



Dr. Sally Ride



Venturer Supernova Award Workbook

This workbook can help you but you still need to read the Venturer Nova Awards Guidebook.

This Workbook can help you organize your thoughts as you prepare to meet with your mentor.

You still must satisfy your mentor that you can demonstrate each skill and have learned the information.

You should use the work space provided for each requirement to keep track of which requirements have been completed, and to make notes for discussing the item with your mentor, not for providing full and complete answers.

If a requirement says that you must take an action using words such as "discuss", "show", "tell", "explain", "demonstrate", "identify", etc, that is what you must do.

Mentors may not require the use of this or any similar workbooks.

No one may add or subtract from the official requirements found in the Venturer Nova Awards Guidebook (Pub. 34031).

The requirements were issued in 2015 • This workbook was updated in August 2018.

Venturer's Name: _____ Unit: _____

Mentor's Name: _____ Mentor's Phone No.: _____

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this **workbook** to: Workbooks@USScouts.Org

Send comments or suggestions for changes to the **requirements** for the **Nova Award** to: Program.Content@Scouting.Org

First-Level Supernova Award for Venturers

- 1. Complete THREE of the Venturer Nova Awards. (Note: These may be done at any time after becoming a Venturer.)
 - Launch!
 - Hang On!
 - Power Up
 - Numbers Don't Lie
- 2. Complete the Venturing Scholarship exploration.
 - A. Do ONE of the following:
 - 1. Show that you have had an average grade of B or higher (80 percent or higher) for one term or semester.
 - 2. Show that for one term or semester you have improved your school grades over the previous period.
 - B. Do TWO of the following:
 - 1. Discuss with your mentor the following situation: Suppose you are writing a research paper and you find a resource in which the author's words are so perfectly aligned with your perspectives and understanding that you cannot imagine a better way to put it in your paper than to use the author's own words. How can you handle such a situation while still maintaining scholarly integrity?
 - 2. Discuss with your mentor the following situation: Suppose you are writing a research paper and you find resources with conflicting "facts" and/or conflicting conclusions. What are some viable strategies for resolving these conflicts and deciding which resources are trustworthy?
 - 3. Discuss with your mentor the following situation: Suppose you are writing a research paper and have acquired dozens of resources. How would you keep track of the resources, summarize the salient parts of each resource, and synthesize the collection of resources into a coherent research paper?
 - C. Get a note from an instructor* of yours that states that during the past term you have demonstrated satisfactory abilities or progress in independently completing scholarly endeavors and proactively seeking help when needed.

*If you are home-schooled, you may obtain a note from a counterpart such as your parent. If you are near the end of your current term, you may ask a current instructor. Otherwise, you should ask an instructor from the immediate past term.

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- D. Do ONE of the following:
 - 1. Show that you have taken part in a scholarly activity (in school or in Scouting) that required teamwork, and discuss with your mentor what you learned about how a team of people can work together effectively, fairly, and efficiently.
 - 2. Find three resources (online, in a library, personal interview, etc.) of expert advice on successful teamwork strategies and discuss with your mentor what you learned about how a team of people can work together effectively, fairly, and efficiently.
- E. Do ONE of the following:
 - 1. Write an argument of approximately 500 words that defends or opposes the principle that, "Students should be obligated to report instances of cheating by others." Discuss this with your mentor.
 - 2. With your crews, another crew, school class, or another peer group, conduct an ethical controversy discussion that addresses the question, "Should students be obligated to report instances of cheating by others?"
- 3. Using the guidelines found in the "Venturing STEM Explorations" chapter, complete STEM explorations for four of the topics listed above (*below*). (Note: These may be completed at any time after becoming a Venturer.)

<input type="checkbox"/> Animal Science	<input type="checkbox"/> Energy	<input type="checkbox"/> Nuclear Science
<input type="checkbox"/> Archaeology	<input type="checkbox"/> Engineering	<input type="checkbox"/> Oceanography
<input type="checkbox"/> Architecture	<input type="checkbox"/> Environmental Science	<input type="checkbox"/> Plant Science
<input type="checkbox"/> Astronomy	<input type="checkbox"/> Farm Mechanics	<input type="checkbox"/> Pulp and Paper
<input type="checkbox"/> Automotive Maintenance	<input type="checkbox"/> Fish and Wildlife Management	<input type="checkbox"/> Radio
<input type="checkbox"/> Aviation	<input type="checkbox"/> Forestry	<input type="checkbox"/> Reptile and Amphibian Study
<input type="checkbox"/> Bird Study	<input type="checkbox"/> Gardening	<input type="checkbox"/> Robotics
<input type="checkbox"/> Chemistry	<input type="checkbox"/> Geocaching	<input type="checkbox"/> Scuba Diving
<input type="checkbox"/> Composite Materials	<input type="checkbox"/> Geology	<input type="checkbox"/> Soil and Water Conservation
<input type="checkbox"/> Computers	<input type="checkbox"/> Insect Study	<input type="checkbox"/> Space Exploration
<input type="checkbox"/> Dentistry	<input type="checkbox"/> Inventing	<input type="checkbox"/> Surveying
<input type="checkbox"/> Drafting	<input type="checkbox"/> Mammal Study	<input type="checkbox"/> Veterinary Medicine
<input type="checkbox"/> Electricity	<input type="checkbox"/> Medicine	<input type="checkbox"/> Weather
<input type="checkbox"/> Electronics	<input type="checkbox"/> Nature	<input type="checkbox"/> Welding
- 4. Complete TWO Supernova activity topics, one each in two different STEM areas.

<input type="checkbox"/> Science	<input type="checkbox"/> Technology	<input type="checkbox"/> Engineering	<input type="checkbox"/> Mathematics
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- 5. Participate in a local, state, or national science fair or mathematics competition OR in any equally challenging STEM-oriented competition or workshop approved by your mentor. An example of this would be an X-Prize type competition.

Competition:	
Date	
- 6. Do ONE of the following:
 - A. Spend at least one day "shadowing" a local scientist or engineer.

Date:		Person Shadowed:	
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 After your visit, discuss with your mentor your experience and what you learned about STEM careers.
 - B. Learn about a career that is heavily involved with STEM.

Career:	
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 - Make a presentation to your mentor about what you learned.

7. Working with your mentor; organize and present a Nova award or other STEM-related program at a Cub Scout den or pack meeting. Be sure to receive permission from the appropriate unit leader, and plan accordingly. If a Cub Scout den or pack is not available, your presentation may be given to another youth group.

Date: Group: Subject:

8. Review the scientific method (you may know this as the scientific process) and note how scientists establish hypotheses, theories, and laws. Compare how the establishment of "facts" or "rules" using the scientific method differs from the establishment of "facts" or "rules" in other environments, such as legal, cultural, religious, military, mathematical, or social environments.

Then do each of the following:

- A. Choose a current subject with at least two competing theories on the subject and learn as much as possible about each theory. Analyze the competing theories, decide which one is most convincing to you, and explain why to your mentor.
- B. Make a presentation to your mentor that describes the controversy, the competing theories, and your conclusions about how the scientific method can or cannot contribute to the resolution of the controversy.
9. Submit an application to the district Nova or advancement committee for approval.

When working on Nova and Supernova awards, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from <http://usscouts.org/advance/docs/GTA-Excerpts-nova.pdf>.

You can download a complete copy of the *Guide to Advancement* from <http://www.scouting.org/filestore/pdf/33088.pdf>.