p>Water Maze Find the Archimedes screw and see if you can use it to raise water.</p> <p><i>Completed</i></p> 	<p>Giditron Robot Can you beat the robot to the finish without making the buzzer sound?</p> <p><i>Completed</i></p> 
<p>Robot Explorer Use the remote control robot to defuse one of the bombs.</p> <p><i>Completed</i></p> 	<p>Crazy Boiler See how high you can send the balls up the towers by controlling the input of fuel and water.</p> <p><i>Completed</i></p> 
<p>Scan-it Click on the toilet and find out about all the different systems involved.</p> <p><i>Completed</i></p> 	<p>Scan-it Click on the Ejection Seat and find out about the split second timing.</p> <p><i>Completed</i></p> 