



SeaPerch Presentation (Middle School)

All teams participating in the 2013 Northern Virginia SeaPerch Middle School Competition are required to present how they worked as an engineering team to plan, construct, test, and modify their SeaPerch unmanned underwater vehicle. Each team will have 6 minutes to present their work to the judges. Presentations that run 7 minutes will be interrupted and stopped. After listening to the team and reviewing their presentation material, judges will ask the team two SeaPerch related questions. The focus of the presentations is to allow students the opportunity to share their growing knowledge, abilities, and depth of understanding in solving real-life science and engineering problems.

Presentations will be judged based upon the rubric below. Information presented to the judges is to include the following the following (Requirements):

Team name, Student names, Contact information, Source of SeaPerch Kit (in-school program, after school activity, home school project, summer workshop, etc...), Title, Statement of problem, Goals, Design Process (First design, Problems encountered, designs modifications, ...), Testing SeaPerch, Summary/Conclusions and areas for improvement.

Vocabulary: Define: density, volume, buoyancy, displacement, ballast, propulsion, circuits, switches. Identify and define four additional terms associated with your SeaPerch experience.

The rubric is designed to help teams prepare for the SeaPerch Presentation at the Northern Virginia Middle School SeaPerch Competition. It is also the score sheet that judges will use to evaluate the presentation. While preparing your presentation, here are some points and questions to consider:

- The maximum poster size is 48"x 36". A header/title that fits on top is allowed.
- Graphics may include drawings, sketches, photos, etc...
- Describe the process to design, build and test your SeaPerch.
- What did your SeaPerch need to do, and how did your design meet that requirement?
- What score/time do you anticipate for each game?
- Explain how you worked as a team.
- What did you learn from this experience?
- Is each member of the team prepared to participate in the oral presentation as well as the Q & A period?

Northern Virginia Middle School SeaPerch Presentation Rubric

	BONUS 1.1	"A" work 1.0	"B" work 0.8	"C" work 0.6	"D" work 0.4	"F" work 0.0
Overall appearance and size. (5 points) Score = _____	Exceeded "A" work	Professional appearance. Exceptional use of color, text and graphics. Poster is adequately sized and free standing.	Very pleasing to view. Nice color and graphics. Poster is adequately sized and free standing.	Pleasing to view. Poster is not adequately sized or not free standing.	Cluttered or sloppy appearance. Lack of color. Poster is not adequately sized or not free standing.	Unreadable or no poster.
Text size/balance (5 points) Score= _____	Exceeded "A" work	Text size is appropriate and text/graphics are perfectly synchronized. Text perfectly explains graphics.	Text size is appropriate and text/graphics are synchronized. Easy to read from 1 meter. Text explains graphics.	Too much text. Text for Figures too small. Text does not explain graphics.	Cannot understand graphics. Text too small.	Unreadable or no poster.
Requirements (5 points) Score= _____	Exceeded "A" work	All requirements are met.	Most requirements are met.	About half of the requirements are missing.	Most requirements are missing.	Unreadable or no poster.
Poster Organization (5 points) Score= _____	-----	Professional appearance. Organization and flow are intuitive to the reader.	Explicit headings and regimented numbering with rows/columns.	Implied headings.	Unclear how to move through poster.	Unreadable or no poster.
Design Process (40 points) Score= _____	Exceeded "A" work	Incorporates multiple scientific principles; detailed evolution to final design; demonstrates great understanding of process; goals referenced in process, areas for improvement.	Some ties of basic scientific principles to design process; Explains evolution to final design; demonstrates understanding of process.	Explains deviations from basic SeaPerch; demonstrates understanding of process.	Standard SeaPerch with minor upgrades.	No documentation.
Documented Testing (15 points) Score= _____	Exceeded "A" work	Numerous trials; Specific timeline of testing from first ballasting to final design, detailed lessons learned.	Multiple trials; General description of timeline and lessons learned.	Few trials; Timeline of testing from first ballast to final design	Little testing done. Adequate documentation.	No documentation of testing.
Oral Presentation (15 points) Score= _____	Exceeded "A" work	Well organized, all team members contributing equitably, smooth, all major topics covered.	Organized, all team members contributing, all major topics covered.	Loosly organized, all team members contributing, most major topics covered.	One teammate dominates or lack of respect, punctuality, enthusiasm.	Not given.
Presentation length (5 points) Score= _____	-----	5.5 to 6 minutes	5 to 5.5 minutes	6 to 7 minutes	Under 5 minutes	Needed to be stopped by judges.
Q & A with Judges (5 points) Score= _____	Exceeded "A" work	All team members contribute equitably, smooth articulate correct responses.	All team members contribute, smooth responses.	All team members contribute, nonconcise responses.	One teammate dominates or incorrect answers.	None or inappropriate.