Overview –In this lesson students are introduced to HTML as a solution to the problem of how to communicate both the content and structure of a website to a computer. The lesson begins with a brief unplugged activity demonstrating the challenges of effectively communicating the structure of a web page. Students then look at an exemplar HTML page in Web Lab and discuss with their classmates how HTML tags help solve this problem. Students then write their first HTML. A wrap-up discussion helps to solidify the understanding of content vs. structure that was developed throughout the lesson.

Vocabulary

- **HTML** Stands for Hypertext Markup Language and is used to create the content of a web page.
- **HTML Element** A piece of a website. Marked by a start tag and sometimes closed with an end tag. Also includes the content of the element as well.
- **HTML Tag** The special set of characters that tells the machine where the start and end of an HTML element is and what type it is.
- Website Content The raw text, images, and other elements included in a web page
- Website Structure The purpose of different pieces of content in a web page, used to help the computer determine how that content should be displayed

New Tags

- **<u>HTML</u>** <html></html>
- **<u>Doctype</u>** <! DOCTYPE>
- <u>Paragraph</u> -
- **<u>Body</u>** <body></body>
- Head <head></head>

Introduction to Web Video on YouTube: https://youtu.be/itx0RYOnoBs

Explore HTML

This is a web page written in HTML, the language of the web. You'll learn more about how it works, but first explore it by using the Inspector Tool.

Do This

- Click the Tip "How do I use the Inspector Tool?" on the right to learn how to use the Inspector
- Follow the instructions in the web page to explore the web page and discuss with a partner how it is working.

Introduction to Web Video Part 2 on YouTube: <u>https://youtu.be/Hjl6gbg9kmk</u>

HTML uses tags to help the computer know what different pieces of content in the web page actually are. Right now we've only learned how to tell the computer that some text is a paragraph, or that part of your website is the body. We've already seen how that affects the way our web pages look and are structured. As we move forward we're going to learn more tags and see more examples of how this language helps us add structure to our webpages.

Standards Alignment

CSTA K-12 Computer Science Standards **AP** - Algorithms & Programming

Learn more about Web Design at: <u>https://curriculum.code.org/csd-18/</u>