



# WHAT IS THE INTERNET?

**Lesson Description:** Students will learn what the Internet is, how it works and how it relates to the World Wide Web.

**Prerequisite Knowledge:** No prerequisites

**Level of Instruction:** This lesson is geared toward a middle school student. I will list other resources at the end for younger students as well.

**Length of Completion:** This lesson may take 2-5 days, depending on extension activities and how in depth the teacher decides to go.

## Applicable Concepts:

### GenCyber Cybersecurity Concepts

Availability

Defense in Depth

Confidentiality

Think Like an Adversary

Integrity

Keep it Simple

## NYSED Standards

New York State K12 Computer Science and Digital Fluency Learning Standards:

7-8.NSD.4 Design a protocol for transmitting data through a multi-point network.

7-8.NSD.5 Summarize where remote data is stored and accessed in a network.

7-8.CY.2 Describe physical, digital, and behavioral safeguards that can be employed in different situations.

7-8.DL.4 Select and use digital tools to create, revise, and publish digital artifacts.



7-8.DL.6 Explain the connection between the persistence of data on the Internet, personal online identity, and personal privacy.

### Resources that are Needed:

- The Internet - PowerPoint
- What is the Internet Video - <https://youtu.be/Dxcc6ycZ73M>
- Polling app - I use polleverywhere.com or menti.com
- Warriors of the Net Video - <https://youtu.be/EOYe71RWMvk>
- How does the Internet Work?- <https://youtu.be/i5oe63pOhLI>

**Accommodations Needed:** Students should receive any of their normal 504 or IEP accommodations they have. All videos are available with closed captioning.

## LEARNING OUTCOMES (CENTURY GOTHIC, 14 PT., WHITE, ITALIC)

LESSON LEARNING OUTCOMES (VERDANA, 12 PT, ALL CAPS)

- Explain what the Internet is
  - Describe how the Internet works

## LESSON DETAILS (CENTURY GOTHIC, 14 PT. WHITE, ITALIC)

**Interconnection:** This lesson would be a starter lesson to lead into Internet security, scams, phishing, making strong passwords. (Hopefully some of these topics will come up in the warm up activity)

**Assessment: (Verdana, 12 pt., Bold)** Assessment will be done through discussions that take place

**Extension Activities: (Verdana, 12 pt., Bold)** Using Lego Bricks create a model of the Internet.

**Differentiated Learning Opportunities: (Verdana, 12 pt., Bold)**

## LESSON (CENTURY GOTHIC, 14 PT. WHITE, ITALIC)



## Lesson Details:

**Warm Up: (3-6 minutes)** Using Poll Everywhere or Menti.com students will answer the question "What words come to mind when you hear the word "Internet?" answers will appear on the word cloud. Students may enter as many thoughts as they want until time is called. Discuss the results. (This is adaptable from lower grade levels to upper grade levels. With younger students- use as a class discussion)

**Lesson: (Verdana, 12 pt., Bold)** Using the PowerPoint, we will explore the Internet, what it is, how it works.

Additional resources:

BrainPOP: Internet Lesson

Story Bots Season 2 Episode 1- How does a Computer work

The Magic School Bus Rides Again Season 2 Episode 4 "Nothing But Net"

