1. Basics Q8 Introduction to AI   (1-2 class periods)

1. Basics	1.Q8 Introduction to AI

Overview of this Thing: Students will build basic and important technology operations, skills, vocabulary, and an understanding of using computing devices. There are seven main Quests. The three Gold Quests are included for those wishing for additional resources.

Thing Learning Objectives Slide
1. Understand the fundamental concepts and features of the 21T4S website [Empowered Learner].
2. Understand basic concepts of technology operations [Empowered Learner].
3. Set personal learning goals [Empowered Learner].
4. Engage in positive, safe, legal, and ethical behavior [Digital Citizen].
5. Use technology to demonstrate their learning [Empowered Learner].
6. Manage their personal data for privacy, safety, and security [Digital Citizen].
7. Explore real-world issues around safety and security [Knowledge Constructor].

In this Quest, students will encounter examples of AI in everyday life and learn about some of the basic considerations and concerns associated with AI, as well as the importance of using it responsibly.

Quest Learning Objectives
I Can:
- Define AI in my own words.
- Identify ways to use AI tools.
- Evaluate ethical and privacy concerns when using AI resources.

Note: In the past, AI-specific activities were part of this Quest. We have moved those activities into the specific Things and Quests where they are applicable so that students are learning the AI tools and concepts with the specific content connected to those skills ~ true tech/AI integration rather than a separate thing.

Link to [Vocabulary Quizlet](#)

Vocabulary:

- **Algorithm:** An algorithm is a detailed step-by-step set of instructions or rules that a computer program follows to solve a problem or complete a task.
- **AI Writing Prompt:** AI writing prompt is a question or idea you type in to guide an AI tool, which then helps create writing or answers based on what you asked..
- **Artificial Intelligence (AI):** Technology that lets computers and machines "think" and make decisions or create things in ways that seem smart, like a human would.
- **Bias:** A bias is a judgment or opinion based on a personal point of view.
- **Chatbot:** A Chatbot is a computer program that can talk with you by answering questions or having a conversation, kind of like chatting with a human online.
- **Ethics:** Ethics are rules or ideas about what is right and wrong that help people make good choices in how they act.
- **Machine Learning**: Machine learning is a type of technology where computers learn from data and practice, kind of like how people get better at something the more they do it.
- **Natural Language Processing:** NLP is a field of artificial intelligence that focuses on teaching computers to understand, interpret, and communicate with humans in human language.
- **Plagiarism:** Plagiarism is the practice of taking/copying someone else's work or ideas and using that work as your own.
- **Sensors**: Sensors are tools or devices that detect changes around them like light, heat, sound, or movement, and send that information to a computer.

Pre-Planning
- Verify that you can display YouTube videos and that students can view them on their devices.
- Play the videos, create some thoughtful questions for your group of students, and consider including additional or alternative activities.
- Decide whether you will have them include reflections or other content on the Student Portfolio slide in the provided template on the Introduction Page.
- Decide and inform students whether they should use the Student Checklist and, if so, where to save it or how to share it with you.
- Review the additional resources provided on the Completing page.

Additional Resources:
- [Project-Based AI Courses for K-12 students developed by Stanford and MIT Graduates](#)
- [View the Code.org How AI Works activities and lessons.](#)

- Online Article on [4 Ways That AI Can Help Students](#)

For accommodation ideas, visit the [Accommodations Page](#).

Introduction page: Students will review the introduction, Learning Objectives, and play the [What is AI? YouTube (2:37 mins)](#) video.

Vocabulary page: Students review the key vocabulary and play the [Interactive Quizlet Game](#)

What is AI? page:
View the Infographic on [6 Six Ways We Use AI Every Day](#). Make a copy or have the students make their copy [How Do We Use AI?" Document](#). Have the students work on their own or with a partner.

AI in Real Life page:
In this section, you will be discussing bias, privacy and data usage, and inaccurate information with your students. Have the students watch the video [How AI is Making the World a Better Place YouTube (1:30)](#) on the page, review the Real-life Examples on this page, and then have a Discussion and/or have the students write a Reflection that they might add to their portfolio.

AI Ethics & Privacy Page
Teachers: Ethics and COPPA are very important things to consider when using AI with students. Many new AI websites may have age restrictions. Check each website before you use it with your students to make sure they can use it.

Teachers: Privacy when using AI resources: This involves some federal laws and your age. **COPPA** is a law enacted in 2020 that protects the data of students **under 13** even when using AI applications. What about the grades and records for students 13 and over? **FERPA** is a law passed in 1974 to protect student data privacy and determine who can access the records. To learn about FERPA, you and the students can access this [FERPA Basics Introduction YouTube (3:20)](#)

Teachers: Let students know if they will work with a partner or in a group. Keep in mind that they may have heard about **AI and ChatGPT.** Students 13 and over are permitted to use it; otherwise, those under 13 need parental permission.

Students will:
- Watch the [Ethics & AI - Privacy & The Future of Work, Direct Link YouTube (3:26 mins](#)), and complete the [What does Ethics Mean to you? Worksheet](#) with a partner or in a group.

Teachers: You will need to have the students create their copy, or you will make a copy for them.

This section applies to students under 13 years of age.

Students will:
- Play the video Features Impacted by COPPA YouTube (3:16).
- Work with a partner, small group, or full class and make a list on a large sheet of paper or display, or use a whiteboard-type app (Google Jamboard, ...) that can be shared.
- Complete the Privacy & COPPA Worksheet, making a list of the different apps and devices that they are using that are collecting information about them.

Completing the Quest Page
Have the students read this page and verify that they have completed everything in this Quest.

Videos and resources in this Quest. You must check that students have access to these resources on their devices.

Videos from Outside Sources
- Ethics & AI - Privacy & The Future of Work, Direct Link YouTube (3:26 mins.)
- Features Impacted by COPPA YouTube (3:16)
- FERPA Basics Introduction YouTube (3:32 mins.)
- How AI is Making the World a Better Place YouTube (1:35 mins.)
- What is Artificial Intelligence? YouTube (5:08 mins.)

21T4S Documents & Quizzes

- How Do We Use AI? Document
- Privacy and COPPA Worksheet
- What Does Ethics Mean to You? Worksheet
- Vocabulary Quizlet

Additional Websites

- 4 Ways That AI Can Help Students
- Project-Based AI Courses for K-12 Students Developed by Stanford and MIT Graduates

Student Checklist 1.Q8 Student Checklist
Broken Link or Content Update Report

Please select this link or the broken link icon to report any broken links or content no longer applicable so that we can quickly update it. Thank you for your help.

How to cite an AI-generated image

AI Overview

To cite an AI-generated image, you can include the AI tool, the prompt, and the date in the caption. You can also include the AI tool's creator and version number.

MLA style
- Include the image as a numbered figure with a caption.
- In the caption, include the prompt in quotation marks, the AI tool, the version, and the date.
- In the Works Cited list, include the prompt, the AI tool, the version, the creator, and the date.

APA style
- Include a figure number in bold, a brief title in italics, and an attribution in a Note area below the image.
- In the Note area, include the prompt you used to create the image.
- If the image is reproduced in a published source, reference the published source in the caption and in your reference list.

Chicago Manual of Style
- Cite AI-generated images like any other image.
- Include the name of the AI tool, the company that created the AI, and the prompt.