

# Cybersecurity CyberSnack: Career Opening Questions

Time: 15-20 min

What You'll Need: [Riddle Handout](#)



## NICE FOCUS: Cybersecurity Career Awareness

**Learning Objectives:** I can explain the connection between cybersecurity careers and the cybersecurity techniques, strategies, and the skills needed for these careers such as: logical thinking, need for people who think “out of the box,” problem solving, and recognizing patterns.

**Essential Question:** What do you think are the essential skills needed in a cybersecurity career?

**Key Words:** cybersecurity, logical thinking, thinking outside the box, problem solving, pattern recognizing

### Activity Steps

Teacher Action	Student Action
<p>1. <u>Start a discussion</u> around career opportunities in cybersecurity by asking one or more of the following questions (selection of questions dependent on student level). Have students share responses in the teacher 's preferred method.</p> <ol style="list-style-type: none"> <li>How many of you use a cell phone?</li> <li>How many of you have digital cable or satellite television?</li> <li>How many of you (or your siblings) have a Facebook account? Use Twitter? Instagram? YouTube? TikTok?</li> <li>How many have parents that use ATM machines, credit cards, or debit cards?</li> </ol> <p>2. <u>Connect discussion to cybersecurity</u></p> <ol style="list-style-type: none"> <li>What is cybersecurity?</li> <li>What does cybersecurity mean to you?</li> <li>Who can tell me what cybersecurity is?</li> <li>Who can tell me what type of jobs you can do in the field of cybersecurity?</li> <li>When you think about cybersecurity, what do you think of?</li> <li>Who can give me some examples of careers or jobs in cybersecurity?</li> </ol> <p>3. <u>Explain context:</u> Cybersecurity is the practice of deploying people, policies, processes and technologies by designing, developing, implementing, and</p>	<ol style="list-style-type: none"> <li>Think of possible answers and ask for clarification as needed. Students then share responses in teacher chosen method</li> </ol>

maintaining defensive and offensive strategies to protect organizations, their critical systems and sensitive information from digital attacks. Talk about the connection between careers in cybersecurity and the skills needed such as: logical thinking, need for people who think “out of the box,” problem solving, recognizing patterns

Reflect: Have students reflect on their responses and change or modify their answers as needed.

4. Ask: What do you think is the connection between solving riddles and a cybersecurity career?

**ANSWER:** The skills it takes to solve a riddle are very similar to the skills needed in a cybersecurity career. It is important to have diverse ways of thinking about how to solve problems.

5. Post Riddles: can be solved individually or as a group. Answers can be shared in teacher method of choice

Reflect: Ask students below question and have them share in teacher preferred method:

# Cybersecurity CyberSnack: Riddle Handout

- **Riddle 1:**

Sherlock, a detective who was close to cracking an international smuggling ring has suddenly gone missing. While inspecting his last-known location, you find a note: 710 57735 34 5508 51 7718

Currently there are three suspects: Bill, John, and Todd. Can you break the detective's code?

- **Riddle 2:**

Decode the message-

carrot fiasco nephew spring rabbit

sonata tailor bureau legacy corona

travel bikini object happen soften

picnic option waited effigy adverb

report accuse animal shriek esteem

oyster

- **Riddle 3:**

What number comes next in this number series: 7 8 5 5 3 4 4 ?

\*Hint: check calendar

- **Riddle 4:**

What's the next number in the pattern?

1

11

21

1211

111221

312211

13112221

?

- **Riddle 5:**

Find the next number in the sequence 100 365 24 60 ?

- **Riddle 6:**

Find the next number in the sequence 77, 49, 36, 18 ?

## **Answer Key:**

**Riddle 1 ANSWER:** if you read the message upside down you'll notice that the numbers resemble letters which then form two sentences. Bill is the boss. He sells oil.

**Riddle 2 ANSWER:** : Starting with the first two words, take the first and last letters, reading from left to right. Example: "Carrot fiasco" from these pairs the message is as follows: CONGRATULATIONS CODE BREAKER

**Riddle 3 ANSWER:** 6 - The number of letters in the month "August."For example: January: 7 letters, February: 8 letters, March: 5 letters, April: 5 letters, May: 3 letters, June: 4 letters, July: 4 letters

**Riddle 4 ANSWER:** 1113213211 Explanation: 1 one one → 11 two one → 21 one two , one one → 1211 one one , one two , two one → 111221 three one , two two one one → 312211 one three, one one , two two, two one → 13112221 → one one , one three, two one, three two, one one

**Riddle 5 ANSWER:** 60 → 100 years in a century, 365 days in a year, 24 hours in a day, 60 minutes in an hour, & 60 seconds in a minute.

**Riddle 6 ANSWER:** The next one is 8

$$77 : 7 * 7 = 49$$

$$49 : 4 * 9 = 36$$

$$36 : 3 * 6 = 18$$

$$18 : 1 * 8 = 8$$