



# Dr. Charles H. Townes



## Webelos Scout Supernova Award Workbook

This workbook can help you but you still need to read the Cub Scout 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 Cub Scout Nova Awards Guidebook (Pub. 34032 – SKU 614935).

The requirements were issued in 2015 • This workbook was updated in November 2017.

Scout'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](mailto:Workbooks@USScouts.Org)

Send comments or suggestions for changes to the **requirements** for the **Nova Award** to: [Program.Content@Scouting.Org](mailto:Program.Content@Scouting.Org)

**Although it is not a requirement, it is recommended that you earn at least two of the seven Nova awards for Cub Scouts before earning the Dr. Charles H. Townes Supernova Award.**

**This Supernova award can be earned by Webelos Scouts like you.**

1. Complete three of the following: Adventures in Science, Engineer, option A or option B.
- Adventures in Science
  - Engineer
  - Option A Do all of the following:
    - a. Construct one of the following from wood, and one from another material: Book rack, Shelf, Bulletin board, Tie rack, Letter holder, Notepad holder, Toolbox, Towel rack, Recipe holder, Lamp stand, Kitchen knife rack, Kitchen utensil rack, Napkin holder, Garden tool rack, Lid holder, Mailbox, Birdhouse, Desk nameplate, Letter, bill, and pencil holder, Bread box, Key rack, Measuring cup rack, Measuring spoon rack
    - b. Keep an "insect zoo" with insects that you have collected. You might have crickets, ants, or grasshoppers. Study them for a while then release them. Share your experience with your den or your Mentor.
    - c. With adult supervision, show how to check the oil level and tire pressure on a car.
  - Option B Do all of the following:
    - a. Take a field trip to a geological site, geological laboratory, or rock show. Discuss what you learned at an upcoming den meeting or with your mentor.
    - b. Construct a simple working electrical circuit using a flashlight battery, a switch, and a light.
    - c. Do five activities within your home or school that require the use of mathematics. Explain to your den or your Mentor how you use math every day.

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What very important award did Dr. Townes earn?


What was Dr. Townes' most famous invention?


4. Find out about five other famous scientists, technology innovators, engineers, or mathematicians approved by your mentor.

1.	
2.	
3.	
4.	
5.	

Discuss what you learned with your mentor.


- 5. Speak with your teacher(s) at school (or your parents if you are home-schooled) OR one of your Cub Scout leaders about your interest in earning the Webelos Scout Supernova award.

Person you spoke with:

Ask them why they think math and science are important in your education.


Discuss what you learn with your mentor.


- 6. Participate in a science project or experiment in your classroom or school.

Project you did:

Discuss this activity with your mentor.




