

Southern Cayuga Central School

STEM 6 Curriculum Map 2023/2024

In addition to the lessons listed, students will participate in team STEM Challenges.

Topics are a baseline of expected curriculum. This class will also support topics covered in 6th Grade Science, as needed.

Title or Topics w/ NYS Standards	Essential Questions & Vocabulary	Content Skills (Activities to cover Essential Questions)	Major Assessments (Tests, Project, etc.)	Time Frame
Class Expectations and Understanding of Teamwork	What are qualities of effective teamwork?	Cup Stacking Challenge	Completing 5+ of the cup stacking challenges using only 3 strings attached to a rubber band	1 class
Escape the Room Teambuilding & Problem Solving	Can you work with your team to be first to find solutions? Vocab: determination, specify, exhibit	Students will work in groups of four to complete the tasks required.	Class discussion of solutions, what worked, what should be changed	1 class
Reading, Writing, and Following Instructions. NYS Standard 4.	Why is it important to be able to communicate ideas, rules, and instructions? Vocab: coherent/incoherent, complexity, correlation, devise, specify	Write It—Do It activity with Legos. Handout from Science Olympiad. Team building.	Group completion of the activity. Journal entry.	1 class
Applied Digital Skills Computer Science and Digital Literacy Standards: 4-6.DL.1 4-6.DL.2 4-6.DL.3	What digital skills are needed for the jobs of today and tomorrow	Applied Digital Skills Online Curriculum	Completion of assigned Applied Digital Skills lessons	10-15 Assignments

4-6.DL.4 4-6.DL.5				
<p>Common Sense Digital Citizen Program</p> <p>Computer Science and Digital Literacy Standards:</p> <p>4-6.IC.3 4-6.IC.5 4-6.CY.1 4-6.CY.2 4-6.CY.3 4-6.CY.4 4-6.CY.5 4-6.DL.6 4-6.DL.7</p>	<ul style="list-style-type: none"> ● Finding Balance in a Digital World <ul style="list-style-type: none"> ○ digital media · media balance · red flag feeling · unplug · digital habits ● Don't Feed the Phish <ul style="list-style-type: none"> ○ private information · identity theft · phishing · internet scam · shortened URL ● Who Are You Online? <ul style="list-style-type: none"> ○ anonymous · affinity group · curate · finsta ● Chatting Safely Online <ul style="list-style-type: none"> ○ private information · red flag feeling · inappropriate · risky ● Digital Drama Unplugged <ul style="list-style-type: none"> ○ de-escalate · digital drama ● Finding Credible News <ul style="list-style-type: none"> ○ bias · corroboration · credible · evaluate 	<ul style="list-style-type: none"> ● Media Balance & Well Being-How do we balance digital media use in our lives? ● Privacy and Security-How can you protect yourself from phishing? ● Digital Footprint & Identity-What are the benefits and drawbacks of presenting yourself in a different way online? ● Relationships & Communication- How do you chat safely with people you meet online? ● Cyberbullying, Digital Drama & Hate Speech ● News & Media Literacy- How do we find credible information on the internet? 	Grade based on participation and completion of activities presented.	6-10 classes

Coding the Vex Go Robots NYS standard 2	<p>What are some of the basic coding commands?</p> <p>Vocab: coding, virtual, acquire, analyze, exhibit, input, design, sequence of events</p>	Code a virtual robot to perform simple commands.	Completing simple coding programs to successfully complete the required challenges	10 classes
Coding the Vex Go Robots NYS standard 2	How can coding help us use robots for simple tasks?	Have the robot perform a simple task and then modify it to perform more efficiently.	Successful completion of each assignment	8-10 classes