

# Cybersecurity Awareness Month 2022: High School Lessons



## Cybersecurity Awareness 2022 Lesson:

In this resource you will find 4 cybersecurity lessons geared towards students in grades 9 - 12.

## How to Implement:

- Option 1: You can fit one lesson in per week for 4 weeks in October.
- Option 2: You can do all lessons in one week that is dedicated to cybersecurity.
- Option 3: Do whatever works for your class!! (These options are just suggestions.)

## Show Off Your Students' Learning

If you would like to show how your students are learning about cybersecurity, please feel free to email us student work or classroom pictures to [the4ms@gmail.com](mailto:the4ms@gmail.com). We would love to see what your students are learning about cybersecurity in October.

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Digital Footprint	
Website(s)	<ul style="list-style-type: none"><li>• Hour of Code: <a href="#">AVATAR: Big Data &amp; Digital Footprints</a></li><li>• <a href="#">AVATAR: Big Data &amp; Digital Footprints Teachers Notes</a></li></ul>
Materials	<ul style="list-style-type: none"><li>• Student device with internet connection</li><li>• Access to <a href="#">AVATAR: Big Data &amp; Digital Footprints</a></li></ul>
Time Needed	60-75 min
Lesson Plan	<ul style="list-style-type: none"><li>• Students will go to <a href="#">AVATAR: Big Data &amp; Digital Footprints</a> and begin working on tasks 1 - 5.<ul style="list-style-type: none"><li>○ Task 1: Digital Footprints</li><li>○ Task 2: The Internet of Things</li><li>○ Task 3: Smart Entertainment</li><li>○ Activity: Blind Data</li><li>○ Task 4: Smart Health &amp; Fitness</li><li>○ Task 5: Location &amp; Transport Data</li></ul></li><li>• As students finish each level, have them write 2 or more things that they learned through completing that task.</li></ul>

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CS Unplugged - Cryptography	
Website(s)	<ul style="list-style-type: none"><li>• <a href="#">CS Unplugged - Cryptography Link</a></li><li>• <a href="#">Cryptography: Crash Course Computer Science Video</a></li></ul>
Materials	<ul style="list-style-type: none"><li>• Pen / Pencil</li><li>• <a href="#">Caesar Cipher Student Worksheet</a></li><li>• <a href="#">CS Unplugged - Cryptography (Teacher)</a></li><li>• <a href="#">CS Unplugged - Cryptography Slides</a></li></ul>
Time Needed	65 min
Lesson Plan	<ul style="list-style-type: none"><li>• Show <a href="#">Cryptography: Crash Course Computer Science Video</a> (12:33 min)</li><li>• Guide students through the <a href="#">CS Unplugged - Cryptography</a> lesson (50 min)</li></ul>

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Scams and Phishing	
Website(s)	<ul style="list-style-type: none"><li>• <a href="#">Stay Safe from Phishing and Scams</a></li><li>• <a href="#">Google Phishing Quiz</a></li><li>• <a href="#">Spotting Scams</a></li></ul>
Materials	<ul style="list-style-type: none"><li>• Spotting Scams Student handout (1 per student)</li><li>• Spotting Scams Student handout - Teacher Version</li><li>• Paper</li><li>• Markers and colored pencils</li></ul>
Time Needed	90 min
Lesson Plan	<ul style="list-style-type: none"><li>• Have students watch <a href="#">Stay Safe from Phishing and Scams</a><ul style="list-style-type: none"><li>○ What is social engineering?</li><li>○ What are some types of phishing / scams that are mentioned in the video?</li><li>○ What are some ways to avoid getting caught up in these scam tactics?</li></ul></li><li>• <a href="#">Spotting Scams</a></li><li>• Have students take the <a href="#">Google Phishing Quiz</a> by going to <a href="https://phishingquiz.withgoogle.com">phishingquiz.withgoogle.com</a>.</li></ul>

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Scams and Phishing	
Website(s)	<ul style="list-style-type: none"><li>• <a href="https://www.cybermission.tech/#!/page/home">https://www.cybermission.tech/#!/page/home</a></li></ul>
Materials	<ul style="list-style-type: none"><li>• Computer, laptop, device</li><li>• Internet</li><li>• <a href="#">Cyber Mission Worksheet</a></li></ul>
Time Needed	45 - 60 min
Lesson Plan	<ul style="list-style-type: none"><li>• Students will go to the <a href="#">Cyber Mission website</a> where they will work through three initiatives: Protect, Defend, and Strike.<ul style="list-style-type: none"><li>◦ Each initiative has three levels.</li><li>◦ Depending on students' progress, each initiative could take 10-20 minutes.</li><li>◦ Once the student has completed all three levels for each initiative, they will select the "Play" button under Ultimate Challenge where it will put their new skills to the ultimate test.</li></ul></li><li>• Once students complete the Ultimate Challenge, they will have the opportunity to Explore Cyber Careers and follow prompts on the worksheet.</li><li>• As students work through the various initiatives, they will be completing the <a href="#">Cyber Mission Worksheet</a>.</li></ul>