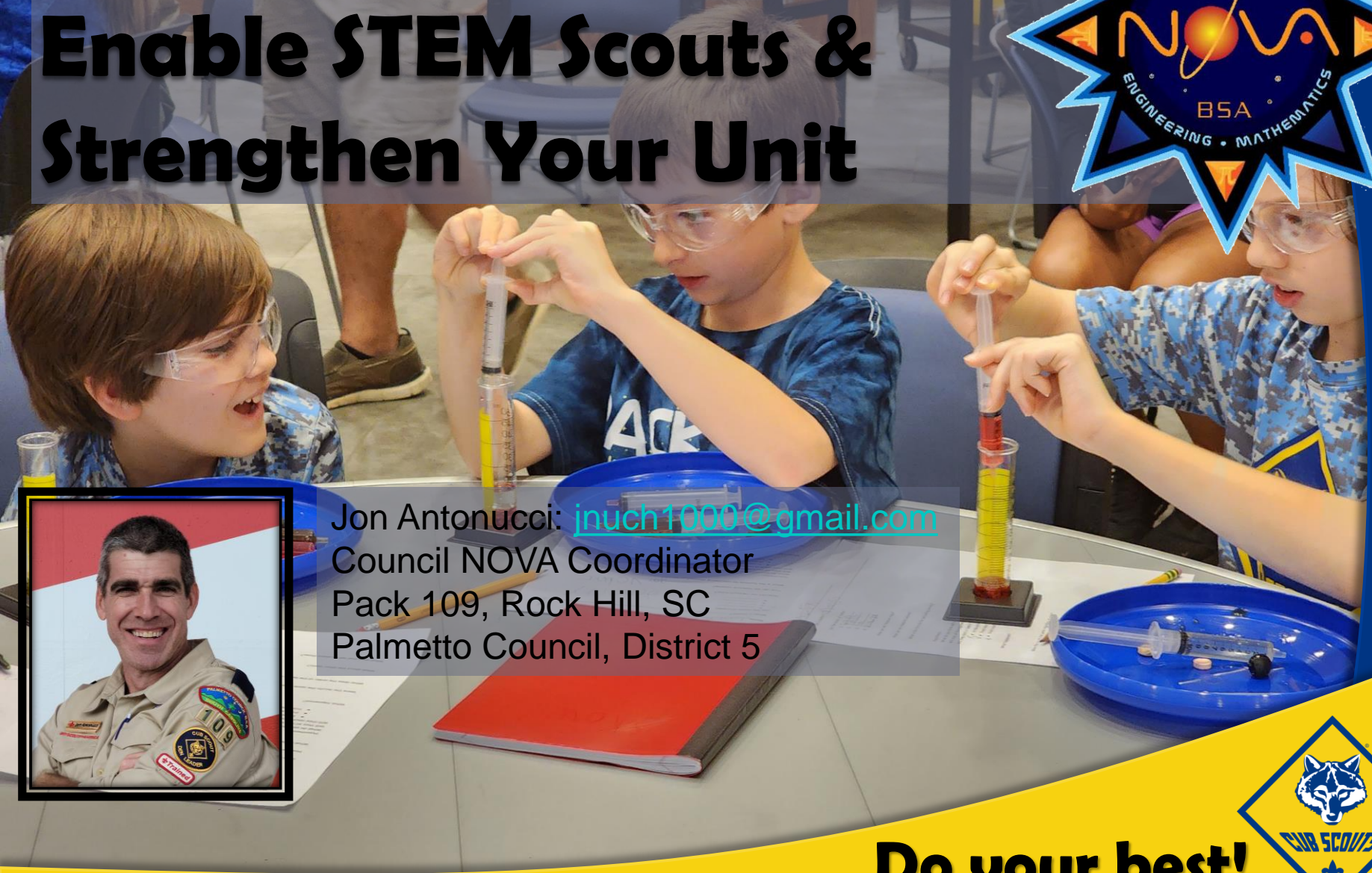
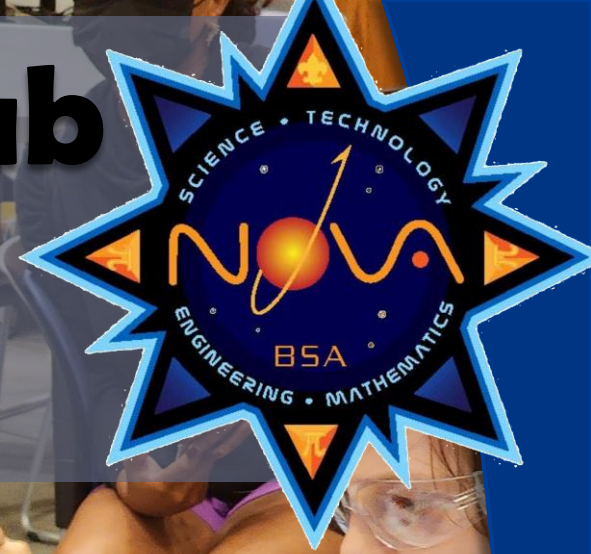


Unit SuperNOVA Club

Enable STEM Scouts & Strengthen Your Unit



Jon Antonucci: jnuch1000@gmail.com
Council NOVA Coordinator
Pack 109, Rock Hill, SC
Palmetto Council, District 5

Do your best!

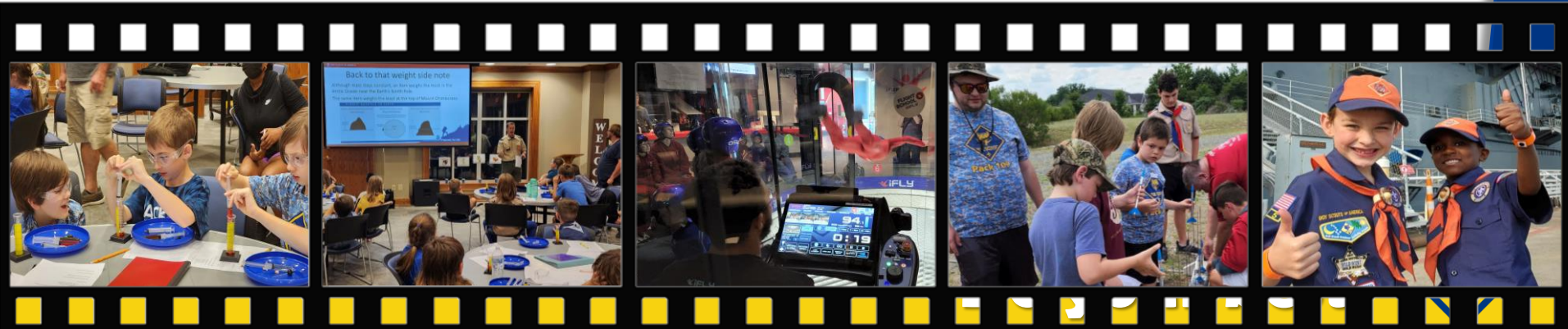


Unit SuperNOVA club goals

Use the scout SuperNOVA program to instill a lifelong love & confidence of STEM in scouts.

Side benefits:

- ✓ Great **unit recruiting** tool – parents & scouts love STEM
- ✓ Great **fundraising** tool – lots of STEM focused businesses
- ✓ Great **leader development** to focus in a new area
- ✓ Great for **scout cooperation** across dens and patrols



How to start a SuperNOVA club

- ✓ **Identify & recruit** STEM oriented leaders & parents
 - Parent talent sheet is a great resource
 - Market through unit email, posters, & announcements
 - You'll need both cubs & troop scouts – they must work together
- ✓ **Schedule, market, & conduct a monthly meeting**
 - 45 min after regular den/troop meetings is effective
- ✓ **Coordinate ~3 off-site NOVA events** each year
 - Scouts need ~2 as typical pre-requisites for SuperNOVA
 - Council and other units can support
- ✓ **Have leaders (2 deep) coach scouts** between mtgs
 - Scouts will need reminders & ways to make requirements less intimidating
- ✓ **Celebrate** achievements at the end of the scout year



Do your best!



Pack 109 SuperNOVA Club

Do you like **science**
or **math** or
engineering or
computers or
rockets or **cheese** or
basically anything
super cool?

**Do you want to earn
a SuperNOVA medal?**

Meetings are first Monday of the month after Pack 109 den meetings

First meeting **October 3** from 7:45p to 8:30p in Wesley Hall

Open to Wolves thru AOL

You will build a hovercraft
the first night!!



(May be less cool than the one pictured.)

**Did you know? 66% of all US
astronauts are scouts!**

Meeting format & frequency



- Meetings can be held in about 45 min after regular den or patrol meetings
 - 20 min discussion on this month's homework to work on SuperNOVA requirements & answer questions
 - 25 min to do a cool science lesson & experiment
- October through April is a good time for meetings.
 - Sept is crazy for scouts & May is starting summer

Do your best!



SuperNOVA Leaders

- You'll want at least one leader registered as a SuperNOVA mentor
- It is helpful to have one counselor for every ~8 scouts
- Responsibilities for club leaders would be:
 1. Help market, plan, & execute club meetings once a month including science experiments
 2. Answer science questions related to SuperNOVA requirements and coach scouts in STEM fields
 3. Help plan & execute three NOVA events a year at third parties
 4. Help with STEM fundraising at third party corporations. Not a must-have, but a great opportunity.
 5. Help conduct a SuperNOVA awards ceremony with possible media coverage at the end of the scouting year



Do your best!



First year experiments



- Here's a suggested schedule of first year SuperNOVA experiments to conduct during your monthly meetings:
 - **October: Build a hovercraft** from CDs, push pull valves, and balloons
 - Great marketing to “build a hovercraft” and good opportunity to discuss forces and make observations on where the craft floats best, longest, etc
 - **November: 3 immiscible liquids in a cylinder**
 - Let's the scouts get the feel for liquid experimentation; change the sequence with different scouts to let them make comparative observations; they can document results
 - **December: Lego pinewood derby cars**
 - Scouts can learn the physics of pinewood derby before building a car at home; Lego allows easy experimentation with key factors for speed
 - **January: pull an experiment from NASA's STEM site**
 - This is a good time to engage scouts in current events and science careers
 - **February: find a guest scientist and do a related experiment**
 - Scouts will need to talk with a career scientist to meet SuperNOVA requirements
 - **March: DNA extraction from a strawberry**
 - This experiment is simple, reliable, and amazing



Do your best!



NOVA Awards



- NOVA events can be held at 3rd parties including:
 - Local STEM companies;
 - Canned events like iFLY STEM day, Kennedy Space Center Overnight, Patriots Point Overnight;
 - Events where we can easily coordinate a NOVA e.g. Carowinds STEM day;
 - Council events like NOVA summer STEM camp day
- NOVA days for both cubs and troop level scouts take some careful thought to find common ground



Science

Science Everywhere
Down and Dirty
Nova Wild
Out of this World
Uncovering the Past



Technology

Tech Talk
Cub Scouts Can Code



Engineering

Swing!
Up and Away



Math





1-2-3 Go!
Fearful Symmetry

Do your best!



Dr. Luis Walter Alvarez SuperNOVA









1	Belt Loops	Wolves: Code of the Wolf Bears: Make It Move		
2	Complete all the following:	A. One week time diary B. Study geometry in architecture C. Measure & make two recipes		
3	Belt Loops or electives	Wolf Cub Scouts: Call of the Wild (core) Bear Cub Scouts: Forensics		
4	Find & discuss interesting facts about Dr. Luis W. Alvarez using resources in your school or local library or on the Internet.			
5	Find out about & discuss three other famous scientists, technology innovators, engineers, or mathematicians approved by your mentor.			
6	Discuss your SuperNOVA efforts with scout leader or school teacher. Discuss why they think math and science are important in your education.			
7	Participate in a science project or experiment in your classroom or school OR do a special science project approved by your teacher.			
8	Visit with someone who works in a STEM-related career. OR Learn about a career based on science, technology, engineering, or mathematics. Discuss.			
9	Learn about the scientific method (or scientific process). Discuss this with your mentor, and include a simple demonstration to show what you learned.			
10	Participate in a NOVA in your Cub Scout den or pack meeting that is conducted by a Boy Scout or Venturer who is working on his or her Supernova award.			



Do your best!

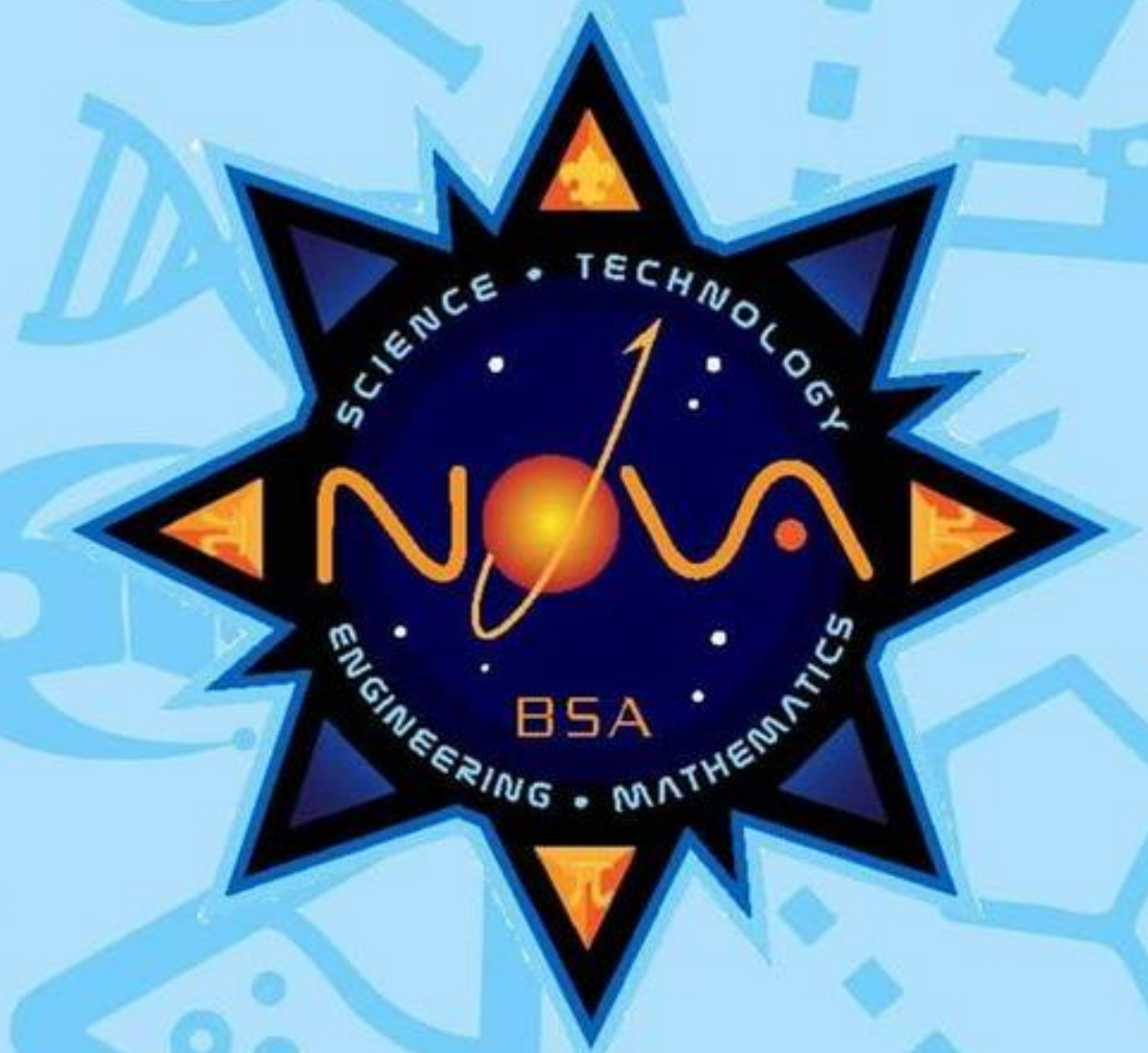
Dr. Charles H. Townes SuperNOVA



- | | | |
|---|--|---|
| 1 | Complete three of the following:   | Option A: build a project from the list
Option B: other projects – review list |
| 2 | Complete three of the following:     | Option A: review adventure list
Option B: review adventure list |
| 3 | Find & discuss interesting facts about Dr. Charles H. Townes using resources in your school or local library or on the Internet. Biggest award? Inventions? | |
| 4 | Find out about & discuss three other famous scientists, technology innovators, engineers, or mathematicians approved by your mentor. | |
| 5 | Discuss your SuperNOVA efforts with scout leader or school teacher. Discuss why they think math and science are important in your education. | |
| 6 | Participate in a science project or experiment in your classroom or school OR do a special science project approved by your teacher. | |
| 7 | Visit with someone who works in a STEM-related career. OR Learn about a career based on science, technology, engineering, or mathematics. Discuss. | |
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| 9 | Participate in a NOVA in your Cub Scout den or pack meeting that is conducted by a Boy Scout or Venturer who is working on his or her Supernova award. | |



Do your best!



SCIENCE • TECHNOLOGY

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BSA