



Is ChatGPT making us  
dumber or smarter?

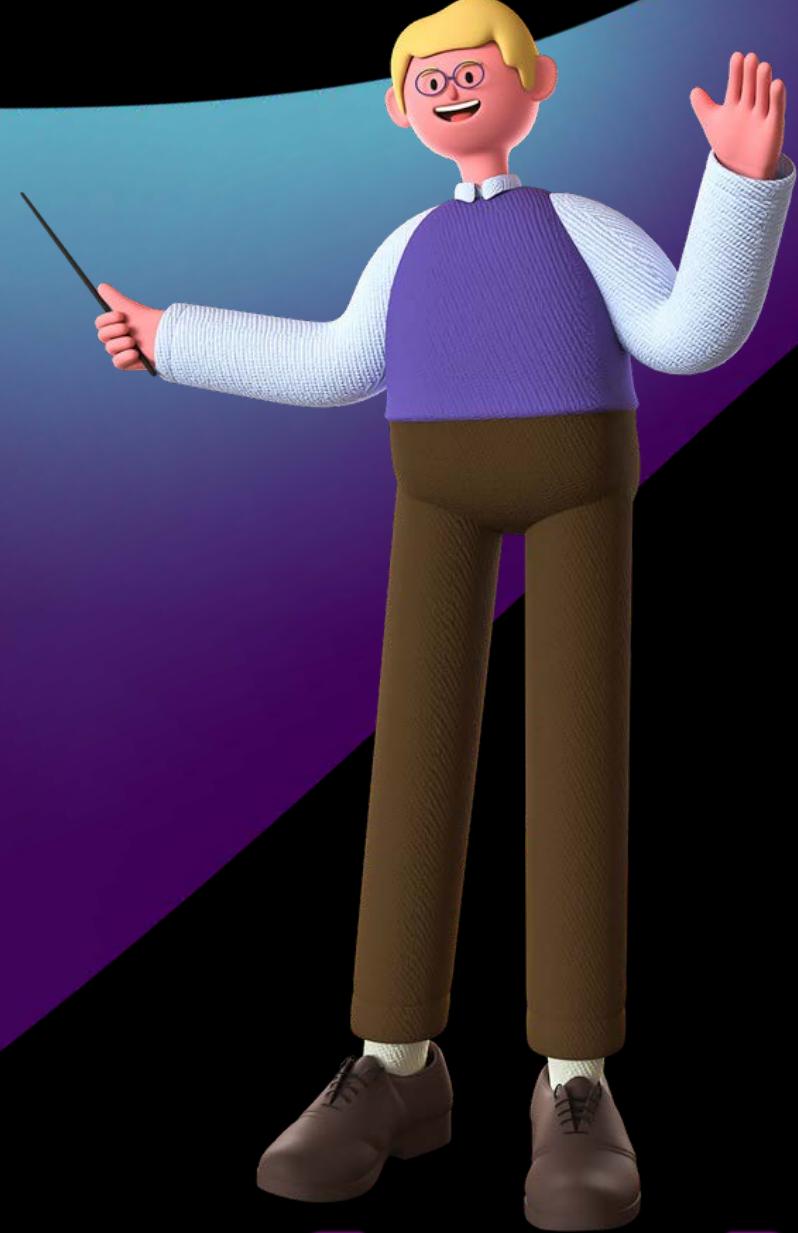




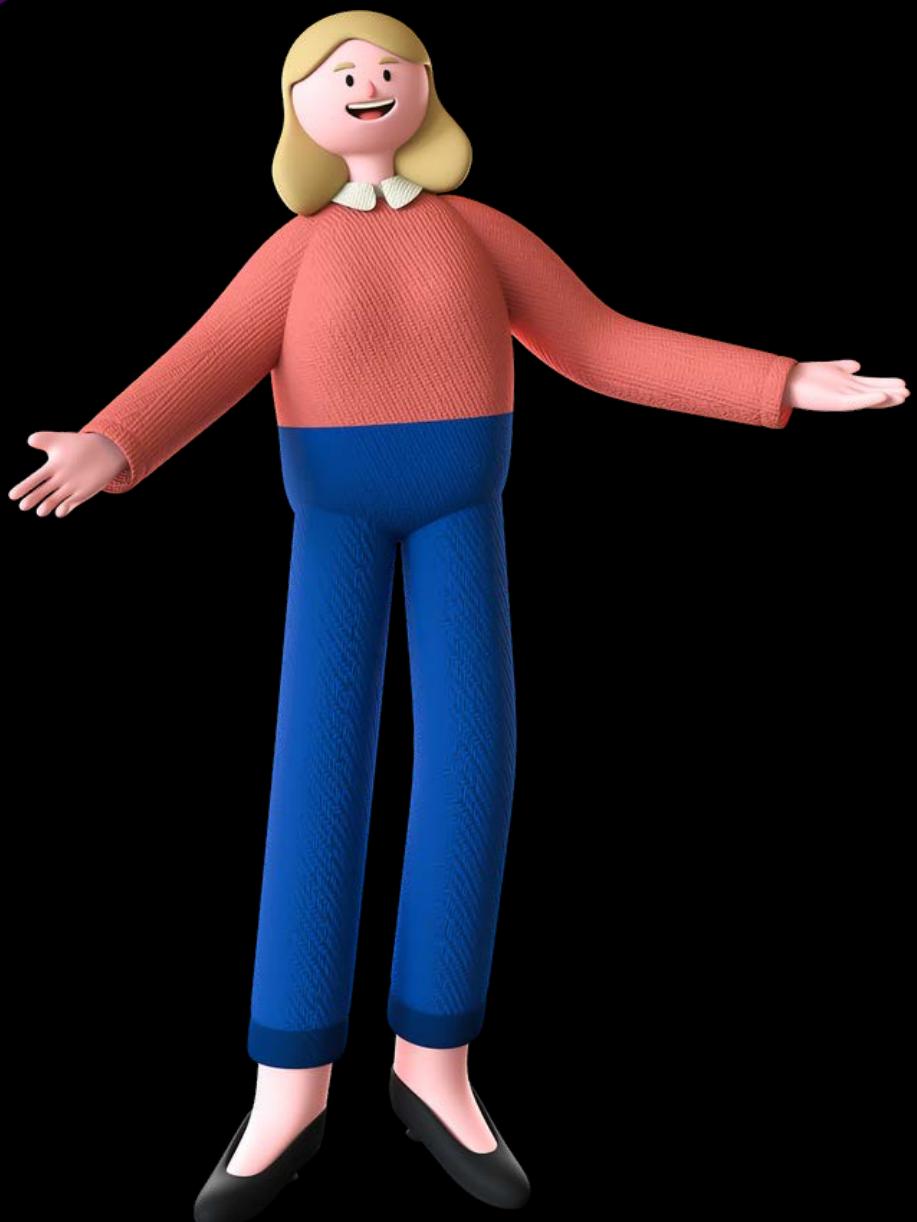
8472 1866

MENTIMETER.COM

# MEET OUR TEAM



[Bartosz  
Ceglarek]



[Salla  
Saarinen]



[Alessandro  
Crescenzo]

# MEET OUR TEAM



Bartosz  
Ceglarek



Finance and Investment

# MEET OUR TEAM

Industrial  
engineering  
& management

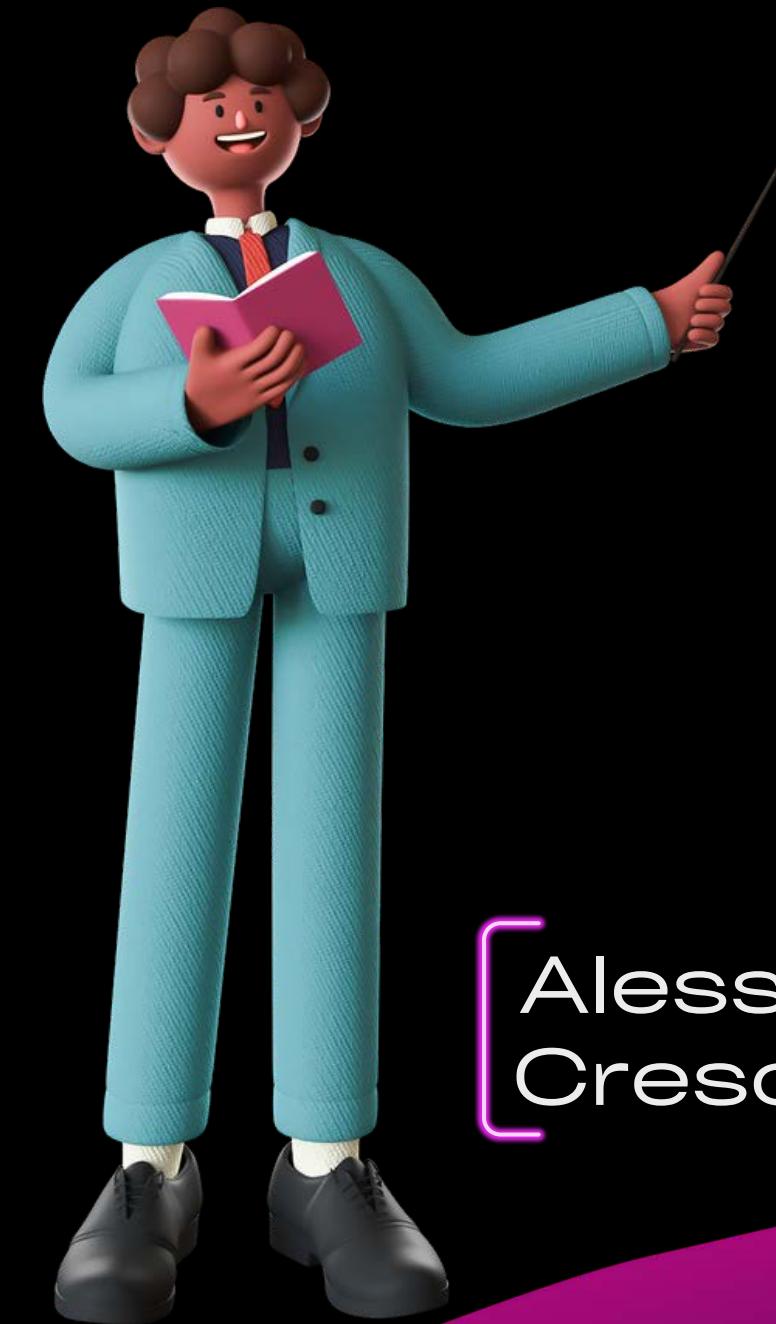


Salla  
Saarinen



# MEET OUR TEAM

Management & Marketing



Alessandro  
Crescenzo



WHY ARE WE  
TALKING ABOUT  
THIS TOPIC?

# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER
- TRANSPARENCY

# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER
- TRANSPARENCY

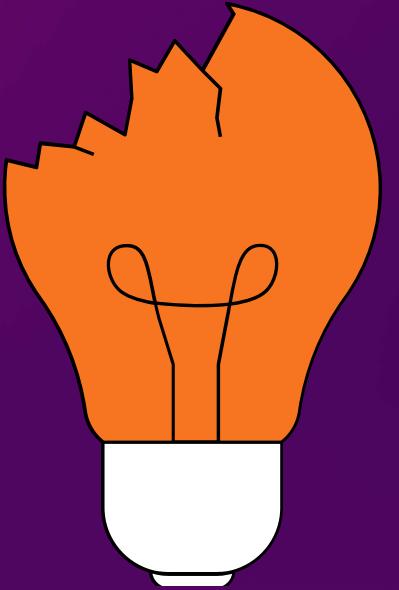
# WHAT DOES IT MEAN TO BE SMART OR DUMB?



Smart

Showing the ability to:

- Learn
- Understand things



Dumb

Not showing or not having:

- Intelligence
  - creative
  - analytical
  - practical
- Good Judgement

# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER

# What is ChatGPT?



**8472 1866**

# What is ChatGPT?

*ChatGPT is an AI chatbot that uses natural language processing model that create humanlike conversational dialogue.*

*The language model can respond to questions and compose various written content, including articles, social media posts, essays, code and emails.*



# ChatGPT Sprints to One Million Users

Time it took for selected online services to reach one million users



\* one million backers \*\* one million nights booked \*\*\* one million downloads  
Source: Company announcements via Business Insider/LinkedIn



statista

1 million  
users 5  
days

100 million  
users in  
less than 3  
months

25 million  
daily visits

# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER
- TRANSPARENCY



USING CHATGPT  
COULD MAKE US  
LESS CREATIVE

S

Could you give an idea for a sequel of Avatar?



Post-human civilization discovers Pandora's origin, explores new worlds, and navigates interspecies diplomacy amidst a galactic conflict.

S

Please explain the idea of the plot.



In "Avatar: Galactic Unity," the plot revolves around the discovery of an ancient artifact on Pandora, revealing connections between Pandora and other planets with intelligent lifeforms. Jake Sully, Neytiri, and xeno-archaeologist Dr. Angela Collins embark on a journey to explore these planets and establish diplomatic relations.



They encounter diverse alien species, forming a coalition that values peace, understanding, and cooperation. However, an expansionist alien race called the Korvani threatens this unity. The protagonists must unite the coalition against this common enemy and navigate interspecies diplomacy.

As war looms, Jake, Neytiri, and Dr. Collins uncover an ancient technology capable of turning the tide of the conflict. The crew races against time to deploy this power, hoping to save their newfound friends and worlds from the Korvani's tyranny.

The story explores themes of unity, valuing diverse perspectives, and individuals' potential to make a difference in larger conflicts.

S

Please give me a script for this movie.



Title: Avatar: Galactic Unity



INT. PANDORA - HUMAN-NA'VI OUTPOST - DAY

Jake Sully (Human-Na'vi hybrid) and Neytiri (Na'vi) speak with Dr. Angela Collins (Human), a xeno-archaeologist.

DR. ANGELA COLLINS

We discovered an ancient artifact. It suggests a connection between Pandora and other planets.

JAKE SULLY

How can we explore them?

EXT. SPACE - PANDORAN SOLAR SYSTEM - DAY

A Na'vi-inspired spacecraft leaves Pandora, heading towards a wormhole. The crew consists of humans, Na'vi, and Avatars.

INT. SPACECRAFT - COMMAND CENTER - DAY

Jake, Neytiri, Dr. Collins, and other crew members gaze at a hologram of interconnected planets.

DR. ANGELA COLLINS

Each planet hosts intelligent life. We need to establish diplomatic relations with them.

EXT. PLANET XANDARIA - DAY

The crew encounters diverse alien species and exchanges cultural knowledge, strengthening their coalition.



LESS  
CREATIVITY

Create a marketing campaign

Write a text

Ask for ideas



USING CHATGPT  
COULD REDUCE OUR  
CRITICAL THINKING

# LESS CRITICAL THINKING



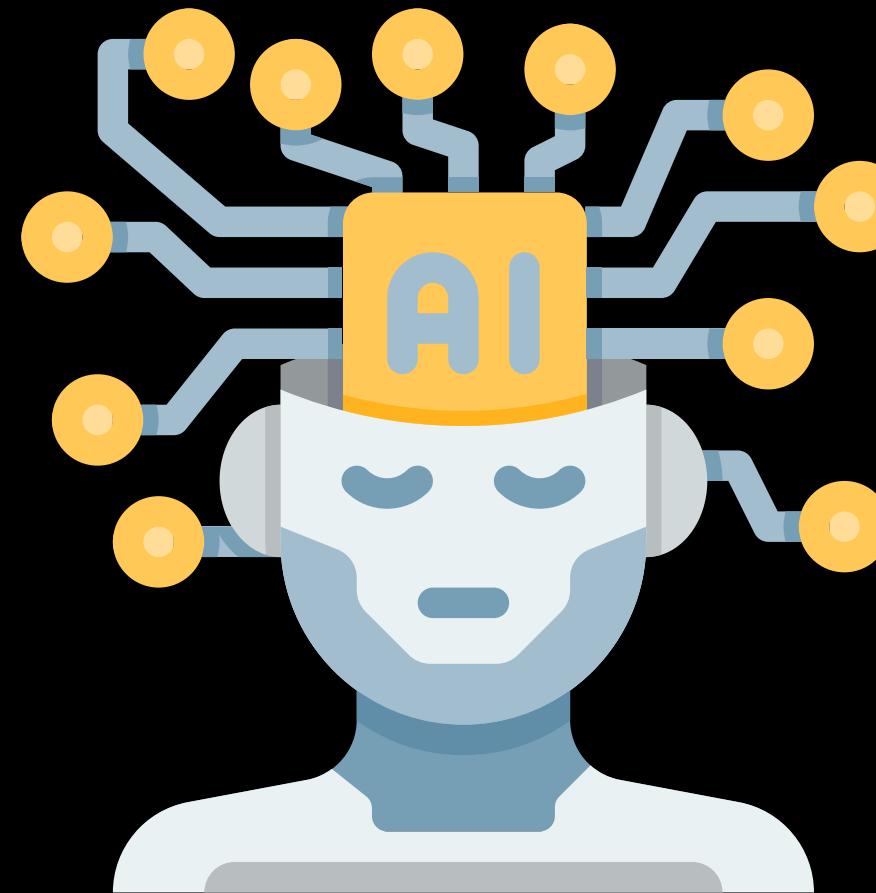
We'll forget to ask  
the 'why'

Without trying to  
think about the  
question for  
ourselves.

We'll ask for  
information and  
then accept what  
we're told

Because we  
don't know any  
better.

# CRITICAL (UN)THINKING



Instead of

“This must be **true** because I saw it **on television**”

We now have

“This must be **true** because the **algorithm says so.**”



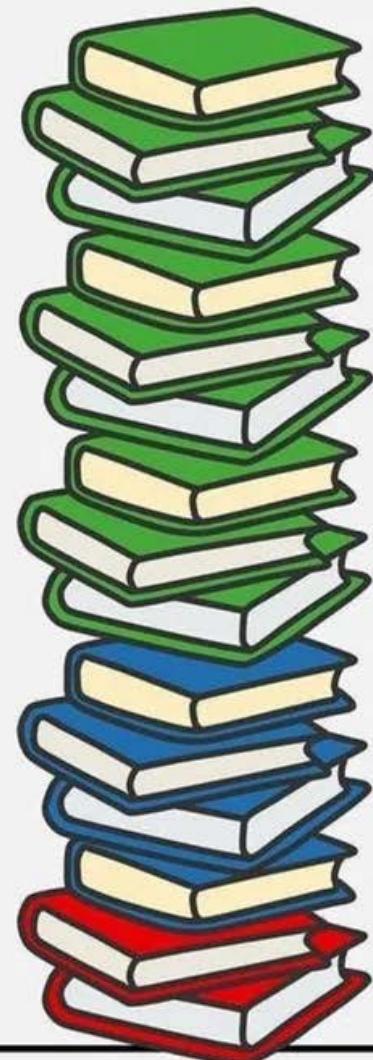
USING CHATGPT  
COULD MAKE US  
MISS A LEARNING  
EXPERIENCE

The background features a dark, abstract design with glowing, organic shapes in shades of blue, purple, and yellow. These shapes resemble neurons or a complex network, with glowing nodes and thin lines connecting them. The overall effect is futuristic and suggests a theme of connectivity, technology, or the brain.

**SMART PEOPLE LEARN  
FROM **THEIR** MISTAKES.**

HOW MUCH YOU LEARN

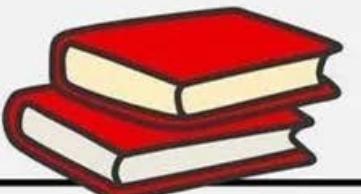
FROM  
MISTAKES



FROM  
PRACTICE



FROM  
THEORY



# SKIPPING A MISTAKE



# Learning languages



# Correcting grammar



# Writing essays

$B \lim_{x \rightarrow 1} \frac{ctgx - 2}{\ln x^3}$   $\stackrel{Q''}{\sim}$   $\int (x \pm a^c) \frac{dx}{x^n}$   $a = 2,79$   $A - C = \frac{\sigma}{C}$   
 $+ y^2 = Z$   $\sum_{n=0}^{+\infty} \frac{x^n}{n!}$   $\oint = \sqrt{\sum_{n=1}^{\infty} (x-m)^n}$   $S = \int_{t=2}^{\infty} f(t) dt$   
 $e = \cos x + t_9 y$    
 $P = r^2 \pi$   $h_1(x) = \frac{(x-x_1)}{x_1}$   $\lim_{\Delta x \rightarrow 0} \frac{\Delta x + 2}{\Delta y} = \lim_{\Delta y \rightarrow 0} \frac{\Delta x + 2}{\Delta y - 1}$   $y = \frac{\Delta x}{\Delta z} \sin x$   
 $\Delta t = T - \frac{3a}{x}$   $\delta_x = h_1 - 3y^2$   $(x+a)^2 = x^2 + 2ax + a^2$   $f_x =$   
 $(x-y^2)$   $y = 2x^2 + 3x$   $\frac{dy}{dx} = 4x + 3$   $(x+y)^2 = \left(\frac{y}{2}\right)^2$   $X_{1/2} = \frac{b + (a-c)}{\sqrt{2a}}$   
 $\int \frac{x+a}{x} dx$   $\sum_{n=0}^{\infty} h_n$   $\pi \approx 3,1415$   $\tan(2a) - \frac{2\tan(a)}{1-\tan^2(a)}$   
 $P = \sum_{i=0}^{\infty} x_i^i$   $y = \frac{ax}{\Delta z}$   $\ln = \sqrt{axb}$   $S_5 = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$    
 $= (y-1)^2$   $\sin \alpha = \frac{a}{b}$

# Solving math problems

# HOW CAN CHATGPT MAKE US DUMBER?

- LESS CREATIVITY
- LESS CRITICAL THINKING
- SKIPPING A MISTAKE



10

11

12

1

2

3

4

5

6

7

8

9

# 1998

## THE BEGINNING OF THE GOOGLE

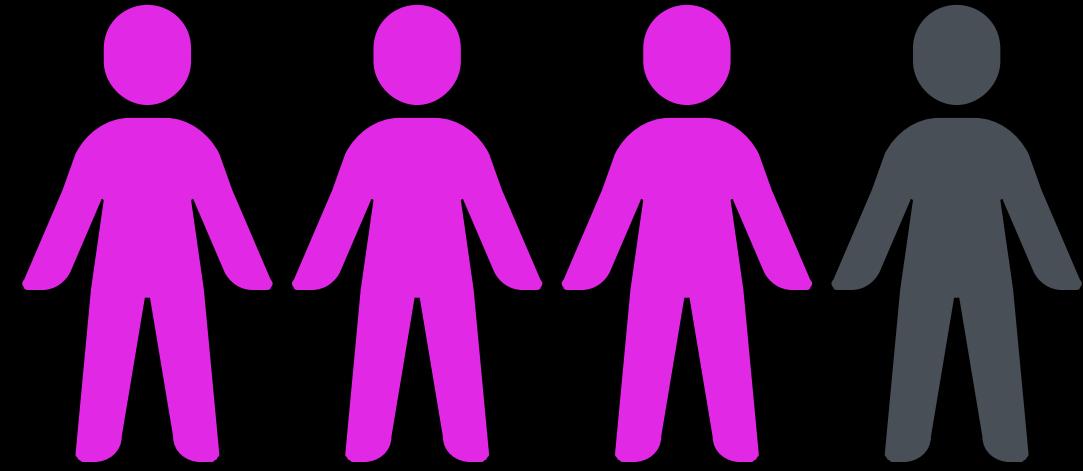




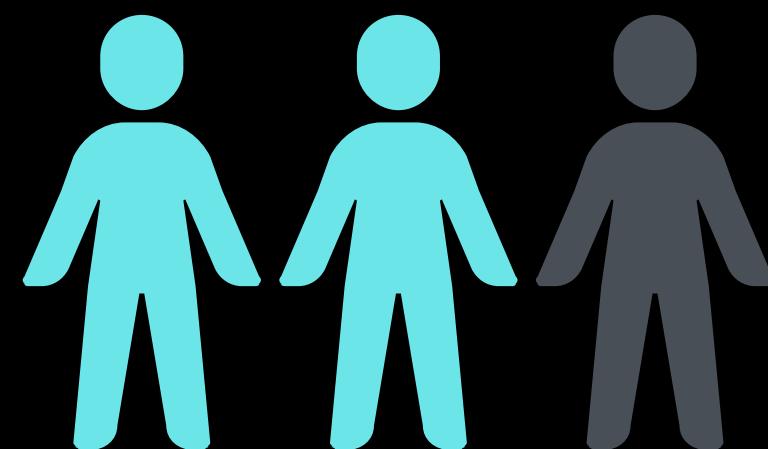
IT IS CHANGING THE  
WAY OUR BRAINS  
WORK.

MAKING US LESS  
ABLE TO FOCUS.

MAKING US LESS  
ABLE THINK DEEPLY.



Three out of four experts said our use of the Internet enhances and augments human intelligence.



Two-thirds said use of the Internet has improved reading, writing and rendering of knowledge.



10

11

12

1

2

3

4

5

6

7

8

9

# THE BEGINNING OF FILMS

1896



The Arrival of a Train 1896  
The First Film Ever Made



10

11

12

1

2

3

4

5

6

7

8

9

# THE BEGINNING OF THE TELEPHONE

1876





10

11

12

1

2

9

8

7

6

5

4

3

THE BEGINNING OF  
A TRAIN

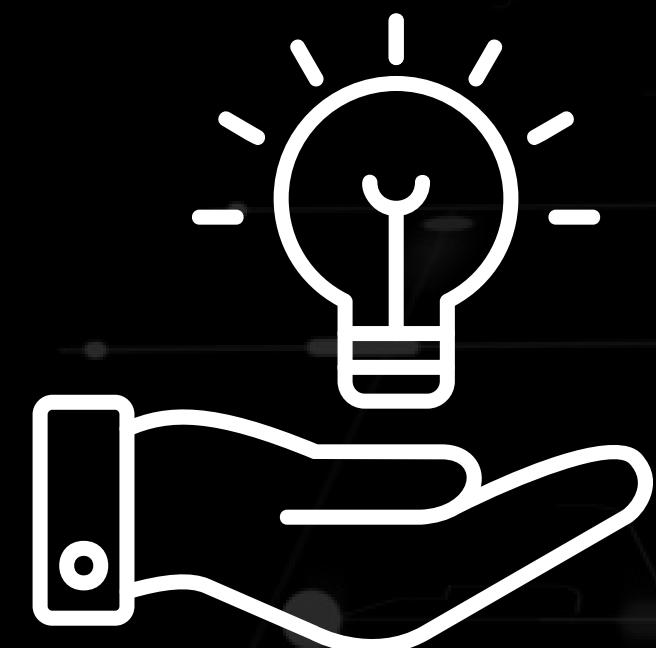
1804



New is always **scary**.

But why ChatGPT  
is **different**?

AI is technology is the first  
to enable us to automate  
intellectual tasks.





 **Elon Musk**   
@elonmusk

Replying to [@sama](#)

ChatGPT is scary good. We are not far from  
dangerously strong AI.

6:48 AM · Dec 4, 2022

1,963 Retweets 243 Quote Tweets 21.3K Likes



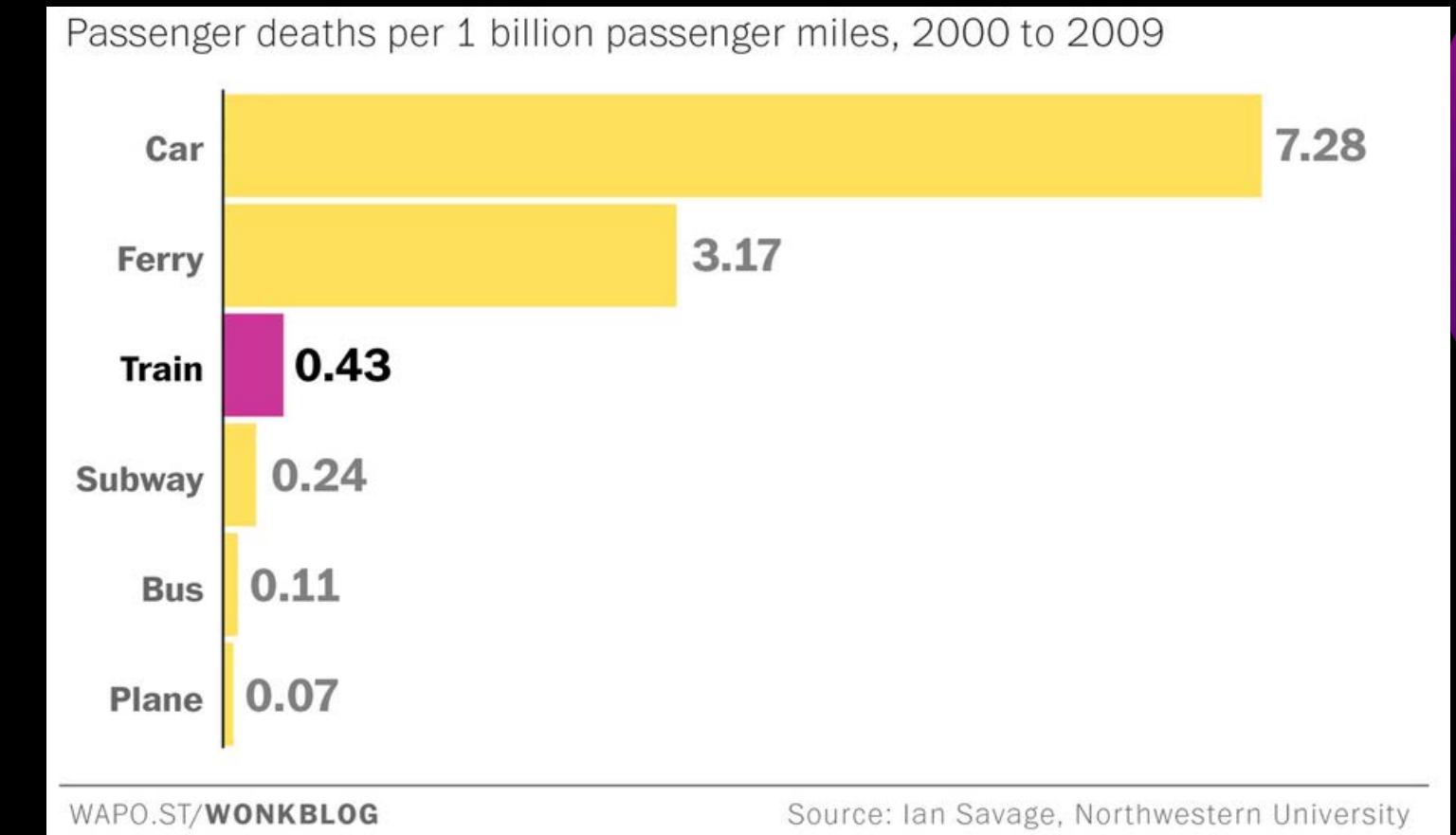
# Would you ban cars?



**8472 1866**



- Each year, 1.35 million people are killed on roadways around the world
- Every day, almost 3,700 people are killed globally



# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER
- TRANSPARENCY

CHATGPT IS MAKING  
KNOWLEDGE MORE  
ACCESSIBLE

# LEARNING A NEW LANGUAGE IS NOW EASIER

AL

I want you to act as my German language tutor and I want you to be engaging, funny and compelling for the entire conversation. I've got difficulties to understand grammar rules and you need to help me with some real life analogy examples. Start the lesson with very basic introduction to the German language



Hallo! Ich bin ChatGPT und ich werde dein Deutsch-Tutor sein. Das bedeutet "Hello! I am ChatGPT and I will be your German tutor." In German, we use a lot of different sounds and letters than in English, but once you get the hang of it, it can be a lot of fun!

AL

What are the 5 must know phrases in German? provide translation and pronunciation?



Sure, here are five must-know phrases in German along with their translations and pronunciations:

1. Hallo! (Hello!) - Pronunciation: hah-loh
2. Wie geht es dir? (How are you?) - Pronunciation: vee geht ess deer
3. Ich heiße... (My name is...) - Pronunciation: eesh hi-suh
4. Danke schön! (Thank you very much!) - Pronunciation: dahn-kuh shern
5. Auf Wiedersehen! (Goodbye!) - Pronunciation: owf vee-duhr-zay-en

AL

I have memorised these phrases, can you test me?



Of course! Let's see if you've memorized those phrases correctly.

1. How would you say "Hello" in German?
2. If you wanted to ask someone "How are you?" in German, what phrase would you use?
3. How would you introduce yourself in German using the phrase "My name is..."?
4. How would you say "Thank you very much" in German?
5. What's the German phrase for "Goodbye"?

Go ahead and give your answers, and I'll let you know how you did!

# EXPLAINING COMPLEX TOPICS

AL

I'm having problems understanding the t-student distribution, can you make me an explanation with some examples?



Sure! The t-distribution, also known as the Student's t-distribution, is a probability distribution that is used in statistical inference to make inferences about a population mean when the sample size is small or the population standard deviation is unknown.

The t-distribution is similar to the normal distribution in shape, but with heavier tails. The shape of the distribution depends on the sample size and the degrees of freedom (df), which is calculated as  $n-1$  (where  $n$  is the sample size). As the sample size increases, the t-distribution approaches the normal distribution.

Here are a few examples to help illustrate the t-distribution:

**Example 1:** Suppose you want to estimate the average height of all students in a school. You take a random sample of 20 students and measure their heights. The sample mean is 68 inches and the sample standard deviation is 3 inches. You can use the t-distribution to construct a confidence interval for the population mean height.

**Example 2:** Suppose you are conducting a hypothesis test to determine whether the mean score on a test is significantly different from a specified value. You take a random sample of 10 students and calculate the sample mean and standard deviation. You can use the t-distribution to calculate the test statistic and determine whether the difference is statistically significant.

# SUMMARIZING ARTICLES



AL make a summary of this article:

<https://www.theguardian.com/science/2023/may/07/mosquitoes-repellent-bite-summer-science-medical-research>

The Guardian article reports on a study conducted by researchers at the University of California, Riverside, who have identified a new compound that could repel mosquitoes and prevent them from biting humans. The compound, called "B1," was found to be effective in laboratory tests against two species of mosquitoes that transmit diseases such as Zika and malaria. The researchers believe that B1 could be used to develop a new type of mosquito repellent that is more effective and longer-lasting than current products on the market. The compound works by blocking the mosquitoes' ability to detect human body odor, which is what attracts them to bite in the first place. The researchers are now working to further study the safety and effectiveness of B1 and explore ways to commercialize it. If successful, this new mosquito repellent could have significant implications for public health, particularly in regions where mosquito-borne illnesses are prevalent.

CHATGPT HELPS  
TO AUTOMATE  
REPETITIVE OR  
TEDIOUS TASKS

S

```
def print_squares(limit):
    for num in range(1, limit + 1):
        square = num * num
        print(f'{num} squared is {square}')

limit = 10
print_squares(limit)
```



What is wrong with this code?



There is a syntax error in this code due to the missing opening quotation mark before the `f` character in the `print` statement inside the `print\_squares` function. It should be `print(f'{num} squared is {square}')` instead of `print(f{num} squared is {square})`. The corrected code would be as follows:



python

```
def print_squares(limit):
    for num in range(1, limit + 1):
        square = num * num
        print(f'{num} squared is {square}')

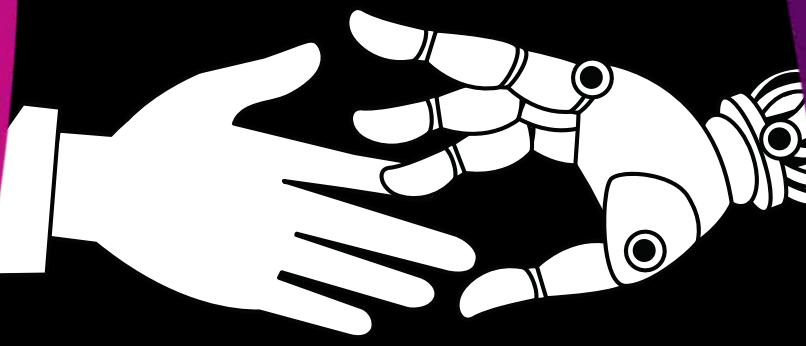
limit = 10
print_squares(limit)
```



Copy code

With the above correction, the code should print out the squares of numbers from 1 to 10.

# Speed

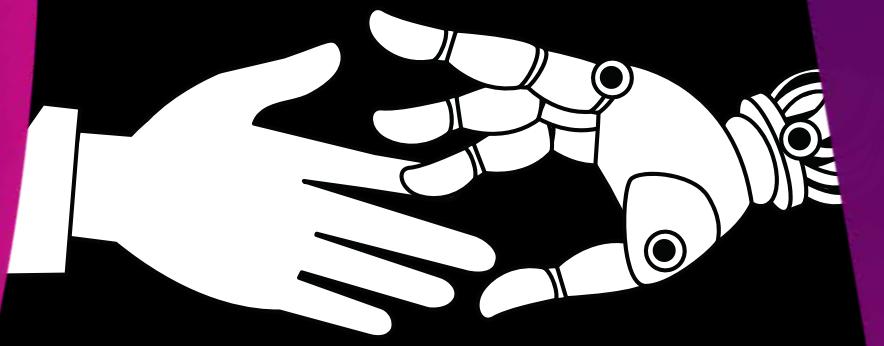


# Accuracy

- Perform tasks faster than humans
  - Making developers more productive
- 
- Less prone to errors
  - Ensure consistency across different tasks.

## Error detection

## Eliminating repetitive tasks



- Help quickly identify errors and bugs
  - Higher-quality work and fewer issues
- 
- More time on more complex and creative work.

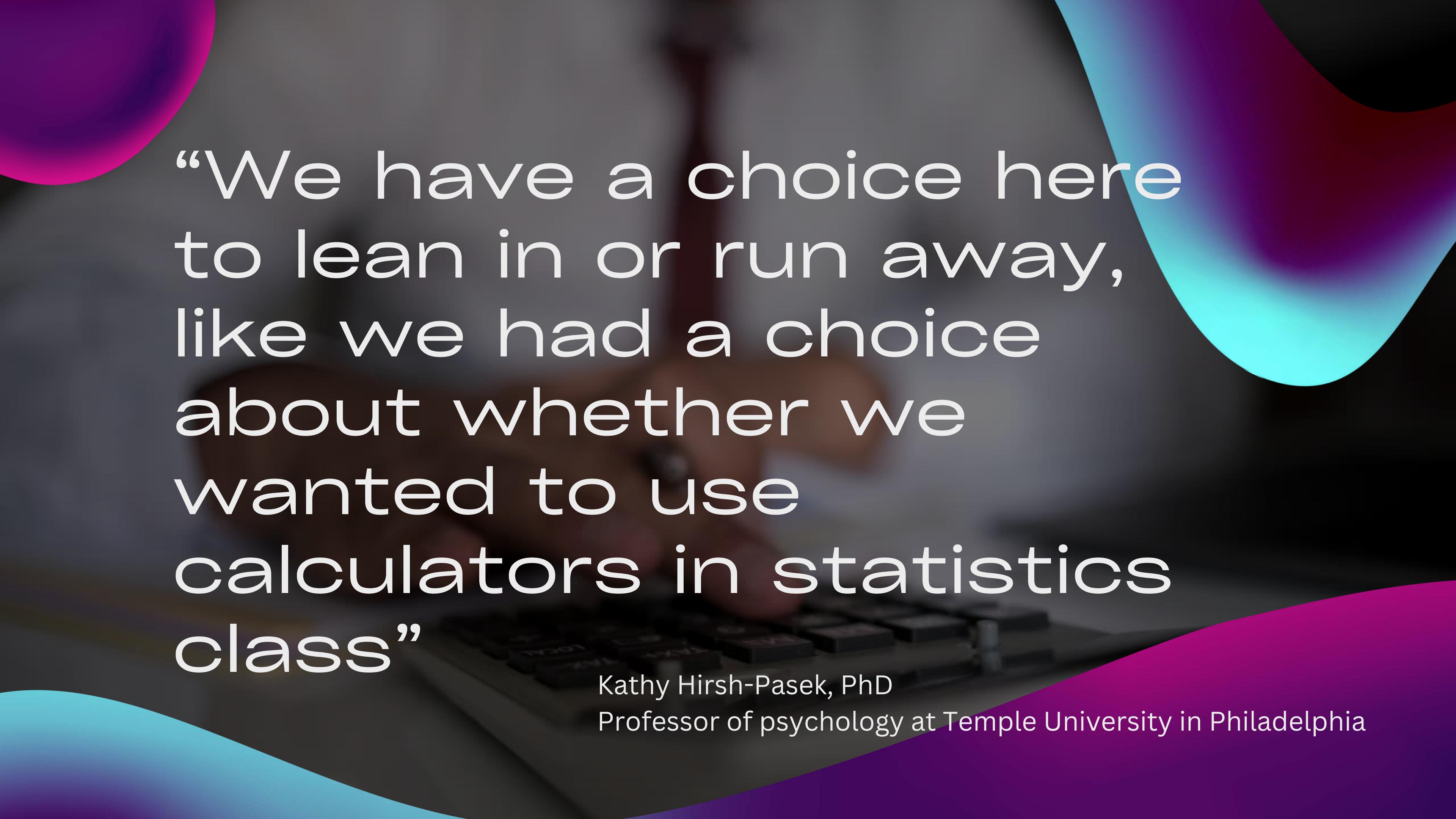
# CHATGPT CAN HELP IN LEARNING

ChatGPT in education

# Would you allow students to use ChatGPT at school?



**8472 1866**



“We have a choice here to lean in or run away, like we had a choice about whether we wanted to use calculators in statistics class”

Kathy Hirsh-Pasek, PhD  
Professor of psychology at Temple University in Philadelphia

# ChatGPT can be an ally of teachers instead of their enemy

Make assignments  
ChatGPT  
cannot do



Make students apply  
theories in their own  
life

The background features a dark, abstract design with glowing, translucent nodes in shades of blue, purple, and yellow. These nodes are interconnected by thin, glowing lines that form a complex network, resembling a brain's neural pathways or a digital data network.

**SMART PEOPLE LEARN  
FROM THEIR MISTAKES.**



**SMART** PEOPLE LEARN  
FROM **THEIR** MISTAKES.

THE **REAL SHARP ONES**  
LEARN FROM THE  
MISTAKES OF **OTHERS**.

# ChatGPT can be an ally of teachers instead of their enemy

Encourage critical thinking



Use ChatGPT for a first draft and fact check and improve

# How can ChatGPT help students improve?

Create personal learning experince

Personal feedback

Interactive learning

Discuss to understand many sides a topic

# HOW CAN CHATGPT MAKE US SMARTER?

- MAKING KNOWLEDGE **MORE ACCESSIBLE**
- **AUTOMATING** REPETITIVE OR TEDIOUS ACTIVITIES
- **IMPROVE** LEARNING

# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER
- TRANSPARENCY



# RESPONSIBLE AI

# Do you trust AI?



**8472 1866**

# PEOPLE PERCEPTION

**35%**

of people  
trust AI

**77%**

of people think  
organisation must held  
accountable for their use  
of AI

# WHY DO WE NEED AI TO BE TRANSPARENT?

- Cambridge Analytica
- COMPAS
- AI-powered recruiting tools

# FROM A BLACK BOX TO A GLASS BOX

Implement XAI :

- Justification generation
- Confidence levels
- Attention mechanism



# FROM A BLACK BOX TO A GLASS BOX

Implement XAI :

- Justification generation
- Confidence levels
- Attention mechanism



# THE IMPACTS OF BEING TRANSPARENT

1. **Decrease** risk of error
2. **Protect** and respect the user
3. **Enable** accountability

# OUR WORKSHOP, IN A NUTSHELL

- DEFINITION OF SMART AND DUMB
- WHAT IS CHATGPT
- HOW IS IT MAKING US DUMBER
- HOW IS IT MAKING US SMARTER
- TRANSPARENCY

# WHAT DOES IT MEAN TO BE SMART OR DUMB?

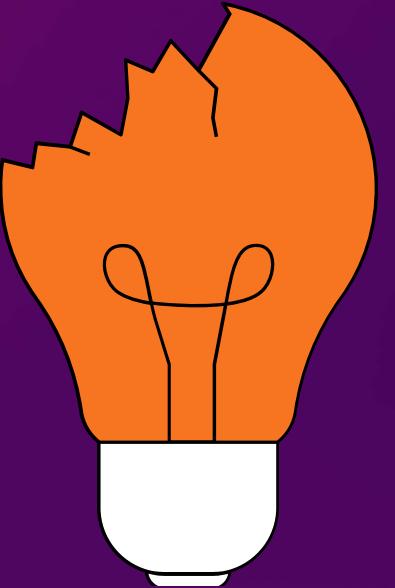


Smart

Showing the ability to:

- Learn
- Understand things

By Definition In Britannica Dictionary



Dumb

Not showing or not having:

- Intelligence
  - creative
  - analytical
  - practical
- Good Judgement

# HOW CHATGPT IS MAKING US...

Dumb

- Less creativity
- Less critical thinking
- Skipping a mistake

Smart

- Making knowledge more accessible
- Automating repetitive or tedious activities
- Improve learning

# HOW CHATGPT IS MAKING US...

Dumb

- Less creativity
- Less critical thinking
- Skipping a mistake



Smart

- Making knowledge more accessible
- Automating repetitive or tedious activities
- Improve learning

# HOW CHATGPT IS MAKING US...

Dumb

- Less creativity
- Less critical thinking
- Skipping a mistake



Smart

- Making knowledge more accessible
- Automating repetitive or tedious activities
- Improve learning



ChatGPT will make smart  
people smarter, productive  
people more productive...

... it doesn't make dumb people smart.

# How would you use ChatGPT to be smarter?



**8472 1866**

Do you think ChatGPT is  
making you smarter?



**8472 1866**







# AUTOMATING REPETITIVE OR TEDIOUS ACTIVITIES

Add a main point

Briefly elaborate on what you want to discuss.

Add a main point

Briefly elaborate on what you want to discuss.

Add a main point

Briefly elaborate on what you want to discuss.

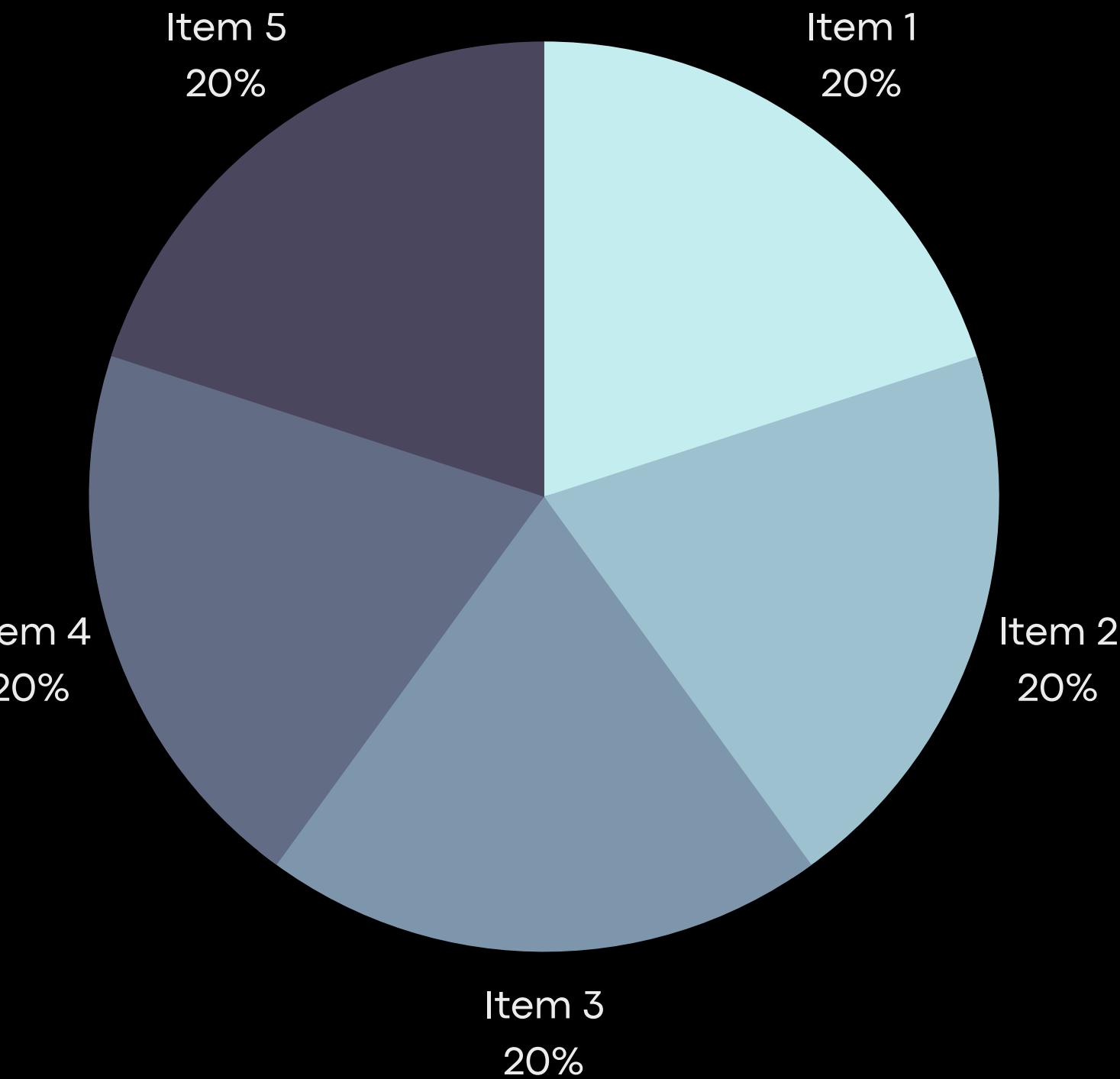
Add a main point

Briefly elaborate on what you want to discuss.

WRITE YOUR TOPIC OR IDEA

## Write a column name

# Write a column name



## WRITE YOUR TOPIC OR IDEA

Briefly elaborate on what you  
want to discuss.

# WRITE YOUR TOPIC OR IDEA

Briefly elaborate on what you want to discuss.



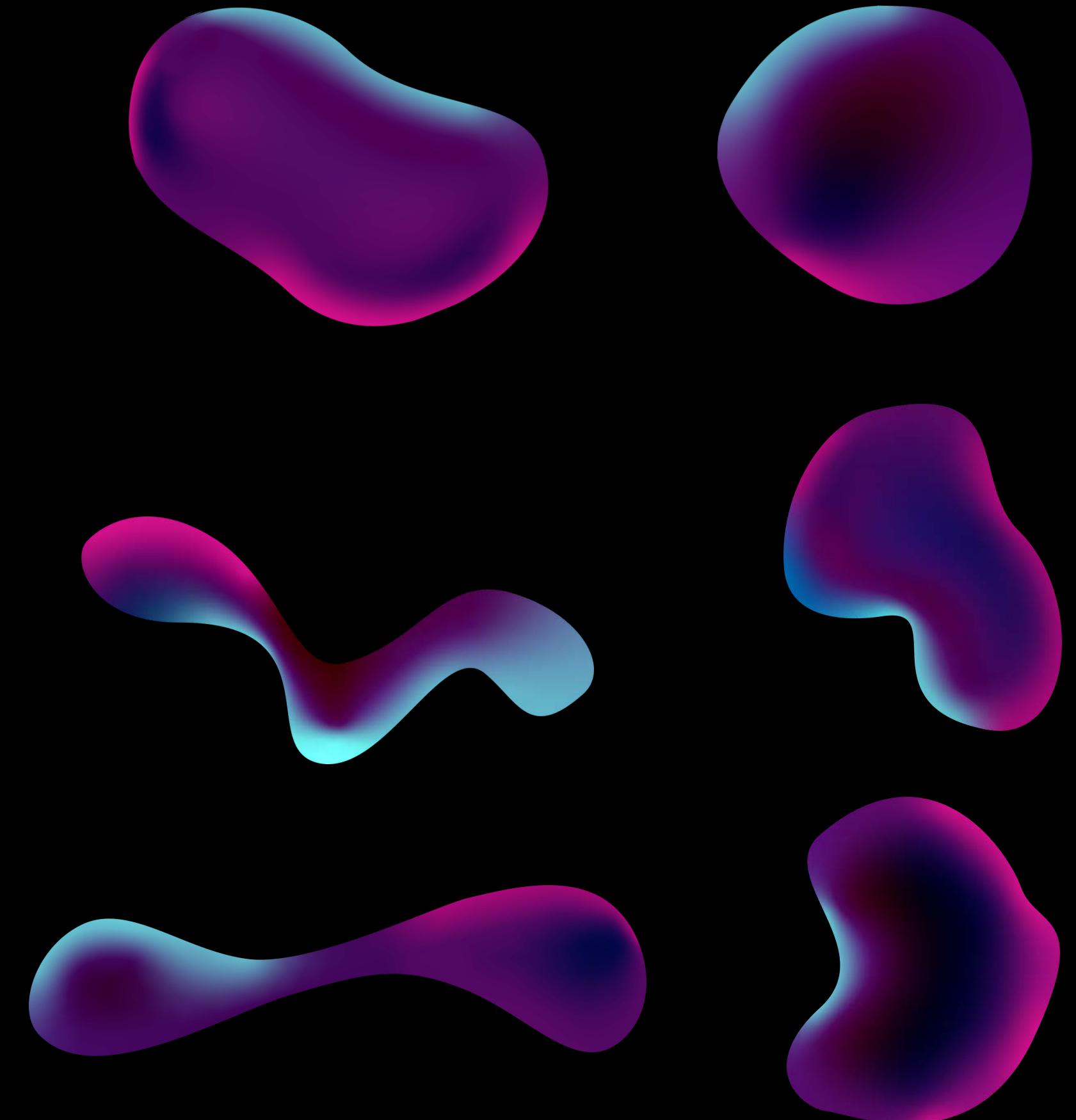
# THANK YOU!

Insert a parting or call-to-action  
message here.

# Resource Page

Use these design resources  
in your Canva Presentation.  
Happy designing!

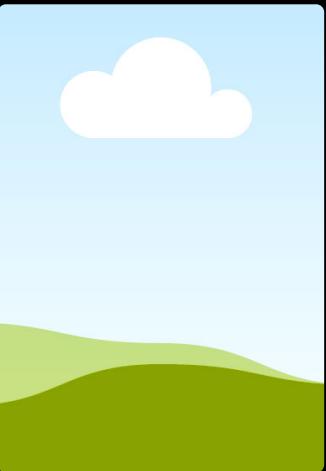
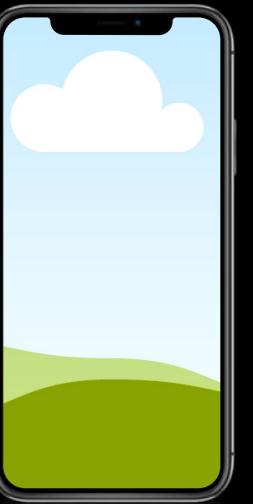
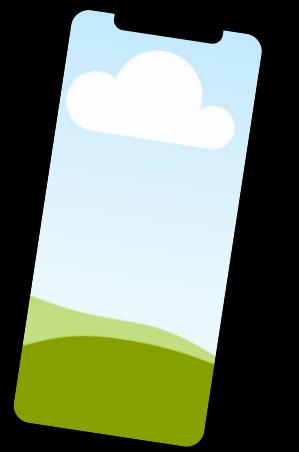
Don't forget to delete this page  
before presenting.



# Resource Page

Use these design resources  
in your Canva Presentation.  
Happy designing!

Don't forget to delete this page  
before presenting.



# Resource Page

B for blur

C for confetti

D for a drumroll

O for bubbles

Q for quiet

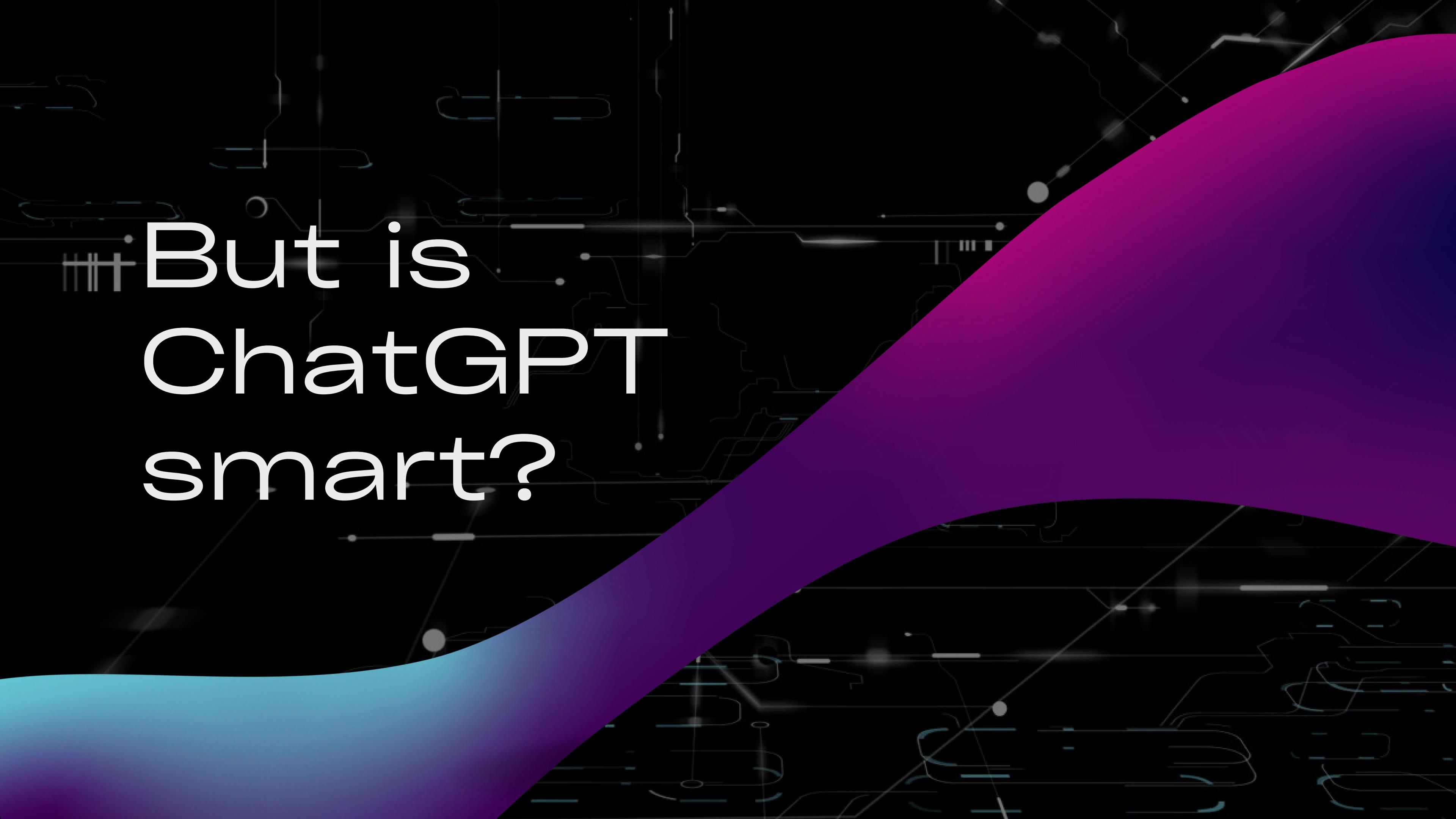
X to close

Find the magic and fun in presenting with Canva Presentations. Press the following keys while on Present mode!

Don't forget to delete this page before presenting.

Any number from 0-9 for a timer

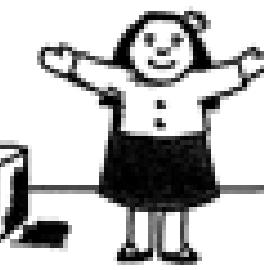




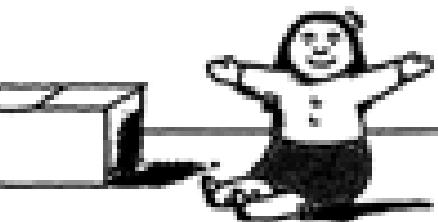
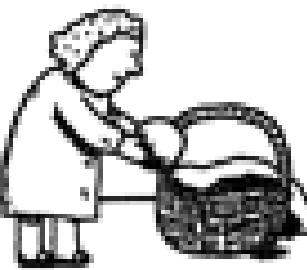
# But is ChatGPT smart?



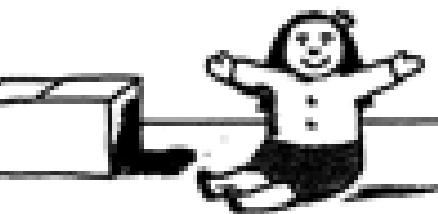
This is Sally



This is Anne



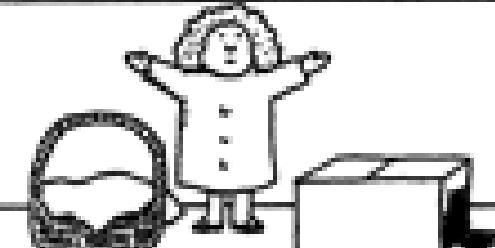
Sally puts her ball in the basket



Sally goes away



Anne moves the ball to her box



Where will Sally look for ball?

# What do you think ChatGPT would answer?



NUMBER

AL

do you know is the Ann and Sally false belief task? explain |

Save & Submit

Cancel



Yes, I'm familiar with the "Ann and Sally False Belief Task." It's a classic experimental paradigm in developmental psychology that is used to measure a child's theory of mind, or their understanding of the mental states of others.



The task typically involves a story or a short puppet play, in which two characters (usually named Ann and Sally) have an object, such as a toy or a ball. The object is then moved from its original location to a new location while one of the characters is absent. The child is then asked a question about the mental state of the absent character, such as "Where will Sally look for the toy?"

The correct answer is that Sally will look for the toy in its original

# IQ of chatgp

just take existing knowledge,  
not create new one