



COLORADO STATE UNIVERSITY
EXTENSION

4 - H



MODEL ROCKETRY

General/Natural
Resources Projects



The model rocketry project is designed to help young people learn how to build and design rockets. Members will help make their dreams of sending a rocket into space, becoming an astronaut or perhaps someday visiting other planets by participating in the experiences of this project.

Resources

- LC1300 Model Rocketry Leader's Guide
- MC1302A Basic Model Rocketry, Units 1-2 Jr./Int./Sr.
- MC1303A Intermediate Model Rocketry, Unit 3 Jr./Int./Sr.
- MC1304A Advanced Model Rocketry, Unit 4 Jr./Int./Sr.
- MC1306 Designer Model Rocketry, Unit 6 Jr./Int./Sr.
- Model Rocketry Tip Sheet
- Model Rocketry e-record
- Model Rocketry Score Sheets
- State Fair Exhibit Requirements

Introduction to Model Rocketry - Unit 1 Jr./Int./Sr.	Basic Model Rocketry - Unit 2 Jr./Int./Sr.	Intermediate Model Rocketry - Unit 3 Jr./Int./Sr.	Advanced Model Rocketry - Unit 4 Jr./Int./Sr.	Designer Model Rocketry - Unit 6 Jr./Int./Sr.
<p>This unit is designed for members ages 8-18 years old who are excited about learning model rocketry.</p> <p>Members will accomplish the following learning experiences:</p> <ul style="list-style-type: none"> • How a model rocket works • Design features of a model rocket • Tools and special techniques needed for building model rockets • Safe engine installation • Necessary equipment and procedures for safe launch • Build at least one skill-level-one rocket 	<p>This unit is designed for members ages 8-18 years old. This unit builds on the skills and techniques learned in the previous unit.</p> <p>Members will accomplish the following learning experiences:</p> <ul style="list-style-type: none"> • Build at least one skill-level-two rocket • Learn types of rockets • Learn the Model Rocket Safety Code • Learn basic parts of a rocket • Learn the recovery parts of a rocket • Learn the launching parts of a rocket • Tools and special equipment for building and launching a rocket. 	<p>This unit is designed for members 8-18 years old who have experience in building and launching model rockets. It is recommended that the member complete the first two units before doing Unit 3. This unit covers new and exciting areas not covered in Unit 2.</p> <p>Members will accomplish the following learning experiences:</p> <ul style="list-style-type: none"> • What is multi-staging • Model rocket launch systems • Rear engine boost-gliders • Front engine boost gliders 	<p>This unit is designed for members ages 8-18 years old who are serious about model rocketry as a hobby.</p> <p>Members will accomplish the following learning experiences:</p> <ul style="list-style-type: none"> • How to organize a model rocket club • Engine types and classifications • Introduction to model rocket engine performance • How big is that parachute -- too big or too small • Art of the payload launch 	<p>This unit is designed for members ages 8-18 years old who are into designing their own rockets.</p> <p>Members will accomplish the following learning experiences:</p> <ul style="list-style-type: none"> • Learn about rocket stability • Learn how to build a wind tunnel • Aerial photography • Rocketronics • Why you need cluster rockets • Glossary of terms • Adaptable electronic kits available • What engines to use