

MODEL ROCKETRY

Literature Needed:

Leader Literature

Leader's Guide ----All Units
LC1300 Model Rocketry

Member Literature

MC1302A Basic Model Rocketry used for Unit 1 as a resource
MC1302A Basic Model Rocketry used for Unit 2
MC1303A Intermediate Model Rocketry used for Unit 3
MC1304A Advanced Model Rocketry Unit 4
MC1306A Designer Model Rocketry Unit 6
e-Record www.colorado4h.org/project_resources/erecords/index.shtml
Model Rocketry worksheet
www.colorado4h.org/project_resources/erecords/index.shtml

Units 2-6 project manual completed and added to sturdy binder/notebook after the E-record.

These units are progressive, suggesting that a member start at unit 1 and work up to the next units.

Exhibit Requirements can be found at www.colorado4h.org

Score Sheets can be found at www.colorado4h.org

Display Tips and Hints can be found at www.colorado4h.org

Shows skill levels of 1, 2, and 3----- www.estesrockets.com

Clubs may need to collectively make an order with the Estes Company to meet a minimum requirement for purchases.

Painting Tips:

1. Apply sanding sealer and sand. Use 180-280 grit sandpaper (use 400 for finger prints.)
2. Repeat step 1 and use a tack cloth .
3. Apply primer and sand.
4. Repeat step 3 two or three times.
5. Apply spray paint (Krylon) with several light coats, use a spray handle for spray cans.
6. Apply final coat of clear coat enamel.
7. Do not use decals that soak in water.

Launching Your Rocket:

1. Read all launching instruction carefully
2. Make sure batteries are in good condition.

3. Make sure micro-clips do not touch each other or any other metal.
4. Don't forget the recovery wadding.
5. Use igniter plugs that are the right size. Too big of plug will block out the oxygen.
6. Be sure that the coated tip of the igniter is in direct contact with the engine propellant.

Judging Criteria For E-Record :

- Extra activities such as demonstrations, talks, story, and pictures added to your e-record.
- Neatness and legibility
- Number of rockets that you put together and may have launched.

Judging Criteria For Rocket:

- Paint used should be evenly applied.
- Check surface for smoothness (whether it was sanded or not).
- Check nose cone for fit and surface.
- Check fin alignment
- Proper placement of launch lug.
- Check airfoiling and fillet of fins.
- Check recovery system(s)
- Check engine mount area
- Check for rounded fin smoothness
- Use originality and creativity
- Check decal application