



USS CLEVELAND LEGACY FOUNDATION STEAM STARS PROGRAM

LESSON OVERVIEW

This lesson concludes the STEAM Stars modules with a focus on team skills lessons as learned by the U.S. Navy SEALS. Throughout the presentation, students will learn team-building concepts in an engaging way, and verify their understanding through an engaging interactive activity that puts these skills to the test. Students will walk away with a better understanding and appreciation for teamwork skills by using their negotiating, problem solving, critical thinking, communication, and collaboration skills with their classmates.

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LESSON TITLE

U.S. Navy Team Skills

TIME

90 min

1 class for Presentation and start of Activity

1 class to finish Activity and Wrap-Up

LEARNING OBJECTIVES

Students will:

- Learn lessons on teamwork
- Practice teamwork skills
- Learn about delegation and leadership
- Practice negotiating, reasoning, and critical thinking
- Exercise skills in Collaboration, Communication, Creativity and Problem Solving while completing tasks and working as a team

NEXT GEN SCIENCE STANDARDS (NGSS)

This lesson helps students prepare for these Next Generation Science Standards Performance Expectations:

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

MS-PS3-2. Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.

MATERIALS AND EQUIPMENT LIST

- 1. Module 7 Presentation (U.S. Navy Team Skills)
- 2. Ultimate Teamwork Challenge! Activity Materials needed for each group:

	6	CU	ıps
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 1 rubber band 1 Pipe Cleaner or 2 foot piece of stri Team Pen (marker with strings attace) Extra materials for the class: Extra cups Extra rubber bands 	ng hed - see instructions under <i>Prep Work</i>)
STUDENT ACTIVITY SHEETS/HANDOUTS M7 Worksheet	
TECHNOLOGY TOOLS ☐ Digital display projector with internet access ☐ Ability to project and play Google Slides and ☐ Printer/Copier ☐ Access to Smartphone or Computer with Inhttps://musiclab.chromeexperiments.com/	d YouTube videos with sound
PREP WORK Test slide deck Print the student worksheets (1 per group, Pre-sort materials for each group Pre-assemble Team Pen (if needed)	Double-sided. Color or Black and White)
each team member). Tape the s	1 marker, tape, and 4 - 2 ft pieces of string (one for string around the marker, like this picture. Make sure security with masking tape, duct tape, or rubber
Go to the OUSSCLF-STEAMStars YouTube to watch helpful How-To videos!	State Stat

PROCEDURE PART 1: PRESENTATION

Module 7 - U.S. Navy Team Skills

Slide 1.



Slide 2.



Over the past weeks as we've learned about S.T.E.A.M. in the U.S. Navy, one thing that you may have noticed is that nothing happens in the Navy without teamwork! Whether their job is working on a ship, submarine, or with planes; whether they are gathering intel, saving lives in medicine, or bringing beautiful music to the world—in every job, and every field, and every mission, it's important that teammates, units, and cross-functional teams work together and can rely on each other. In the Navy, team skills are critical. But there's one Navy team in particular that is actually known as the highest performing team in the world. Can anyone guess which team that is?

Slide 3.



It's the U.S. Navy SEALs. This group of elite special forces set the standard for operating as a team at the highest level, under the most stressful conditions in unpredictable environments, and being exceptionally good at what they do. They have been studied extensively on what makes them successful and how they are able to function so effectively. Here are a few lessons on teamwork that we all can take away from the SEALs...

Slide 4.



1. No discrimination

They don't look down on anybody on the team. Their orientation is the most mentally and physically challenging training, and there are no accommodations, whether you are short, or tall, or fat, or thin, male or female. Out of over 100 people who go through this training each year, 75% quit before it's over. Generally around 16 make it to the end and are awarded a job. And surprisingly, it's not the strongest guys who make it through. The SEALs are a prime example that we shouldn't judge a book by its cover.

Slide 5.



2. Every person counts

On a team, we all have roles or tasks to perform in a larger operation. When all parts of the team bring their best, the team performs better. When one part slacks, the team suffers. You may think you have a small part, but your role is part of a bigger picture. Each individual plays an important role in completing missions, and all roles are instrumental in the team's success. A famous Navy

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SEALs saying is, "Individuals play the game, but Teams beat the odds." 3. Communicate

Slide 6.



Good communication is necessary for any team or relationship in order to accomplish a task. You wouldn't get very far with your team if you didn't all speak the same language, right? But as you saw in many of our lessons, communicating for Navy sailors often goes beyond languages—especially when you're communicating underwater, in code, or in foreign lands! For Navy SEALs, being able to communicate with each other effectively builds trust and allows teams to operate efficiently in any environment.

Slide 7. 4. Be open to ideas – ALL ideas!



In a team, nobody knows it all. In the Navy, even high ranking officers are open to ideas from their subordinates and team members. That way they get a new view of the situation and it usually helps the team. So don't shoot down a team member's ideas, or be afraid to speak up when you have one. It may be the one that saves the day.

Slide 8. Lastly, 5. Help and encourage one another



Teamwork is not competitive. Everybody in a team works together and helps each other accomplish the task or the mission fails. When one falls, the other picks him up. This is what makes a team solid and keeps them going.

Slide 9. A Team is better than One.



Navy SEALs know they are stronger, smarter, and better together, than they are on their own.

Slide 10.



Now we'll get to end with the Ultimate Teamwork Challenge and put these skills to the test! In this activity, you'll need to work together to get through each challenge. Remember the lessons we just talked about... Don't judge, every person counts, communicate, be open to ideas, help one another. These are all going to help your team succeed. We'll be breaking into teams of 4. The first activity will be with these cups. After you're done with the first challenge, and I've checked it, you can go on to the next one, and on the back side is a second activity using the "Team Pen" (hold up the pen).

Here are the rules for the first activity... (Begin activity)

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PROCEDURE PART 2: ACTIVITY

Ultimate Teamwork Challenge!

The Rules:

- ALL group members must participate for each challenge
- Only the rubber band can touch or move the cups
- If the directions for each challenge are not followed correctly, groups will have to restart that challenge
- Have each challenge checked by me before continuing to the next challenge

Instructions:

Divide students into teams of four. Provide each team with six cups, one rubber band and four pipe cleaners (or four pieces of string that are each two feet long). Students must work as a team to stack all of the cups in a pyramid. Here's the catch: they cannot touch the cups directly. Students must create a tool using the pipe cleaner (or string) and rubber bands to move the cups. Then they will tackle the challenges on the worksheet one by one. Walk around the class and make sure you are enforcing the rules for talking/no talking, one hand/two hand, etc. Students should complete each task in 10 minutes or less. Be prepared to supply extra cups for the Bonus Challenge after #4 "Build the Tallest Tower."





After the cup challenges are complete, teams will move onto the Team Pen challenge (back side of the worksheet). Students need to work together to write a word with the pen. Each team member can only use one hand. Be sure to encourage them to communicate directions to each other with their words (up, down, left, right).

PROCEDURE PART 3: DISCUSSION

In Activity/Post Activity Discussion

Use these questions after the activity as a debrief. Or if you have a transition time between periods where you need to pause the activity, you can ask these questions to the class during the break or before restarting:

- What were some of the challenges your group faced? How did you resolve the conflicts that came up?
- What communication or collaboration techniques did your group use to be successful? What didn't work so well?
- Why are collaboration and communication skills important characteristics for scientists to have?

When students respond, guide them to elaborate on their responses. For example, if a student talks about how they needed to use communication skills, ask how they communicated with one another. What was their language like? How did they talk to their teammates?