

AUG/SEP  
2022

News from the field of the premiere DoD Youth STEM education program.

## Curriculum Schedules Are Due September 26th!!

It's that time again! Please complete and submit your 2022-2023 school year curriculum schedules for review and approval.

Don't know where to start, or what to do? Never fear! STARBASE-U has some helpful hints, tips, and tricks for creating your curriculum schedules. In the *STARBASE Approved Curriculum* course, you will find curriculum implementation guidelines, thorough instructions on creating your curriculum schedule, samples, and two different templates for your use.



Save your curriculum schedule using the following format for your file name

*FY23\_State\_SiteName\_Curr*

and upload your document to the shared site folder in Google Drive that is connected with your [dodstarbase.org](mailto:dodstarbase.org) email account.

Before you submit, review and check:

- Does your schedule meet all of the objectives for each category?
- Did you allow time for student breaks and lunches?
- Did you allow time for classroom management?
- Are parent lessons delivered BEFORE follow-on appendix lessons and activities?
- Are curriculum categories spiraled throughout the five day plan?
- Have you utilized the correct colors for categories?
- Are your timing blocks accurate?
- Is your site name updated in the heading of your document?

Please contact [email@dodstarbase.org](mailto:email@dodstarbase.org) with any questions or concerns with submission.



"Scientists investigate that which already is; engineers create that which has never been." -- Albert Einstein

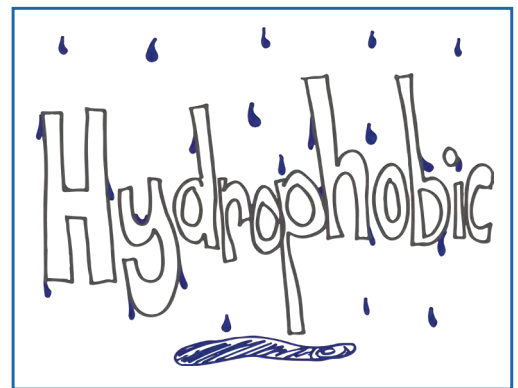
# Visual Vocabulary in Vermont

DoD STARBASE curriculum and activities are full of new and essential vocabulary that we introduce to our 5th grade students. From hydrophobic to compounds, these terms are foundational for forming understanding and connections to the content. In South Burlington, Vermont, the STARBASE team has implemented the use of visual vocabulary to help their students grasp the meaning of terms and phrases they may not have heard before. Let's take for example, hydrophobic and hydrophilic.

**Hydrophobic — Repelling, tending not to combine with, or incapable of dissolving in water.**

**Hydrophilic — Having an affinity for water; readily absorbing or dissolving in water.**

What? How? Say that again? What is "repelling"? What does "affinity" mean? We have heard it all before. And although, we encourage our students to ask questions, we also strive for them to make their learning their own! So, instead of presenting the scientific definition to students and checking for understanding, program instructors can easily incorporate a new strategy. Let's take a look:



Show students the two images and have them make observations about the two new words/images and see if they can figure out the definition. Students may share the following:

- » They both start with the letter "H."
- » They both start with "Hydro."
- » They both have blue droplets on the page.
- » Hydro means WATER!
- » Hydrophilic has the water INSIDE the word, while hydrophobic has the water on the OUTSIDE of the word.

Through this discussion, and potentially some driving questions from the instructor, students may be able to come up with the meaning of these two new vocabulary words on their own and make connections that they will remember not only throughout the STARBASE activity, but down the road in their learning as well!

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Here are some hints for utilizing visual vocabulary at your STARBASE Site.

- » Vocabulary words should be written in a large font size that fills the page or board that students are seeing.
- » Use empty block letters if possible so that colors and images can be included as needed.
- » Use of colors helps student predict meanings in words such as if the word might have to do with heat or liquids.
- » When possible, pair the word with its antonym and present both words at the same time.
- » Prompt students to look at the letters and the colors and listen to how the words sound and then make any observation about what they can see or hear about the words.
- » Have fun and be creative with your visual vocabulary!

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## Electronic Submission of Operational Site Visit Documents



You may have noticed that you have a new folder on your Google Drive! The SPECTRUM Group is moving towards collecting operational site visit documents electronically this year.

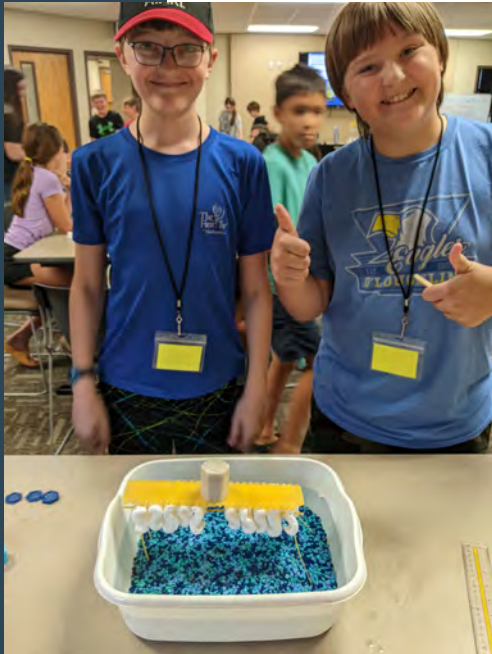
As you create and gather your documents throughout the year, you can house them on your Google drive, and The SPECTRUM Group will have access to them as needed! More information on the required document checklist and how to upload them to your folder coming soon!

### A Call for Participation

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Throughout the year, this newsletter will continue to spotlight the achievements, partnerships, and tips of the participants of the DoD STARBASE program. Please share your achievements, success stories, and helpful tips with us at [email@dodstarbase.org](mailto:email@dodstarbase.org).

# STAR Studded Summer at STARBASE Salina



After completing four on-site summer camps, STARBASE Salina hit the road to partner with Fort Hays State University to provide a four-day summer outreach to students in Western Kansas. Fort Hays, located 96 miles west of Salina, became the setting for Camp North Star, where students who do not typically have opportunity to attend a Kansas STARBASE program during the school year, got to participate in hands-on/minds-on STEM activities.

Students enjoyed learning about the Engineering Design Process (EDP) through activities like Lt. Eggbert and Operation Bridge Quest. They further explored the EDP using Onshape to create original designs. Newton's Laws of Motion were reinforced through straw rockets, as well as building and launching their own solid fuel rockets on the last day.

Cari Rohleder, the Fort Hays coordinator for Camp North Star, had positive things to say about the camp. "When STARBASE comes for the week I have no worries or concerns with the leadership or the camp. STARBASE teachers are top notch and always prepared for anything that comes their way. I look forward to STARBASE week during the summer because the campers are so engaged and learning many different science and space facts. Fort Hays State University hopes to continue the opportunity of partnering with STARBASE for our community."

Besides dedicated STARBASE Salina staff members, Fort Hays provided six college students the opportunity to act as Flight Leaders for the week. College students majoring in education enjoyed working with the kids, as well as seeing how STEM education can ignite learning.

College student Devon Harris commented, "Camp North Star is an extraordinary experience for elementary students interested in Science, Math, Engineering, and Technology. It was really special to see how much the students enjoyed learning about building rockets, and watching their eyes light up when they learned something new. They had so much fun they didn't even realize they were doing Math and Science problems. I wish I had this experience growing up because Camp North Star makes up for the lack of STEM in a regular classroom setting AND it's fun!"



# STARBASE Goodfellow Renews STEM Partnership Agreement



STARBASE Goodfellow renewed their partnership for another five years on July 20, 2022. Since its inception in September 2017, STARBASE Goodfellow and their educational partners have served Goodfellow Air Force Base, San Angelo, and the surrounding Concho Valley Area by educating and graduating over 7,000 local fifth grade students in the areas of Science, Technology, Engineering, and Math, known as STEM.



Howard Taylor, Executive Director of the San Angelo Museum of Fine Arts (local non-profit sponsor) and Colonel Moore, 17th Mission Support Group Commander officially signed the partnership agreement to continue the DoD STEM program on base. Brenda Gunter, Mayor, City of San Angelo, Texas was present for the event and stated a few words to the audience on the importance of STEM education in the San Angelo, West Texas area and our nation.

With the new agreement the program will continue to positively impact an average of 30 schools and 1,500 students per year in their Basic STEM Academy and with the addition of the 2.0 After School Program, they will mentor 6th-8th graders in drone technology and aerial robotics.

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2023 Teacher  
Survey

The 2023 Teacher Survey is available now in STARBASE-U in the *SB Program Directors Course* under the Academy Management section. Please contact [email@dodstarbase.org](mailto:email@dodstarbase.org) with questions.