

# Waukesha 4-H Project Guide

Category: STEM (Science Technology Engineering Math)

4/2021



Extension

UNIVERSITY OF WISCONSIN-MADISON  
WAUKESHA COUNTY



<p>4-H Project <b>Astronomy</b></p>	<p>Subprojects under this project</p> <ul style="list-style-type: none"> <li>• Physics</li> <li>• Geology</li> </ul>
<p>Things you might learn in this project:</p>	<ul style="list-style-type: none"> <li>• Names and identities of constellations</li> <li>• Different types of stars</li> <li>• Relationship between gravity and weight</li> <li>• Organization of the solar system</li> <li>• Differences and similarities between objects, like meteors, asteroids, comets, planets, galaxies, and stars</li> <li>• What causes a meteor shower</li> <li>• The ages of the universe and the Earth</li> <li>• Learn the different rock ages</li> <li>• Learn the different rock types (sedimentary, igneous, metamorphic)</li> </ul>
<p>Learning activities/ workshops/ field trip ideas:</p>	<ul style="list-style-type: none"> <li>• Trip to Retzer Nature Center’s planetarium</li> <li>• Meteor shower observation</li> <li>• Telescope viewing</li> <li>• Trip to the Chicago Planetarium</li> <li>• Trip to the Madison Geology Museum</li> </ul>
<p>Ideas of things you might exhibit in the fair:</p>	<ul style="list-style-type: none"> <li>• Book of constellations with labels</li> <li>• Solar system diorama</li> <li>• Report on how the universe and/or Earth was formed over eons</li> <li>• Rock collection with labels</li> <li>• Poster of the geology of Wisconsin / Waukesha County</li> </ul>
<p>Waukesha County Project Leaders:</p>	<ul style="list-style-type: none"> <li>• Gayle Nicoll, <a href="mailto:gaylenicollphd@gmail.com">gaylenicollphd@gmail.com</a>, 412-965-7046</li> </ul>
<p>References &amp; Resource links:</p>	<ul style="list-style-type: none"> <li>• <a href="https://geoscience.wisc.edu/museum/">https://geoscience.wisc.edu/museum/</a></li> <li>• <a href="http://www.gov.pe.ca/photos/original/4h_astronomyAG.pdf">http://www.gov.pe.ca/photos/original/4h_astronomyAG.pdf</a></li> <li>• <a href="http://ceshasta.ucanr.edu/files/142073.pdf">http://ceshasta.ucanr.edu/files/142073.pdf</a></li> <li>• <a href="https://nightsky.jpl.nasa.gov/email.cfm?Member_ID=13147&amp;Club_ID=1545">https://nightsky.jpl.nasa.gov/email.cfm?Member_ID=13147&amp;Club_ID=1545</a></li> <li>• <a href="https://ohio4h.org/sites/ohio4h/files/imce/365_01_Astronomy_2015%283%29.pdf">https://ohio4h.org/sites/ohio4h/files/imce/365_01_Astronomy_2015%283%29.pdf</a></li> <li>• <a href="https://extension.purdue.edu/4h/Documents/Resources/4H-911-6.pdf">https://extension.purdue.edu/4h/Documents/Resources/4H-911-6.pdf</a></li> <li>• <a href="https://www.kansas4-h.org/events-activities/volunteer-trainings/spacetech/docs/Astronomy_Its_Out_of_This_World.pdf">https://www.kansas4-h.org/events-activities/volunteer-trainings/spacetech/docs/Astronomy_Its_Out_of_This_World.pdf</a></li> <li>• </li> </ul>