

Waukesha 4-H Project Guide

Category: STEM (Science Technology Engineering Math)
4/2021



Extension
UNIVERSITY OF WISCONSIN-MADISON
WAUKESHA COUNTY



<p>4-H Project Model Rocketry</p>	<p>Subprojects under this project</p> <ul style="list-style-type: none"> •
<p>Things you might learn in this project:</p>	<ul style="list-style-type: none"> • How to build a model rocket • Learn parts of a rocket • Learn aerodynamics and engine principles • Learn about basic physics like pitch, yaw, and roll; drag; trajectory; thrust; aerodynamics, principles of flight; etc • Learn about model rocket safety
<p>Learning activities/ workshops/ field trip ideas:</p>	<ul style="list-style-type: none"> • Group rocket building activity • Go to a science museum (Discovery World) • Watch rocket related movies and videos • Visit a local rocket club • Attend 4-H Space Camp • Participate in the annual 4-H Rocket Launch
<p>Ideas of things you might exhibit in the fair:</p>	<ul style="list-style-type: none"> • Flying Launched Model Rocket in Rocket Launch • Flying Remote Control Model Aircraft in Rocket Launch • Independently flown model Rocket (Rockets flown at Rocket Launch excluded) • Independently flown Remote Controlled (RC) Aircraft • Poster explaining some principle of rocketry • Poster explaining a real life experience of rocketry • Photos taken during flight of Rocket, RC Aircraft (Rockets flown at Rocket Launch excluded).
<p>Waukesha County Project Leaders:</p>	<ul style="list-style-type: none"> • Flash Gordon, flash_rescue31@hotmail.com, 262-544-0405
<p>References & Resource links:</p>	<ul style="list-style-type: none"> • https://4h.extension.wisc.edu/opportunities/projects/stem/aerospace-project/ • https://fyi.extension.wisc.edu/wi4hprojects/stem-science-technology-engineering-math/aerospace/ • https://www.nar.org/educational-resources/4-h-partnership/ • https://www.nar.org/model-rocket-info/ • https://estesrockets.com/ • https://www.apogeerockets.com/New-to-Model-Rocketry • https://estesrockets.com/get-started/ • https://www.grc.nasa.gov/www/k-12/rocket/rktparts.html