

**Energy and Forces**  
**5th and 6th classes**

Click on the links below to access the resource.

Name of Resource	Description	Link
Shake it up	STEM Smaointe - Sound  This activity requires pupils to investigate sound as a form of energy.	<a href="https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.dr63vascok7g">https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.dr63vascok7g</a>
Refraction Force	STEM Smaointe - Light  Invite pupils to place a straw/pencil in a glass of water and let it go. Pupils should look at the straw from various angles. What do they notice? The straw/pencil seems to bend at the surface of the water, this effect is called refraction.	<a href="https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.luld91us4cfy">https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.luld91us4cfy</a>
Leaf Gliders	STEM Smaointe - Forces  Pupils will use autumn leaves to explore forces and motion by designing and making a leaf glider	<a href="https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.c1exq8qhdopw">https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.c1exq8qhdopw</a>
Slow Motion Sycamore Seeds	Forces A video of sycamore seeds falling - this can be used to help pupils to observe and discuss flight paths of objects falling.	<a href="https://www.youtube.com/watch?v=SdOOpT1ZrN0">https://www.youtube.com/watch?v=SdOOpT1ZrN0</a>

**Energy and Forces**  
**5th and 6th classes**

<p>Paper Helicopters (forces)</p>	<p>STEM in a Bubble Webinar - Forces</p> <p>Pupils explore how things fall and how varying the size of the rotor blades, the shape of the rotor blades and the weight of a paper helicopter affect the way a helicopter spins.</p>	<p>STEM in a Bubble Resource Page  <a href="https://www.scoilnet.ie/stem_ar_scoil/workshop1/">https://www.scoilnet.ie/stem_ar_scoil/workshop1/</a></p> <p>Paper Helicopters Activity  <a href="https://www.sfi.ie/site-files/primary-science/media/pdfs/col/paper_helicopters.pdf">https://www.sfi.ie/site-files/primary-science/media/pdfs/col/paper_helicopters.pdf</a></p> <p>Maths extension ideas  <a href="https://www.sfi.ie/site-files/primary-science/media/pdfs/col/dps_maths_paper_helicopters_activity.pdf">https://www.sfi.ie/site-files/primary-science/media/pdfs/col/dps_maths_paper_helicopters_activity.pdf</a></p>
<p>Design and Make a Pedal Bin</p>	<p>STEM and the Kitchen webinar - Forces</p> <p>Pupils design and make a home made pedal bin incorporating simple levers.</p>	<p>STEM and the Kitchen resource page  <a href="https://www.scoilnet.ie/stem_sa_bhaile/kitchen/">https://www.scoilnet.ie/stem_sa_bhaile/kitchen/</a></p> <p><a href="https://www.scoilnet.ie/uploads/resources/34929/34688.pdf">https://www.scoilnet.ie/uploads/resources/34929/34688.pdf</a></p>
<p>The Best Bounce</p>	<p>Forces</p> <p>Pupils investigate which ball has the “best” bounce</p>	<p>Weblink from STEM and Sport 45:24 mins to 51:50 mins</p>
<p>Home Alone Burglar Trap</p>	<p>Seasonal STEAM webinar - Forces</p> <p>Help Kevin catch the burglars by designing three traps. Choose your favourite trap and build a prototype</p>	<p>Seasonal STEAM resource page  <a href="https://www.scoilnet.ie/stem_ar_scoil/steam/">https://www.scoilnet.ie/stem_ar_scoil/steam/</a></p> <p><a href="https://www.scoilnet.ie/uploads/resources/35021/34780.pdf">https://www.scoilnet.ie/uploads/resources/35021/34780.pdf</a></p>

**Energy and Forces**  
**5th and 6th classes**

<p>Christmas Decorations</p>	<p>Seasonal STEAM webinar - Forces</p> <p>Pupils design and make simple christmas decorations using simple levers and trapped air/water pressure techniques (pneumatics/hydraulics)</p>	<p>Seasonal STEAM recording  <a href="https://youtu.be/ng6UD_FgEm4">https://youtu.be/ng6UD_FgEm4</a> from 48:20 minutes to 49:34</p> <p>Seasonal STEAM resource page  <a href="https://www.scoilnet.ie/stem_ar_scoil/steam/">https://www.scoilnet.ie/stem_ar_scoil/steam/</a></p>
<p>Christmas Light Decorations - Burglar Lights</p>	<p>Seasonal STEAM webinar - Electricity and Magnetism</p> <p>Pupils design and make simple circuits to create a set of christmas lights for a lego house. Incorporate a homemade switch when a window or door is opened</p>	<p>Seasonal STEAM recording  <a href="https://youtu.be/ng6UD_FgEm4">https://youtu.be/ng6UD_FgEm4</a> from 49:35 to 50:10</p> <p>Seasonal STEAM resource page  <a href="https://www.scoilnet.ie/stem_ar_scoil/steam/">https://www.scoilnet.ie/stem_ar_scoil/steam/</a></p>
<p>Solar Oven (heat)</p>	<p>STEM Smaointe - Heat</p> <p>Pupils will create their own simple solar oven using tin foil. Pupils can explore how effectively tinfoil reflects light and heat energy by placing their oven in sunlight</p>	<p><a href="https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.g8kywx2kd0mi">https://sites.google.com/pdst.ie/stemsmainte/archived-activities/science/5th-and-6th-class?authuser=0#h.g8kywx2kd0mi</a></p>