



STEM 1.0: STEM in Scouting

Session Length: 45 Minutes

Through this session, you will:

Explain ** How STEM has always been included in the Boy Scouts of America **

Demonstrate **Examples of STEM in Scouting **

Guide **Scouts to see and experience STEM in Scouting at a different level**

Enable **Scouts can get involved and help serve STEM Scouting events**

Learning Outcomes:

- STEM in Traditional Scouting... from the very beginning
- Why is STEM knowledge (STEM literacy) important for everyone
- Examples of Science, Technology, Engineering and Math in Scouting
- Technology improves the Scouting experience
- STEM as Scouting Activities
- Order of the Arrow Service

Theme Connection:

The theme of NOAC 2018 is “Decide Your Destiny,” emphasizing the message that today’s decisions shape tomorrow’s reality. This session will relay this theme in the following ways:

- **STEM is important to the future of the youth and to our nation**
- **Being STEM literate is important to their lives**
- **Getting involved in the STEM Nova program can lead to a fulfilling STEM career**

This session will help the **Lodge/Chapter/Section** with the Journey to Excellence Requirement(s):

Req 3 and 4: Improve and retain membership

Embracing STEM activities have been shown to improve and maintain Scout membership.

Req 7: Improve lodge member participation

Scouts are more inclined to attend Lodge events when there are STEM activities included (this has been shown to be true with Unit meetings).

Req 9: Complete service projects.**



Scouts can participate in STEM activities to provide service to for other Scouts and the community.

Required Materials: [tailor specifically for this session after the syllabus is done, e.g. handouts, flipcharts, projector, screen]

- ****STEM in Scouting slides****
- ****STEM in Scouting handouts****
- ****flipcharts (optional)****
- ****projector & screen (optional)****
- ****laptop with slides (optional)****

TRAINER PREPARATION

1. Obtain STEM in Scouting slides (from the National STEM Nova committee training task force lead)
2. Review STEM in Scouting slides and be familiar with the program
3. Add examples from your own experience – times when STEM activities were included in a Scout program (if available)

Session Narrative

Introduction

5 minutes

STEM has always been a part of the Scouting program at the unit, district/chapter, council/lodge, area/section and national levels. Here are the learning objectives.

First topic

10 minutes

Can you see examples of STEM in Scouting.

Typing in with the OA here are examples of STEM in Native American Culture

Second topic

10 minutes

Why it is important to include STEM in the Scouting program.

Where STEM and Technology have improved the Scouting Experience



Third topic

10 minutes

STEM is FUN in the Scouting program
Examples of STEM activities

Additional topics as needed

10 minutes

Ideas for including STEM activities in Scouting and OA events
How to provide service in supporting STEM activities

Takeaway Challenge

3 minutes

Please take out your notebook and pen. For the final three minutes, think about the role that you will be playing next year in the OA, or the role you hope to play.

Write down three key ideas related to this session that you could help improve the way your chapter, lodge, or section works

Ideas for STEM program within your Lodge, Chapter, Council or Unit

During your break time later today, share these with others in your chapter or lodge.

Trainer Instructions: Have a prop to go with each of the main requirements. Show the props to help reinforce the idea of each requirements.



Appendix: Resources and Source Material

- STEM in Scouting website
<http://www.scouting.org/stem.aspx>
- STEM Mentor Resources
<https://www.scouting.org/stem-nova-awards/council/volunteer-support/>
- Finding STEM Volunteers
<http://blog.scoutingmagazine.org/2015/09/18/how-to-find-stem-experts-for-your-next-scoutmeeting-or-event/>
- STEM Supernova
<https://www.scouting.org/stem-nova-awards/awards/boy-scouts-supernova-awards/>
<https://www.scouting.org/stem-nova-awards/awards/venturer-supernova-awards/>
- STEM Nova Awards Guidebooks
Cub Scout Nova Awards Guidebook
Boy Scout Nova Awards Guidebook
Venturer Nova Awards Guidebook
- Commercial Sites, available online at
SteveSpanglerScience.com
Teachersource.com
Pitsco.com
<https://www.nasa.gov/audience/forstudents/index.html>
<https://www.engineeringtoolbox.com/>
- Lodge / Chapter Journey to Excellence Workbook
<https://oa-bsa.org/resources/forms/>
- GSLAC STEM website
<http://stlbsa.org/activities/other-activities/stem/>
Facebook
STEM Nova Award, BSA
Scouting and STEM - Greater St. Louis Area