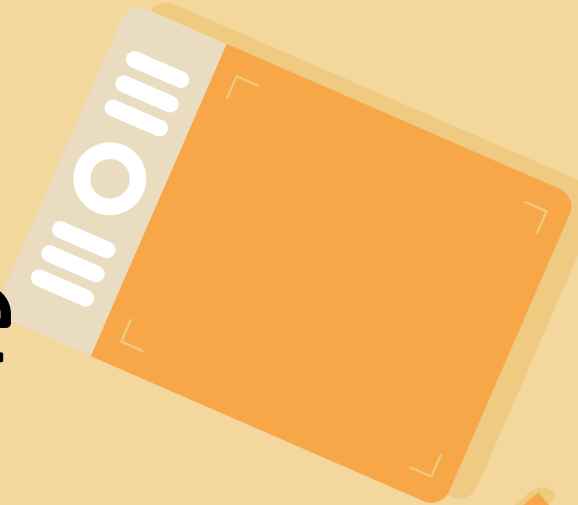


# Artificial Intelligence

## In Your Classroom





# Ben Sondgeroth

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[@bsgolfphotogrphy](https://www.instagram.com/bsgolfphotogrphy)

# Agenda

- What is Artificial Intelligence?
- AI uses in Education
- Limitations and Challenges



[Canva AI Image Generator](#)

# What is AI?

**Pop quiz:** How long has artificial intelligence been around?



# A VERY Brief History of AI

## Computing Machinery and Intelligence

Alan Turing publishes article proposing machines that can think, Turing Test.

1950

1955

## Logic Theorist

The first AI program is invented

## Eliza

First chatbot

1964

1986

## NavLab

Autonomous automobile

1997

## Deep Blue

Computer beats grandmaster Gary Kasparov at chess.

## Dragon Systems

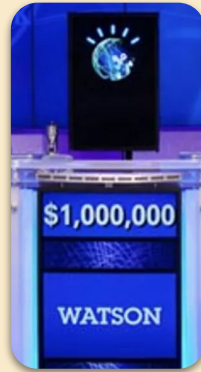
First speech recognition software available

# A Brief History of AI in the 2000's



2002  
**Roomba**

**Siri**  
2008



2011  
**Watson**

2014

**Alexa**



2022



## OpenAI

Chat GPT, Dall-E, Craiyon released to the public with API access, immediately gaining millions of users.

# So What's the Big Deal with AI Now?

## Generative

Can produce new content from what it has learned.



## Natural Language Processing

Trained to interact with people in the way we communicate.



## Refineable

Results can be tailored, fine-tuned, and targeted.



## Multimedia

Text, images, audio, video are all editable and producible.

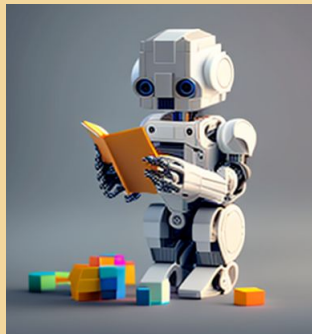


# Generative AI



Imagine a box of Legos...

Each Lego represents a small piece of information that the computer has learned from studying a bunch of examples...



Give it a prompt like '**create a tree**,' and it starts piecing together the Legos to make an example of what it has previously learned about trees.



It keeps trying different combinations until it comes up with something that looks like a tree.





# Machine Learning

A branch of AI and CS focused on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy.

Source: [IBM](#)



**Chat GPT-3 was trained on 176 billion parameters and 570 GB of data from books, websites, articles, and more.**



But... it doesn't know the context of what it is saying.

Instead, it makes predictions on what the next word should be as it creates.

Generative AI

**By the way... most of the text and images from this section were AI-generated.**



Images from [Midjourney](#) and [Canva](#)



How can we simplify it?

*Hopefully AI will do the 4Ds – the dirty,  
dull, difficult and the dangerous.*



Professor Toby Walsh, Reddit AMA

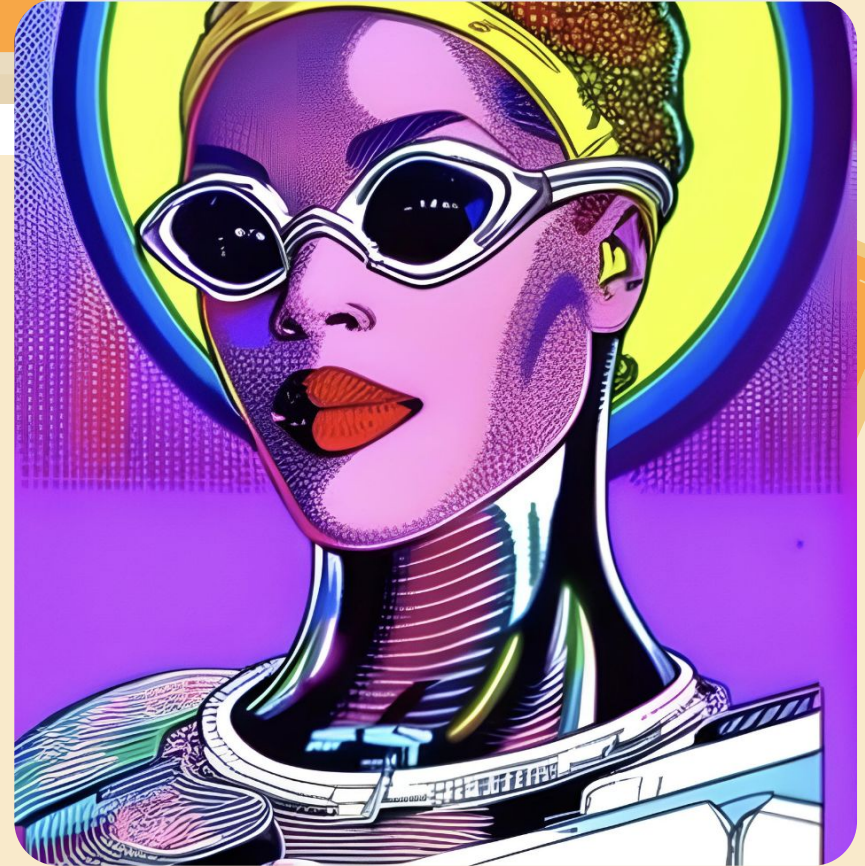


# The Big Names

- OpenAI - Chat GPT
- Google Bard
- Adobe Firefly
- Microsoft Bing, Copilot
- Meta + MS = Llama
- Elon Musk - [X.AI](#)
- AppleGPT, Apple Ajax

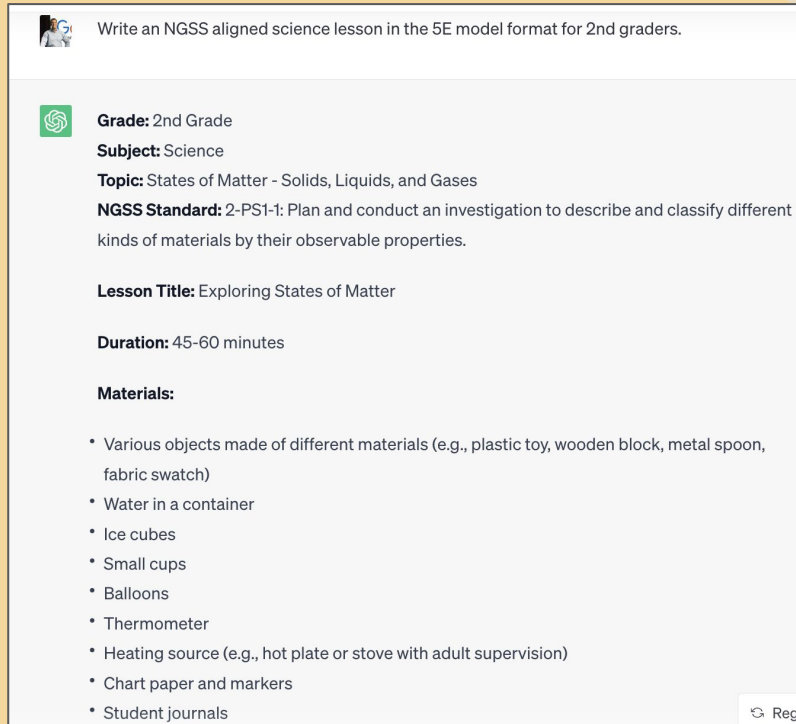


# AI Uses for Educators




# Chat GPT: Create Lesson Outlines and Plans

**Write an NGSS aligned science lesson in the 5E model format for 2nd graders.**



Write an NGSS aligned science lesson in the 5E model format for 2nd graders.

 **Grade:** 2nd Grade  
**Subject:** Science  
**Topic:** States of Matter - Solids, Liquids, and Gases  
**NGSS Standard:** 2-PS1-1: Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

**Lesson Title:** Exploring States of Matter

**Duration:** 45-60 minutes


**Materials:**


- Various objects made of different materials (e.g., plastic toy, wooden block, metal spoon, fabric swatch)
- Water in a container
- Ice cubes
- Small cups
- Balloons
- Thermometer
- Heating source (e.g., hot plate or stove with adult supervision)
- Chart paper and markers
- Student journals

Reg



# Lesson Generator: Curipod

[Curipod.com](https://Curipod.com) Code: CURIBEN

Topic for the lesson  Grade



Civics 5th Grade 

✓ Learning objective and standards

SS.CV.1.5. Distinguish the responsibilities and powers of government officials at various levels  

Do magic ✨

### Create new lesson

 Blank lesson	 Full lesson	 Checkin	 Lesson hook
 Beta What do you infer?	 Beta Personalised feedback	 Discussion questions	 Mini project
 Brain break	 Poll questions	 Exit ticket	



# Curipod Results

The screenshot displays the Curipod interface. At the top left, the Curipod logo is next to 'Civics' and 'Settings' tabs. On the top right, there are 'Saved' and 'Present' buttons. The main area shows a slide titled 'Work together in pairs: What are the three branches of the United States government?' with a background image of a protest. A search bar at the top of the slide area contains the text 'Not exactly what you were looking for?' and a 'Make a new lesson' button. A sidebar on the left lists five slides, with the first slide titled '1 Word Cloud' and the second '2 Slide'. A bottom sidebar contains '+ Add slide' and 'Import PPT/PDF' buttons. On the right, the 'Activity' settings panel shows 'Open question' selected, a duration of '02:00', and '3 answers' entries per participant. A 'Results' section shows a grid icon. A notification bubble at the bottom center says 'Remember to fact check content generated by the AI'. A vertical watermark 'SLIDESMANIA.COM' is on the far left.

Curipod

Civics Settings

✓ Saved ? Present

1 Word Cloud

the name of the branch of government responsible for making laws?

2 Slide

Learning objective:

- Identify the three branches of government: executive, legislative, and judicial.
- Explain the powers and responsibilities of each branch.
- Understand the checks and balances system.

3 Slide

Civics: What We Can Do To Make a Difference

- Know the roles and responsibilities of citizens in a democracy.
- Vote in local and national elections to have your voice heard.
- Volunteer in your community to make things better for everyone.

4 Slide

Concepts:

- Identify the roles and responsibilities of citizens in a democracy. It includes the study of the current business and politics in the public and public policy.
- Know the roles and responsibilities of citizens in a democracy. It includes the study of the current business and politics in the public and public policy.
- Understand the checks and balances system.

5 Slide

+ Add slide

Import PPT/PDF

Join at curi.live with pin: 84213

Curipod

Work together in pairs: What are the three branches of the United States government?

Drag and drop or click to select an image

Supported file types are .jpg, .png, .webp and .gif

Remember to fact check content generated by the AI

Activity ?

Open question

Duration ?

02:00

Entries per participant ?

3 answers

Participants will not vote ?

Results ?

Open question calendly.com/santosltc

Your participants answer your question with longer sentences. The results will be displayed in a grid

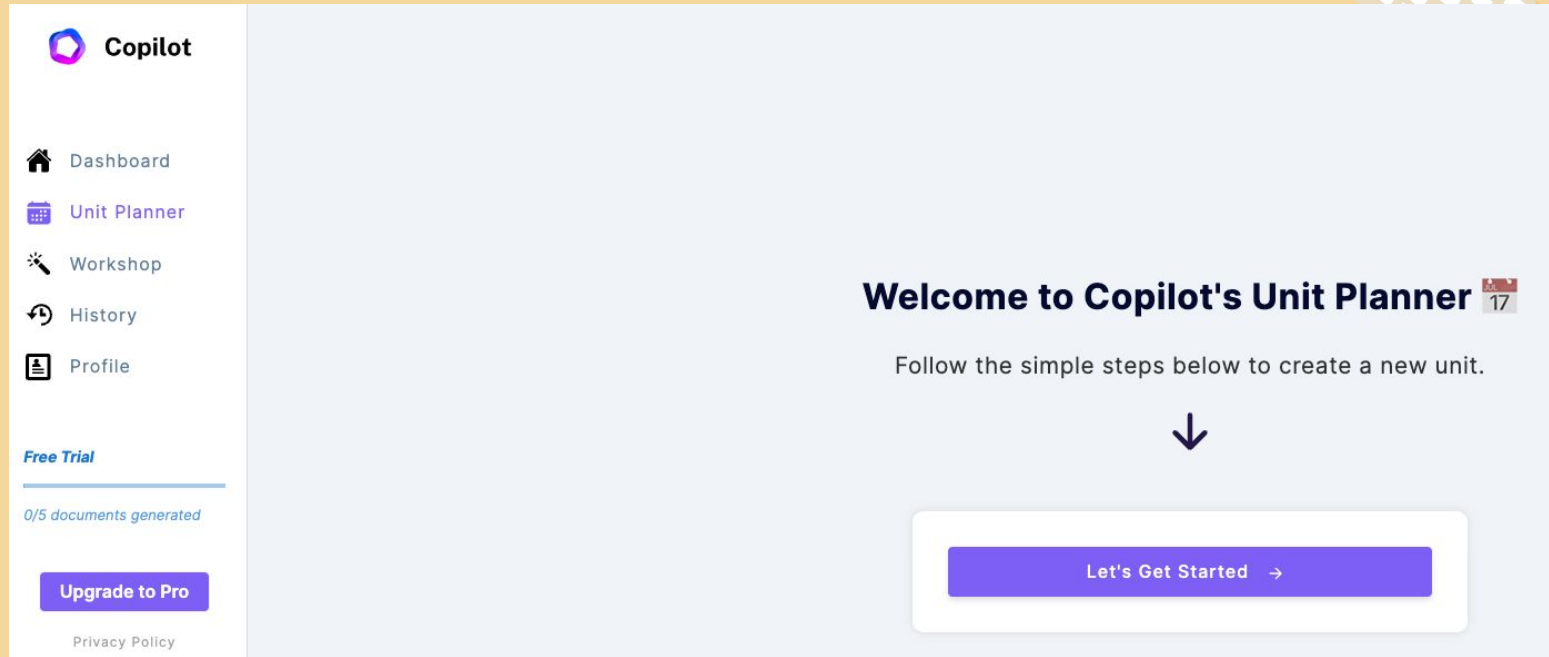
Background

SLIDESMANIA.COM

Also check out: [Education Copilot](#)



# Education Copilot



The image shows the Education Copilot Unit Planner interface. On the left is a white sidebar with the Copilot logo and navigation links: Dashboard, Unit Planner, Workshop, History, and Profile. Below these is a 'Free Trial' section with a progress indicator '0/5 documents generated' and an 'Upgrade to Pro' button. The main content area is light blue and features a 'Welcome to Copilot's Unit Planner' message with a date indicator '17'. Below the welcome message is the instruction 'Follow the simple steps below to create a new unit.' followed by a downward arrow and a large purple 'Let's Get Started' button with a right-pointing arrow.

**Copilot**

- Dashboard
- Unit Planner
- Workshop
- History
- Profile

**Free Trial**

0/5 documents generated

[Upgrade to Pro](#)

[Privacy Policy](#)

## Welcome to Copilot's Unit Planner 17

Follow the simple steps below to create a new unit.

↓

[Let's Get Started →](#)

[Education Copilot](#)

# Chat GPT: Develop Practice Problems



Can you write 5 practice problems for a 4th grader studying math that they would be learning to start their school year off?\



Certainly! Here are five math practice problems suitable for a 4th grader at the beginning of the school year:



1. Sarah has 24 apples, and she wants to share them equally among 6 friends. How many apples will each friend receive?
2. The perimeter of a rectangle is 30 centimeters. If the length of the rectangle is 8 centimeters, what is the width of the rectangle?
3. A box contains 48 pencils. If each pencil case holds 8 pencils, how many pencil cases can be filled completely?
4. John has saved \$36 in his piggy bank. He wants to buy a toy that costs \$18. How much money will he have left after buying the toy?
5. There are 27 students in a class, and the teacher wants to divide them into equal groups for a project. If each group should have 3 students, how many groups will there be?

Feel free to use these practice problems to help your 4th grader sharpen their math skills!



Certainly! Here are the solutions to the practice problems:



1. Sarah has 24 apples, and she wants to share them equally among 6 friends. Each friend will receive  $24 \div 6 = 4$  apples.
2. The perimeter of a rectangle is 30 centimeters. If the length of the rectangle is 8 centimeters, the width can be found by subtracting twice the length from the perimeter:  $30 - 2(8) = 30 - 16 = 14$  centimeters.
3. A box contains 48 pencils. If each pencil case holds 8 pencils, the number of pencil cases that can be filled completely is  $48 \div 8 = 6$  pencil cases.
4. John has saved \$36 in his piggy bank. After buying the toy for \$18, he will have  $\$36 - \$18 = \$18$  left.
5. There are 27 students in a class, and the teacher wants to divide them into equal groups for a project. Each group will have 3 students. The number of groups can be found by dividing the total number of students by the number of students in each group:  $27 \div 3 = 9$  groups.

These are the solutions to the practice problems. I hope they help!

# Chat GPT: Generate Leveled Text



Rewrite this article at an 8th grade reading level



In August 2006 the International Astronomical Union (IAU) downgraded the status of Pluto to that of "dwarf planet." This means that from now on only the rocky worlds of the inner Solar System and the gas giants of the outer system will be designated as planets. The "inner Solar System" is the region of space that is smaller than the radius of Jupiter's orbit around the sun. It contains the asteroid belt as well as the terrestrial planets, Mercury, Venus, Earth, and Mars. The "gas giants" of course are Jupiter, Saturn, Neptune, and Uranus. So now we have eight planets instead of the nine we used to have.

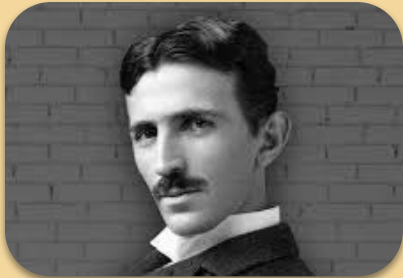


In August 2006, something significant happened to Pluto. The International Astronomical Union (IAU) decided to change its classification to a "dwarf planet." This means that only the rocky planets closer to the Sun and the big gas giants farther away will be called planets. The inner Solar System includes the space that is smaller than Jupiter's orbit around the Sun and contains the asteroid belt and the planets Mercury, Venus, Earth, and Mars. The gas giants are Jupiter, Saturn, Neptune, and Uranus. So now we have eight planets instead of nine.



Original text: <https://www.loc.gov/everyday-mysteries/astronomy/item/why-is-pluto-no-longer-a-planet/>

# Perspective and Tone



Write a letter as Tesla to Thomas Edison accusing him of stealing Tesla's ideas. Make it formal



Tesla Motors  
123 Electric Avenue  
Palo Alto, CA 12345  
July 11, 2023

Mr. Thomas Edison  
Edison Electric Company  
456 Power Drive  
Menlo Park, NJ 54321

Dear Mr. Edison,

I hope this letter finds you well. I am writing to you with a matter of utmost importance and concern. It has recently come to my attention that there have been allegations and evidence suggesting that certain ideas and inventions, which rightfully belong to me, have been misappropriated by you and attributed to your name. I must express my deep disappointment and regret over this matter, as I have always held you in high regard as a fellow innovator and scientist.

Allow me to bring to your attention the specific instances where I believe my ideas have been taken without proper credit or acknowledgment. First and foremost, it has been widely acknowledged that the concept of alternating current (AC) transmission, a groundbreaking technology that has revolutionized the world of electricity, was pioneered by me. Yet, I have reason to believe that you have claimed credit for this invention, despite its origins lying firmly in my research and development.

# Create Outlines and Agendas



How would you outline a workshop for teachers that are learning about bringing digital storytelling to their classrooms? We will be using Canva for photos, flyers, and videos. Clip Champ for video creation, Book Creator to write stories, and Google Sites for website publishing



Great question! Here's an outline for a workshop on bringing digital storytelling to classrooms using Canva, Clip Champ, Book Creator, and Google Sites:



## I. Introduction

- Introduce yourself and explain the purpose of the workshop
- Share the learning objectives of the workshop

## II. What is digital storytelling?

- Define digital storytelling
- Discuss the benefits of digital storytelling in the classroom
- Provide examples of digital storytelling

## III. Introduction to Canva

- Explain what Canva is and its features
- Show how to use Canva to create photos, flyers, and videos

## IV. Introduction to Clip Champ

- Explain what Clip Champ is and its features

# Other Ideas



## **Creating Documents**

- Emails to Parents
- Permission Slips
- Copy for websites
- Instructions
- Rubrics

## **Condensing Research**

## **Explaining Concepts**

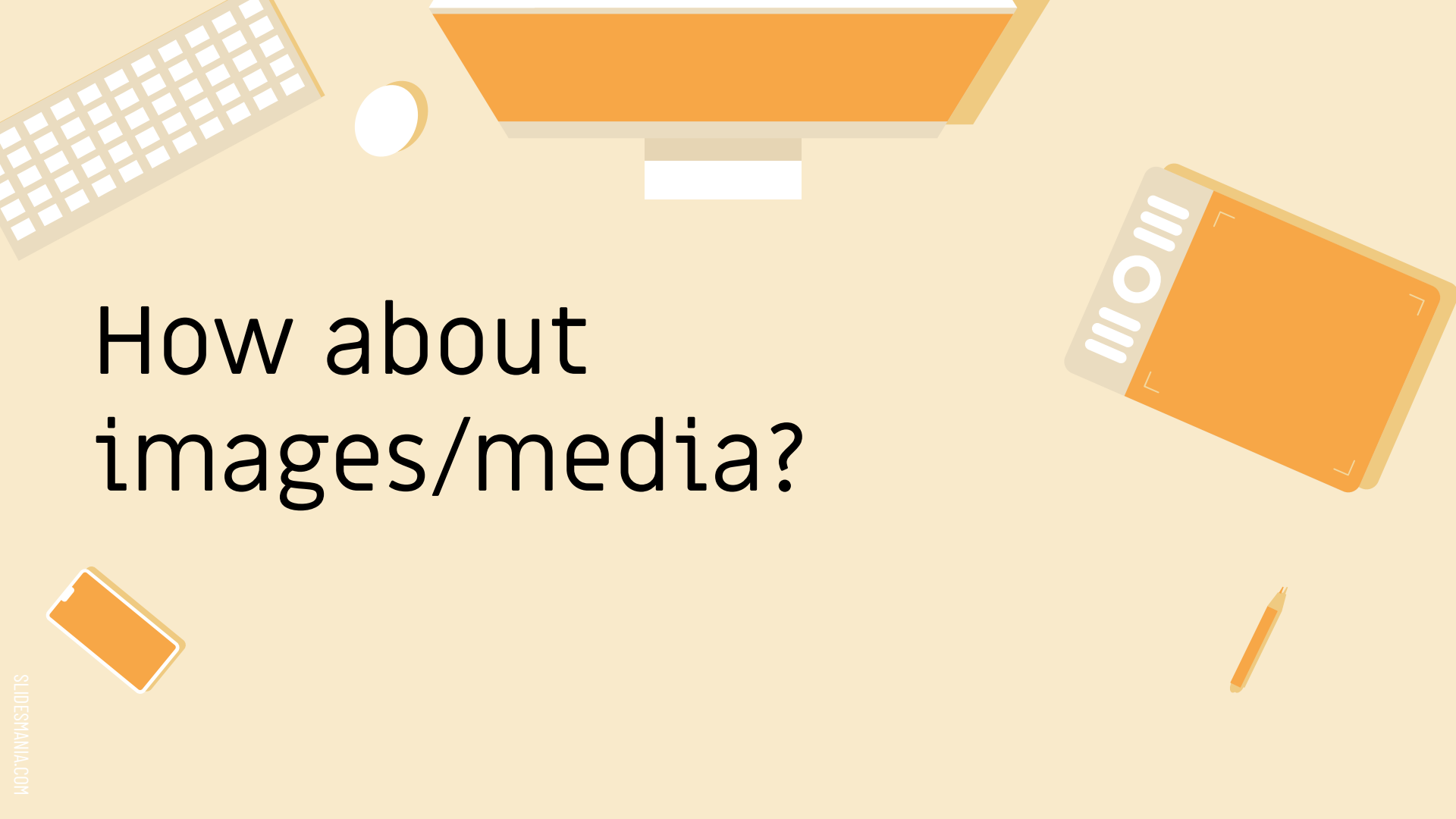
## **Creating Lists**

## **Creating Tables of data**

# Other Tools Beyond Chat GPT

- [Curipod](#)
- [Education Copilot](#)
- [Gradescope](#)
- [Perplexity](#)
- [Hyperwrite](#)



The background features several stylized, flat-design icons in shades of orange and grey. At the top center is a computer monitor with a white base. To its left is a keyboard and a mouse. To the right is a tablet with a grey top edge and an orange screen. At the bottom left is a smartphone, and at the bottom right is a pencil.

How about  
images/media?



# Let's see an example!

**A good prompt might have...**

- Noun [Person, creature, thing]
- Verb
- Adjective
- Style of art

[Canva Image Generator](#)



*Example: Cheeseburger cat sitting on a table, realistic*

# Photoshop Generative Fill

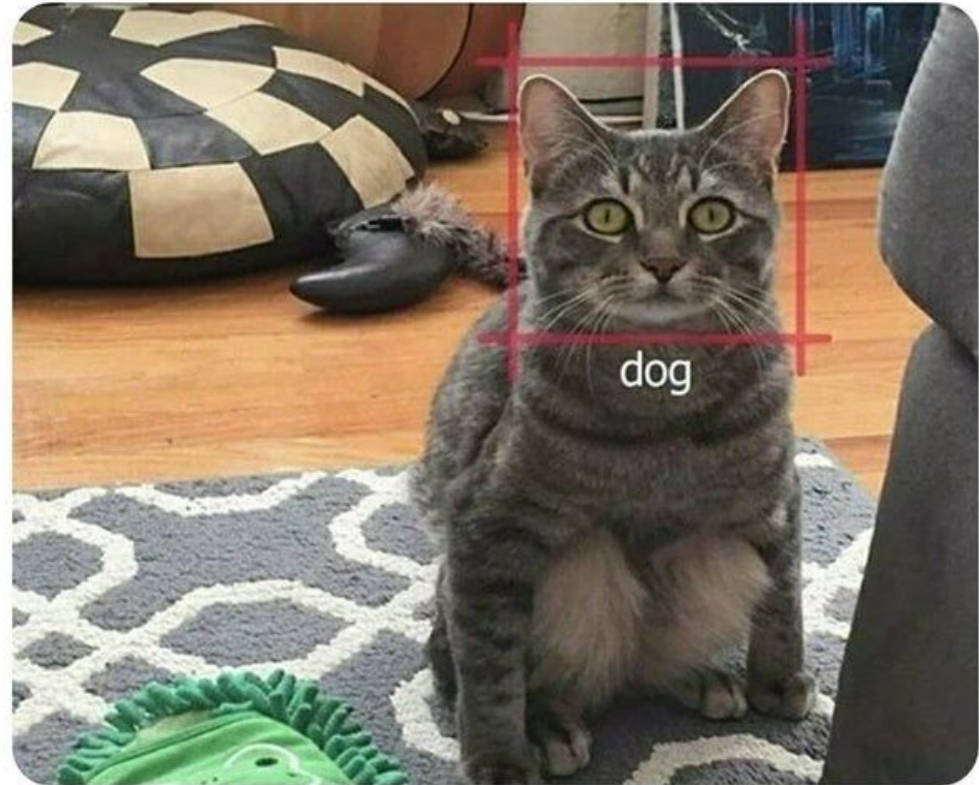
Photoshop now allows you to generative fill AI content into your images



# Limitations & Challenges

90's Media: AI WILL DESTROY THE WORLD IN A DECADE

That AI today:





# Implications on Artists / Copyright



- Is it fair to “train” AI using copyrighted works?
- Who “owns” AI-generated products?
- [Artist rejects photo prize after AI-generated image wins award](#)
- [How AI finished Beethoven's last symphony](#)  
[and what that means for the future of music]

## Fact Check / Self-Check

AI can generate “fake news” by incorrectly piecing together real information or events.



[Image source](#)

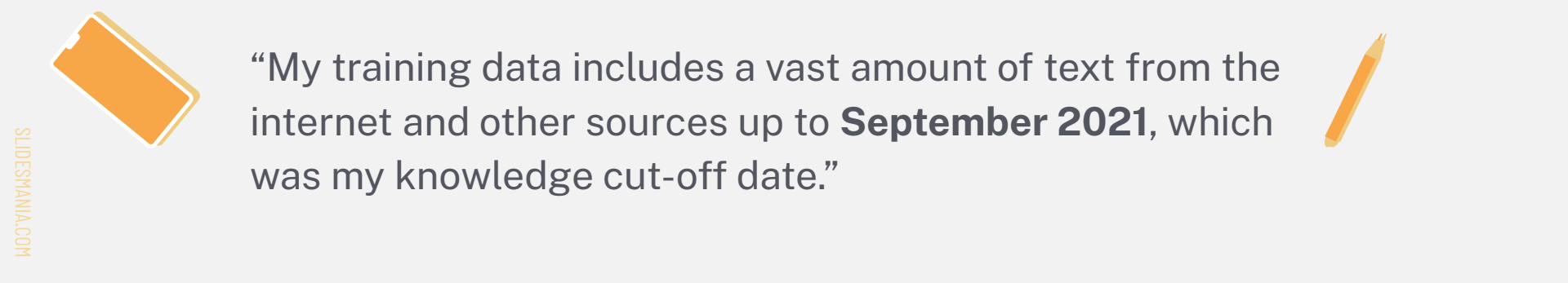






# Domain-Specific and Current Knowledge

“I can provide general information on a wide range of topics, but I may not have in-depth knowledge of specific fields or industries.”

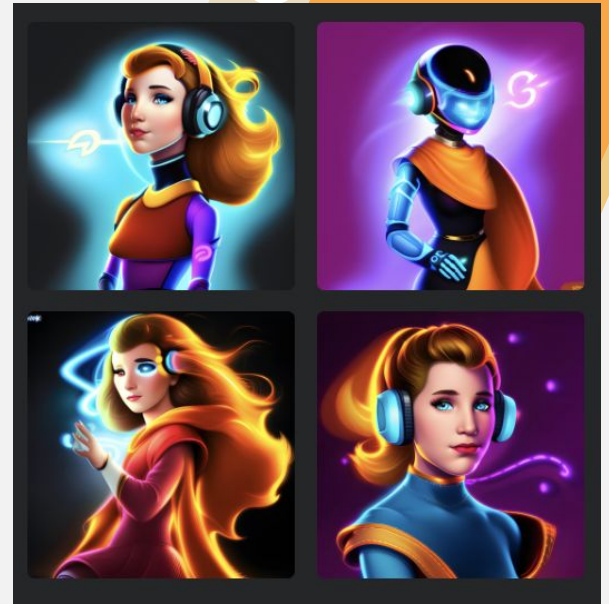


“My training data includes a vast amount of text from the internet and other sources up to **September 2021**, which was my knowledge cut-off date.”

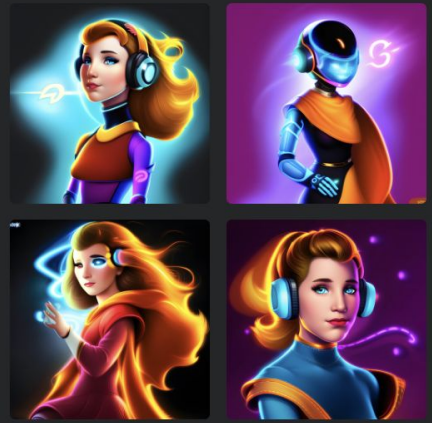
# Bias and Morality

AI can only be as ethical and enlightened as its programmers and the data it reviews.

While there are filters in place on many of them, expect that “unconscious” bias may reveal itself in the results!



# Varying Results



Some rules apply when using these images. [Learn more](#)

A teacher cyborg

Styles


See all



None

Dreamlike

Filmic

 Text to Image



Some rules apply when using these images. [Learn more](#)

A teacher cyborg



Some rules apply when using these images. [Learn more](#)

A teacher leading a class in a lesson about artificial intelligence



Some rules apply when using these images. [Learn more](#)

A teacher





# Hallucinations

## **From Chat GPT:**

*“While I can generate coherent text based on the inputs I receive, I may sometimes miss the nuances of a conversation and provide inaccurate or irrelevant responses.”*

**AI may confidently produce a response that does not match its training data.**

# Everyone: AI art will make designers obsolete

AI accepting the job:



# Preparing for AI in your Class



Adobe Firefly (Beta)  
Image Not for Commercial Use

# We've been here before

- The Internet
- Google
- Wikipedia
- 1:1 Devices / take-home
- Cell phones
- Social Media



Let's not forget TV, radio, telegraph, printing press, and education in general as a threat!

# Tip 1: Become Familiar with the Tools!

- 
- 
- 
- 



## Tip 2: You can try AI Detection, but...

- [GPTZero](#)
- [Writeful](#)
- [TurnItIn](#)
- and many more...



*In the bot vs bot wars, AI detectors are not hard to 'beat.'*

## Tip #3: Design Activities Proactively

- Require verifiable sources
- Require personal / authentic examples
- Increase *human* creativity requirements
- Reconsider homework
- Discuss media literacy and healthy skepticism!

# Tip #5: Embrace It

- Discuss responsible use
- Update Your Course Syllabus for chatGPT
  - What is an what is not allowed?
  - How can it be a useful tool?
  - How should it be cited?
  - SOPPA

- Incorporate it as a learning tool



# Tip #5: Embrace It

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- Incorporate it as a learning tool

# Thank You!

Ben Sondgeroth  
sondgerothben@gmail.com

