

## How the World Works – Simple Machines

Week 1	<ul style="list-style-type: none"> <li>• Children complete a mindmap about "what is work?"</li> <li>• Then they research into the dictionary to find the definition of work - direct to the scientific definition.</li> </ul> <p>Watch Audrey - Rube Goldberg  <a href="https://www.youtube.com/watch?v=0uDDEEHdf1Y">https://www.youtube.com/watch?v=0uDDEEHdf1Y</a></p> <ul style="list-style-type: none"> <li>• Explore trolley books</li> <li>• Children play with some simple machines - like the poster and complete "How do these work sheet?"</li> <li>• Watch a BrainPOP on work /simple machines - to stimulate words and ideas related to simple machines.</li> <li>• Central Idea: Simple Machines play a role in our everyday lives - definition activity.</li> <li>• Safari Montage - Real World Science - Simple Machines</li> <li>• Explore Force: BrainPop - Gravity and Push/Pull episodes; use tools - balls, balloon, car on carpet vs car on lino to show and chat about.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Explore books / videos etc to find the meaning of terms used.</li> <li>• Watch Sid the Kid episodes related to simple machines - Amazing Invention (Lever); Tree House (Pulley); Gabriella's Balancing Act (Lever and balance); My Slide (Incline Plane); The Broken Wheel (Wheels)</li> <li>• Explicitly teach forces - push, pull, gravity, friction, magnetic, force</li> <li>• In UOI book write the definition of the vocab and children draw diagrams to help explain the concepts.</li> <li>• Encourage them to reflect and wonder.</li> <li>• Identify SIMPLE MACHINES - 6 types - screw, wedge, lever, pulley,</li> <li>• Explore a range of activities using these machines</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Complete SEE/THINK/ WONDER on the Compound Machine Pictures</li> <li>• Identify simple machines within compound machines.</li> <li>• How simple machines make a compound machine work.</li> <li>• I can see .....in scissors</li> <li>• Look at a compound machine e.g. bicycle What simple machines are in the compound machine?</li> <li>• STEM activities:</li> </ul> <p>Simple Machines websites:</p>

	<p> <a href="http://handsonaswegrow.com/rube-goldberg-machine-cereal/">http://handsonaswegrow.com/rube-goldberg-machine-cereal/</a>  <a href="http://dragonsdencurriculum.blogspot.com/2014/12/simply-simple-machines.html">http://dragonsdencurriculum.blogspot.com/2014/12/simply-simple-machines.html</a>  <a href="http://www.soulouposeto.gr/2013/09/50.html">http://www.soulouposeto.gr/2013/09/50.html</a>  <a href="http://www.minds-in-bloom.com/2013/09/families-fun-and-engineering-building.html">http://www.minds-in-bloom.com/2013/09/families-fun-and-engineering-building.html</a>  <a href="http://www.partselect.com/JustForFun/Simple-Machine-Lesson-Plans.aspx">http://www.partselect.com/JustForFun/Simple-Machine-Lesson-Plans.aspx</a>  <a href="http://wimedialab.pbslearningmedia.org/resource/cg8.sci.phys.ramproll/curious-george-ramp-n-roll/">http://wimedialab.pbslearningmedia.org/resource/cg8.sci.phys.ramproll/curious-george-ramp-n-roll/</a>  <a href="http://mrsmorgansstars.edublogs.org/2013/10/23/force-and-motion-spin-roll-slide/">http://mrsmorgansstars.edublogs.org/2013/10/23/force-and-motion-spin-roll-slide/</a> </p> <p> <a href="https://www.youtube.com/watch?v=0uDDEEHdf1Y">https://www.youtube.com/watch?v=0uDDEEHdf1Y</a> </p>
Week 4/5	<ul style="list-style-type: none"> <li>• <b>SUMMATIVE:</b> Work on / draw / create a compound machine made up of simple machines to do "work" - that makes life easier.</li> <li>• Children design, draw and construct a machine from recycable materials . They have 2 scenarios to choose from to make a suitable machine. They need to include at least 2 simple machines in their construction.</li> <li>• Once complete they will reflect and we will have a Simple Machine Gallery walk for the parents and younger grades - to share the journey.</li> </ul>

[http://www.msichicago.org/fileadmin/Activities/Games/simple\\_machines/](http://www.msichicago.org/fileadmin/Activities/Games/simple_machines/)

<http://www.edheads.org/activities/simple-machines/>

<http://www.learninggamesforkids.com/simple-machines-games/simple-machines-song.html>

You might also be able to find some more resources, especially videos, here.

<http://www.neok12.com/Simple-Machines.htm>