



# Artificial Intelligence in Education

Meenakshi Uberoi

# Microsoft in Education

Through this training, Microsoft intends to,

- Accomplish the mission of empowering students and Educators to do more
- Integrate Teaching and Learning experiences with **Technology**

*To know more, please visit <https://www.microsoft.com/education>*

# AGENDA

- AI in Education
- AI powered Office tools
- AI for fostering 21st century skills

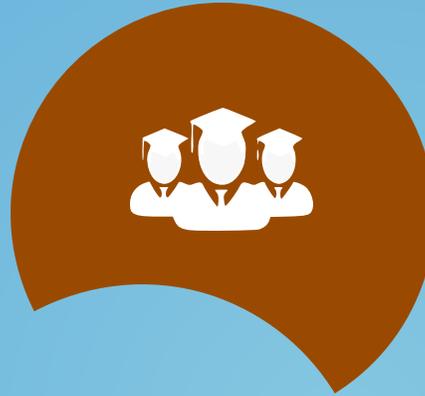




# AI In Education!

## Empower Students To Their Best Work

- Personalise learning
- Navigate your own learning
- Foster future-ready skills
- Enables anytime anywhere learning
- Brings collaboration and connectedness in learning
- Empowers students to think creatively



AI

## Enable Teachers To Engage Every Learner

- Enables teachers to Personalise learning
- Monitor and navigate learning progress
- Foster future-ready skills
- Enables anytime anywhere teaching-learning
- Brings collaboration in planning and teaching
- Increase student engagement using immersive learning experiences



## Ensure Equity and Inclusion In Schools

- Enables schools to make students workforce-ready
- Monitor and track school and student progress
- Intelligent environments provide insights to make substantive decisions
- Increases productivity and effectiveness for all
- Makes learning accessible and inclusive

# How Are You Today?

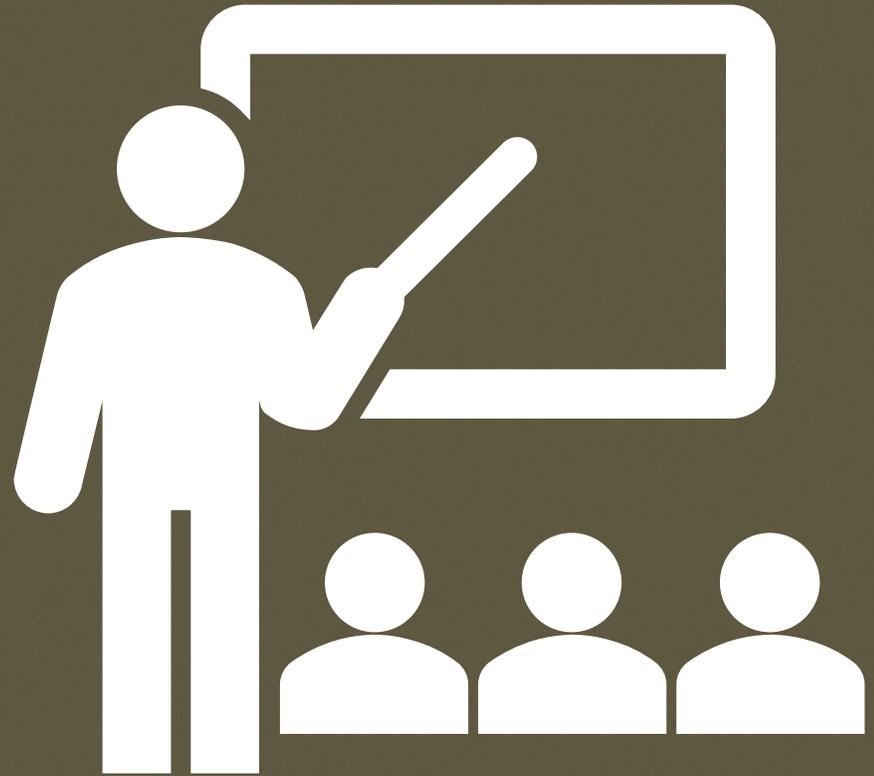


[bit.ly/HRUTAP](http://bit.ly/HRUTAP)



# AI powered Learning Tools- Immersive Reader

Learning Tools  
Immersive Reader  
creates a reading  
experience that adds  
accessibility and  
comprehension for  
learners of all ages and  
abilities.





The study of Earth's landforms is called physical geography. Landforms can be mountains and valleys. They can also be glaciers or rivers. Landforms are sometimes called physical features.



Syllables



Parts of Speech

nouns n.



verbs v.



adjectives adj.



adverbs adv.



Show labels



AutoSave On Amazon Rainfor... - Last Modified: Just now Search

File Home Insert Design Layout References Mailings Review View Help

Clipboard Font Paragraph Styles Editing

Calibri (Body) 11 A A A A AaBbCcDd AaBbCcDd AaBbCc AaBbCcC AaB AaBbCcD AaBbCcDd

1 Normal 1 No Spac... Heading 1 Heading 2 Title Subtitle Subtitle Em...

Find Replace Select Dictate

Share Comments

## The Amazon Rainforest

The Amazon Rainforest is an expansive forest located in the Amazon Basin. The forest covers an area as large as the 48 contgenous United States. (Field Mu Estimate 16,000 Tree Species in the Amazon) Contained within it is a dizzying array of distinct tree species – aproxxemity 16,000 different species in total – have much fewer than 1,000 living trees. Because of this, its dense animal biodiversity, its higher taxonomic uniqueness, and the rarity of the habitat, the A considered to be a distinct ecoregion. (Amazon Rainforest, Amazon plants, Amazon river Animals)



## Deforestation

Dictate

- Chinese (China)
- English (Canada)
- English (United Kingdom)
- English (United States)
- French (France)
- German (Germany)
- Italian (Italy)
- Spanish (Mexico)
- Spanish (Spain)

Preview Languages

- English (Australia)
- English (India)
- French (Canada)
- Portuguese (Brazil)

429 words

Type here to search

Display Settings Focus

140%



## Math Notes

Wednesday, December 19, 2018 11:06 AM

A handwritten green equation  $y = \frac{1}{4} \left( \sin \left( \frac{1}{2} x \right) \right)$  is shown within a dashed rectangular selection box. A small circular handle with a crosshair is positioned over the 'i' in 'sin'.

### Math

$$y = \frac{1}{4} \left( \sin \left( \frac{1}{2} x \right) \right)$$

Solve for x

Solve for y

Graph in 2D



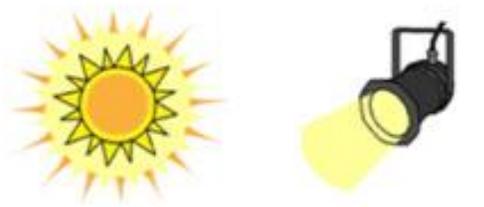
8/21/19, 2:03 PM Office Lens



How Plants Grow What do plants need to grow? They need wa-ter and light, of course, but they al-so need nu-tri-ents, fresh air, a com-  
-ture, space to spread their roots, and

light

Spanish luz



& Nu-tri-ents Plants draw wa-ter and oil. That's why we wa-ter the soil, not the most plants. Ni-tro-gen, phos-pho-rus, and

# AI and its applications are making a significant mark on the lives of learners

The learning shift is happening now

Search, launch, and command

Activity Chat Teams Calendar Files Assignments Store

Geography of the Earth

Krystal McKinney Attempts: 2 Level: N Words: 207 Insights

81 Correct Words per Minute

83% Accuracy Rate

- 5 Mispronunciations
- 2 Omissions
- 1 Self-corrections
- 1 Insertions
- 0 Repetitions

Auto-Detect

Pronunciation sensitivity Low

The study of Earth's **landforms** is called physical geography. Landforms can be mountains and valleys. They can also be **glaciers**, lakes, or rivers. Landforms are sometimes called physical features. It is important for students to know about the physical geography of Earth.

The seasons, the **atmosphere** and all **the** natural processes of Earth affect where people are able to live. One of a **combination** of factors that people use to decide where they want to live.

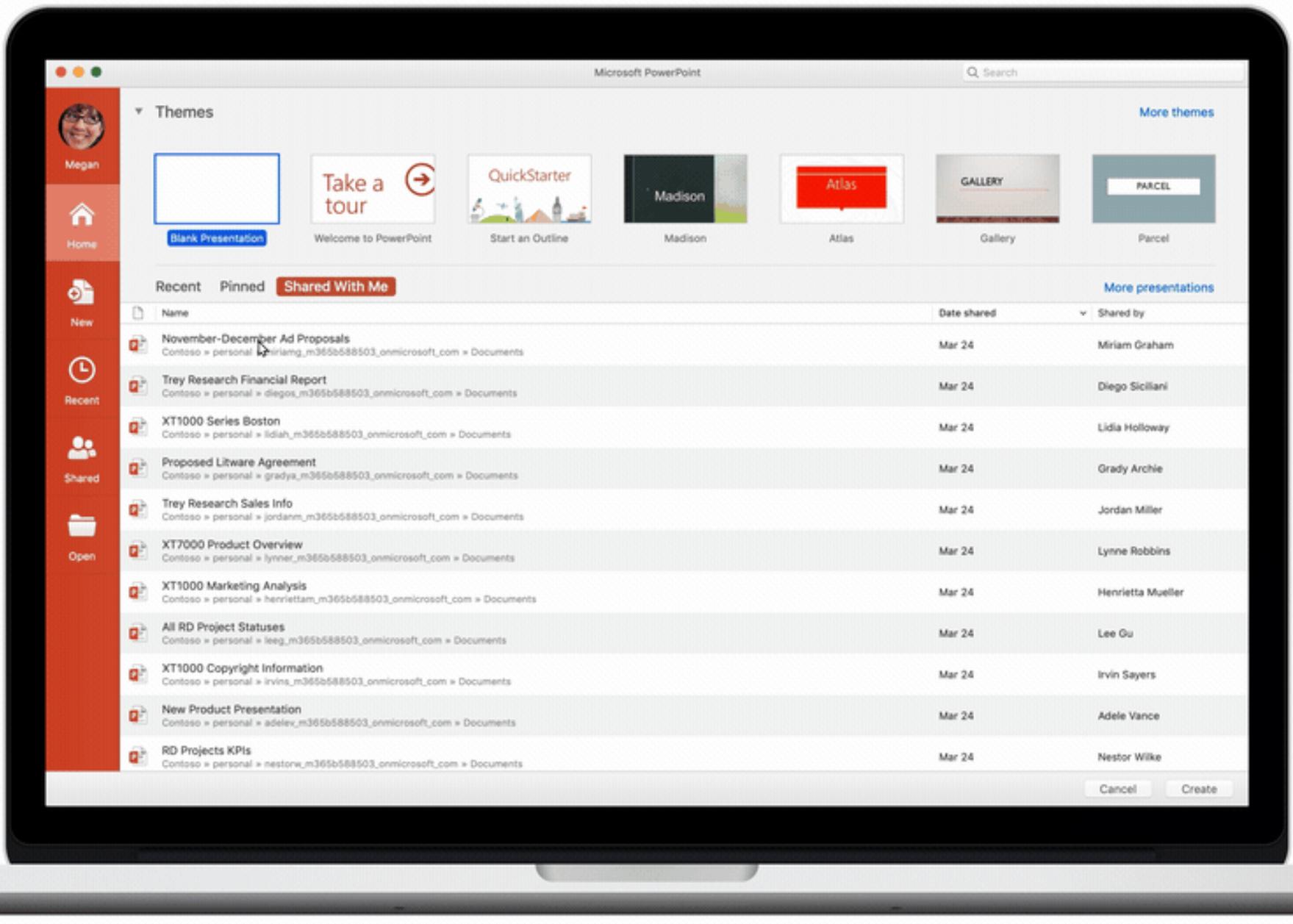
The **physical** features of a region influence where people settle. Within a nation, mountain ranges become barriers for settlement areas. In the U.S., major mountain ranges include the Sierra Nevada, the Rocky Mountains, and the Appalachian Mountains.

Fresh water sources also influence where people settle. People need water

- Omission
- Insertion
- Mispronunciation
- Repetition
- Self-correction
- Mark as correct
- Jump to word

# AI built in PowerPoint





Themes

More themes



Blank Presentation



Welcome to PowerPoint



Start an Outline



Madison



Atlas



Gallery



Parcel

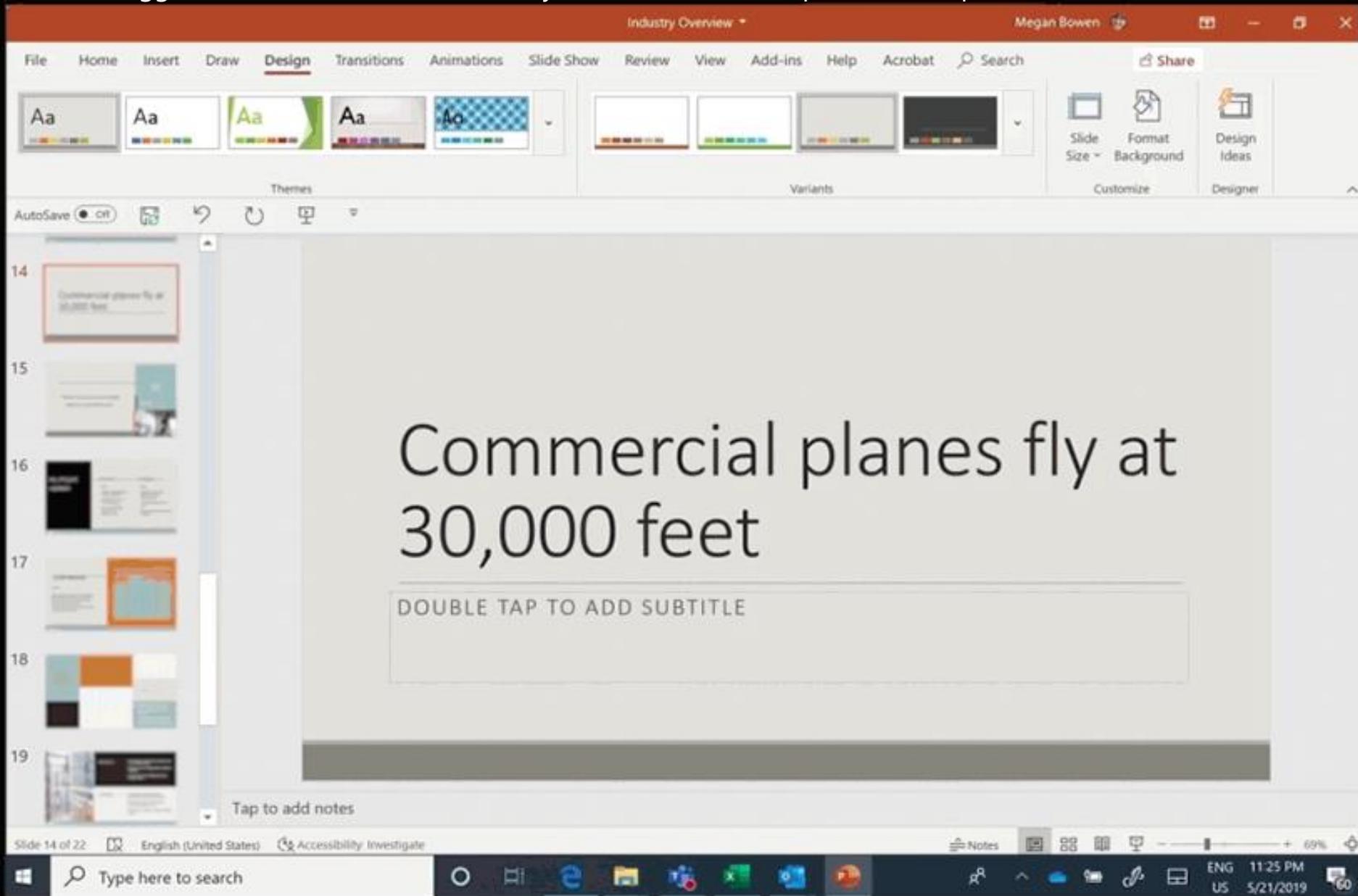
Recent Pinned Shared With Me

More presentations

Name	Date shared	Shared by
November-December Ad Proposals Contoso > personal > miriam_m365b588503_onmicrosoft_com > Documents	Mar 24	Miriam Graham
Trey Research Financial Report Contoso > personal > diego_m365b588503_onmicrosoft_com > Documents	Mar 24	Diego Siciliani
XT1000 Series Boston Contoso > personal > lidia_m365b588503_onmicrosoft_com > Documents	Mar 24	Lidia Holloway
Proposed Litware Agreement Contoso > personal > grady_m365b588503_onmicrosoft_com > Documents	Mar 24	Grady Archie
Trey Research Sales Info Contoso > personal > jordanm_m365b588503_onmicrosoft_com > Documents	Mar 24	Jordan Miller
XT7000 Product Overview Contoso > personal > lynne_m365b588503_onmicrosoft_com > Documents	Mar 24	Lynne Robbins
XT1000 Marketing Analysis Contoso > personal > henrietta_m365b588503_onmicrosoft_com > Documents	Mar 24	Henrietta Mueller
All RD Project Statuses Contoso > personal > lee_m365b588503_onmicrosoft_com > Documents	Mar 24	Lee Gu
XT1000 Copyright Information Contoso > personal > irvin_m365b588503_onmicrosoft_com > Documents	Mar 24	Irvin Sayers
New Product Presentation Contoso > personal > adelev_m365b588503_onmicrosoft_com > Documents	Mar 24	Adele Vance
RD Projects KPIs Contoso > personal > nestor_m365b588503_onmicrosoft_com > Documents	Mar 24	Nestor Wilke

Cancel Create

PowerPoint's Designer Perspective, which is fuelled by Microsoft Research's Perspective Engine, will automatically suggest text that makes it easier for your audience to comprehend complicated numerical values.



## Your Rehearsal Report (Preview)

Feedback

Rehearse Again

ⓘ Rehearse for more than one minute for Coach to better understand your speech and give recommendations.

### Summary

Good job rehearsing! Keep up the hard work.

0:36

total time spent

1

slides rehearsed

### Originality

✓ You avoided reading slide text aloud. That's good for keeping the audience engaged with your message.

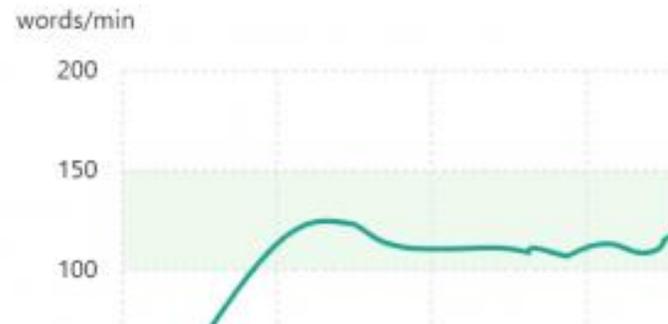
[Learn More](#)

### Pace



Your pace is just right! Keep it up!

### Your average pace over time



### Sensitive Phrases

✓ No sensitive phrases found. Great job using inclusive speech.

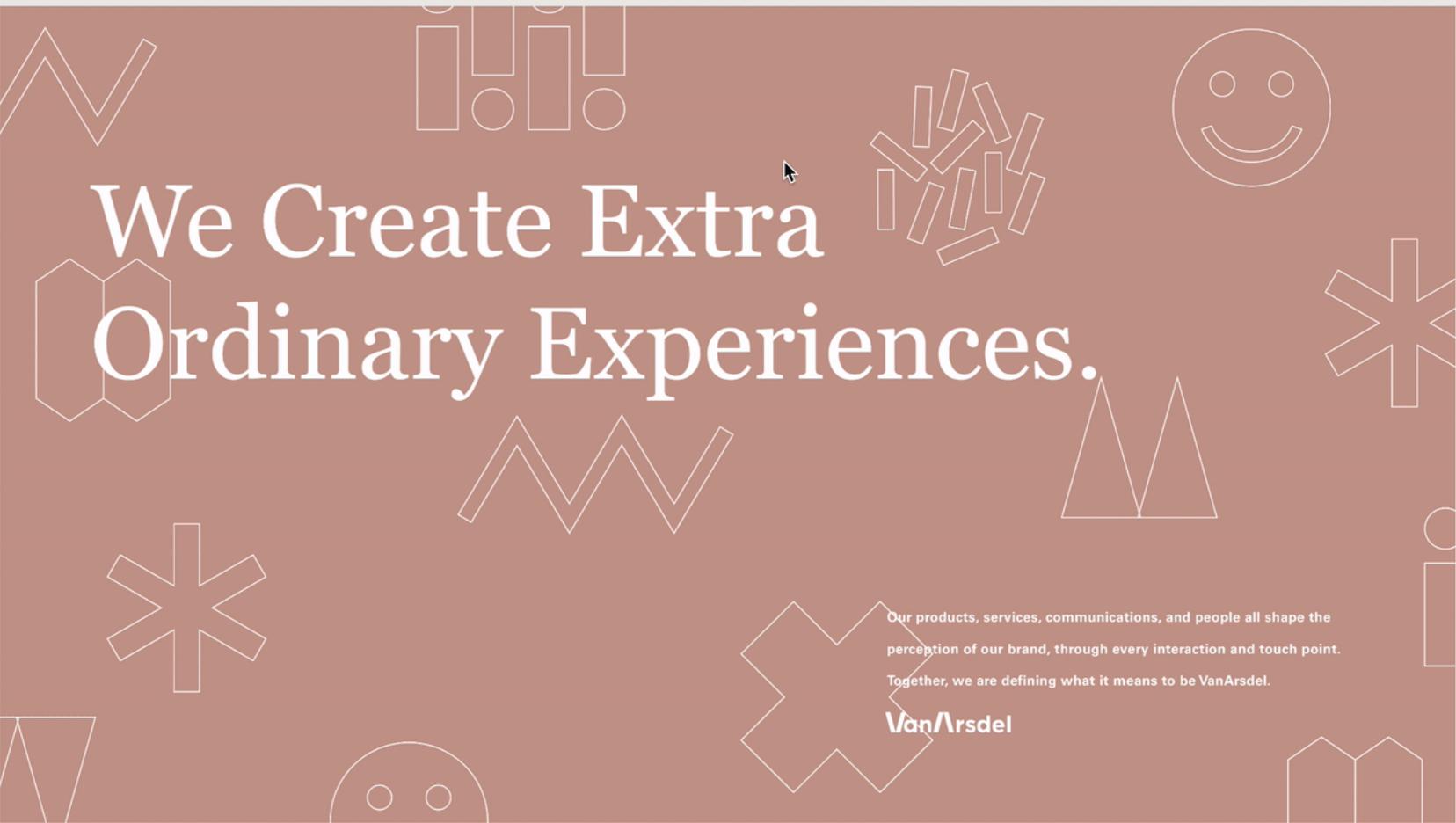
[Learn More](#)

### Fillers

✓ Fantastic! You didn't say too many filler words in your speech!

[Learn More](#)

- 1 Event Planning Proposal 2019
- 2 We Create Extra Ordinary Experiences.
- 3
- 4
- 5
- 6



Office

PowerPoint

File Home Insert

Play from Beginning

1 Event Planning Proposal

2 We Create Extra Ordinary Experiences.

3

4

5

6

## Sensitive Phrases

 No sensitive phrases found. Great job using inclusive speech.

[Learn more](#)

## Repetitive Language NEW

Try using synonyms to avoid repetition. Below are the repeated words from your rehearsal:

**awesome** beautiful I think

Similar words to consider  
wonderful, amazing, fantastic

[Learn more](#)

[Learn more](#)

## Pronunciation BETA

\* Based on General American English.

We heard a few words from your speech that may need more practice.

**extraordinary** rhetoric expertise

**extraordinary**  
ex-traor-di-nar-y  

 **Practice**

[Learn more](#)

[Learn more](#)

## Body Language

Suggestions for a presentation:

 **Eye contact**  
Keep your

 Facing a



**Distance**  
Keep a co  
your came

 **Clear view**  
Keep the v

[Learn more](#)

File Home Insert Design Transitions Animations Slide Show Review View Help Open in Desktop App Tell me what you want to do

Play from Beginning Play from Current Slide Always Use Subtitles Rehearse with Coach



- Spoken Language >
- Subtitle Language
- Bottom (Overlaid)
- Top (Overlaid)
- Below Slide
- Above Slide

# Early Solar System Explorations

6<sup>th</sup> Grade Science

VanArsdel



Corine Peterson

Regional Manager, VanArsdel Sales

# “Present Powerfully.”

Corrine earned her bachelor’s degree in supply chain economics, magna cum laude, from University of Fabrikam. She is the author of “Economy of Scale” a national best seller. Corrine was awarded VanArsdel’s Annual Sales Leadership award in 2018. She devotes much of her free time helping youth develop presentation skills and a passion for career success.



Speaker

Corine Peterson

1:00





AI built in Word

**Litware-Contoso Sales Proposal**

## Executive summary

The current consumer electronics market is experiencing unprecedented change—and with that changes comes great opportunity. Together, Litware and Contoso are ideally poised to take a market leadership position and deliver quality, consistency, and innovation to their customers.

Increasingly, people live life with their devices in hand. They are always on and always connected, so they require more from these devices—more power, more speed, more seamless integration. The industry challenge remains clear: Understand your customers, anticipate their future requirements, and deliver above their expectations.

That's why a Litware-Contoso partnership makes sense. No one in the consumer electronics market has a better understanding than Contoso of its long history of exciting innovation, turbulent disruption, and remarkable growth. And no one in the market consistently navigates through these changes and empowers its partners like Contoso.

providing  
descriptions for  
images  
recognizable by  
Computer Vision

AutoSave On Amazon Rainforest.docx - Aimee Owens

File Home Insert Draw Design Layout References Mailings Review View Tell me what you want to do

Cut Copy Paste Format Painter Clipboard

Calibri (Body) 11 A A+ Aa Font

Paragraph

Styles

1 Normal 1 No Spac... Heading 1 Heading 2 Title Subtitle Subtle Em... Emphasis Intense E...

Find Replace Select

## The Amazon Rainforest

The Amazon Rainforest is an expansive forest located in the Amazon Basin. The forest covers an area as large as the 48 contiguous United States. (Field Museum Scientists Estimate 16,000 Tree Species in the Amazon) Contained within it is a dizzying array of distinct tree species – approximately 16,000 different species in total – many of which have much fewer than 1,000 living trees. Because of this, its dense animal biodiversity, its higher taxonomic uniqueness, and the rarity of the habitat, the Amazon is also considered to be a distinct ecoregion (Amazon Rainforest, Amazon Plants, Amazon River Animals).

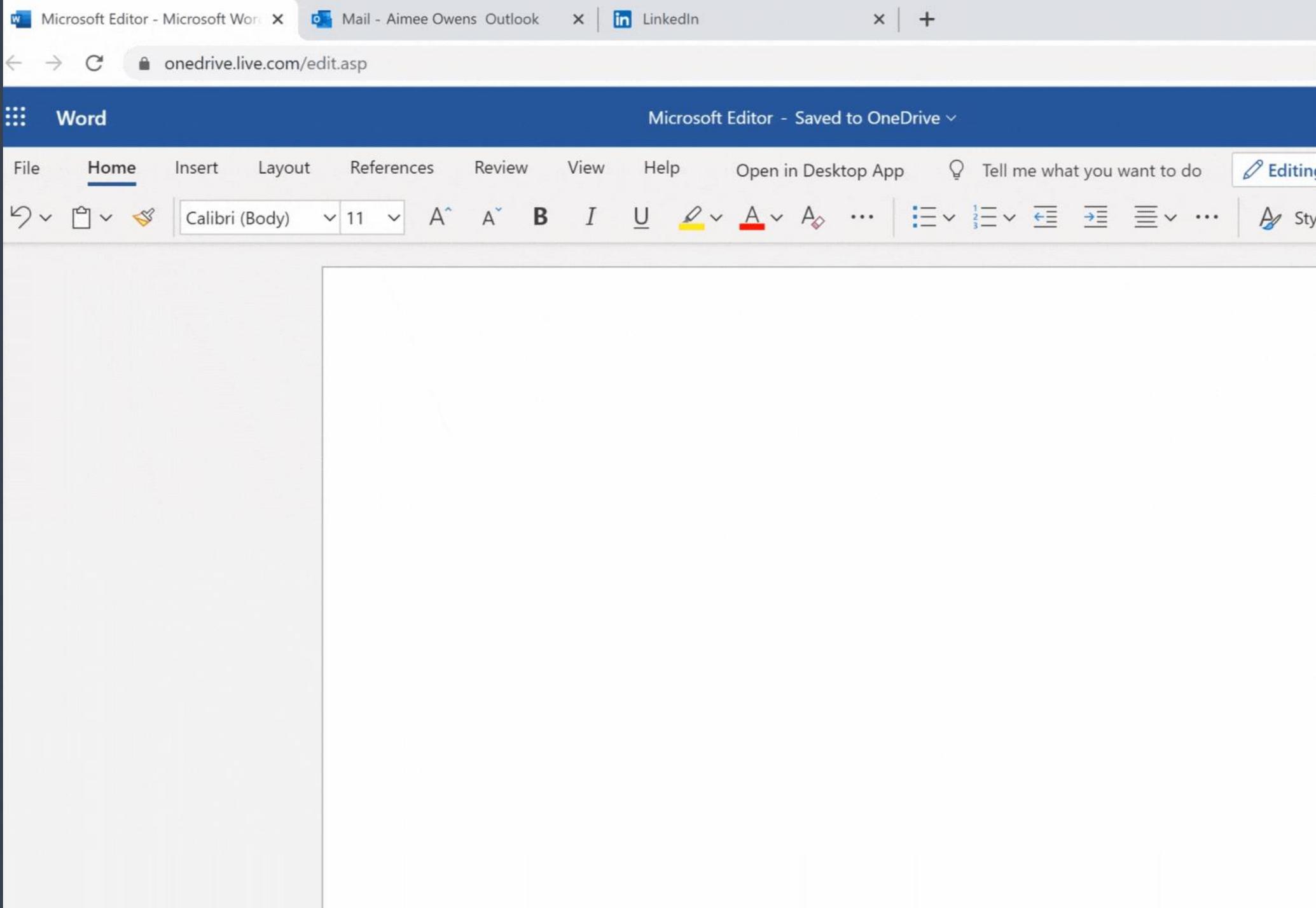


### Deforestation

Unfortunately, though deforestation is now widely discussed, the systematic deforestation of the rainforest has increased since 1996. (Margulis) Deforestation is often driven by a desire for cattle ranching, which has proven to be an enticing business for many in the area, and includes many entrepreneurs and intermediaries who benefit, often at the cost of more broad-based social improvement. (Margulis) Governments and large paper and lumber companies profit from rapid deforestation.

Page 1 of 1 205 words

Type here to search 10:17 AM 5/10/2018



Editor's suggestions in Word,<sup>1</sup> Outlook, and on your favourite sites

**Get help with  
the basics of  
spelling and  
grammar**

We were traveling across  
the globe last year

I hope they get their act together  
for the next show.

**Check for  
level of  
formality**

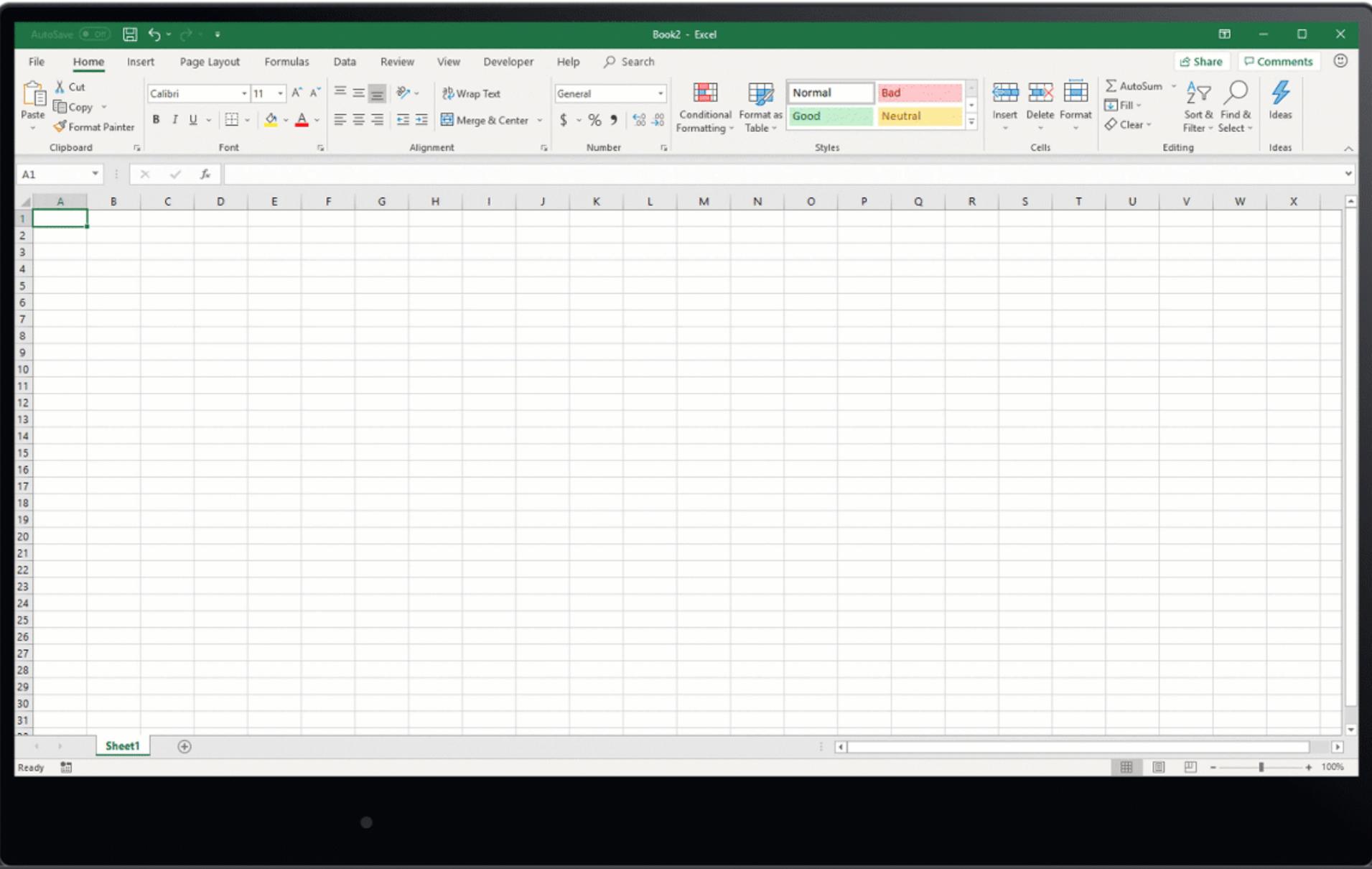
# Keep it concise

We don't have an alternative choice  
in this situation.

We want to quickly and efficiently finish this task.



AI built in Excel



AutoSave Off

Book2 - Excel

File Home Insert Page Layout Formulas Data Review View Developer Help Search

Clipboard: Paste, Cut, Copy, Format Painter

Font: Calibri, 11, Bold, Italic, Underline, Color, Background Color

Alignment: Wrap Text, Merge & Center

Number: General, Currency, Percentage, Decimals

Styles: Conditional Formatting, Format as Table, Normal, Bad, Good, Neutral

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

Ideas: Ideas

Share Comments

A1

Excel grid with columns A-X and rows 1-31. Cell A1 is highlighted.

Sheet1

Ready

100%



# Handling large data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		A	B											
2	Jan	5600	4800											
3	Feb	7000	4600											
4	Mar	5100	5000											
5	Apr	6200	4900											
6	May	5000	5100											
7	Jun	4900	4700											
8	Jul	5300	4900											
9	Aug	5700	5000											
10	Sep	5100	4800											
11	Oct	5200	4600											
12	Nov	5000	4900											
13	Dec	5500	5100											

	A	B	C	D	E	F	
1	Product	Price	Cost Price	Operating Expenses	Tax	Profit	
2	shirt	120	85	5	10		
3	shoes	200	155	5	15		
4	jeans	85	55	5	5		
5	pants	110	65	5	5		
6	Total						
7							
8							
9							
10							

Excel now supports natural language queries, allowing you to ask a question of your data and get quick answers without having to write a formula

The screenshot shows the Microsoft Excel interface within a web browser. The browser address bar displays the URL: [https://contoso.sharepoint.com/personal/megan\\_bowen\\_contoso\\_com/](https://contoso.sharepoint.com/personal/megan_bowen_contoso_com/). The Excel ribbon is visible, showing the 'Home' tab with various toolbars for Clipboard, Font, Alignment, Number, Tables, Cells, Editing, Ideas, and Sensitivity. The main workspace displays a spreadsheet with the following data:

Year	Category	Product	Sales	Rating
2017	Components	Chains	\$ 20,000	75%
2015	Clothing	Socks	\$ 3,700	22%
2017	Clothing	Bib-Shorts	\$ 4,000	22%
2015	Clothing	Shorts	\$ 13,300	56%
2017	Clothing	Tights	\$ 36,000	100%
2015	Components	Handlebars	\$ 2,300	35%
2016	Clothing	Socks	\$ 2,300	28%
2016	Components	Brakes	\$ 3,400	36%
2016	Bikes	Mountain Bikes	\$ 6,300	40%
2017	Components	Brakes	\$ 5,400	38%
2016	Accessories	Helmets	\$ 17,000	90%
2016	Accessories	Lights	\$ 21,600	90%
2016	Accessories	Locks	\$ 29,800	90%
2016	Components	Bottom Brackets	\$ 1,000	23%
2015	Clothing	Jerseys	\$ 6,700	5%
2017	Components	Bottom Brackets	\$ 600	27%
2015	Bikes	Road Bikes	\$ 3,500	50%
2017	Clothing	Jerseys	\$ 7,500	40%
2017	Accessories	Tires and Tubes	\$ 63,700	90%
2017	Bikes	Cargo Bike	\$ 9,300	60%
2017	Bikes	Mountain Bikes	\$ 8,500	46%
2017	Accessories	Bike Racks	\$ 33,700	92%
2017	Clothing	Caps	\$ 600	15%
2015	Bikes	Mountain Bikes	\$ 3,100	35%
2017	Accessories	Pumps	\$ 30,700	95%
2016	Accessories	Pumps	\$ 16,400	80%
2016	Accessories	Bike Racks	\$ 22,100	90%
2017	Accessories	Helmets	\$ 34,000	95%

The bottom of the screen shows the Windows taskbar with the search bar and several application icons, including Edge, File Explorer, and Office apps. The system tray on the right includes icons for network, volume, and power.

# AI can help foster 21<sup>st</sup> century skills where students want to navigate their own learning and teachers are thriving to become more effective facilitators of learning



## Office Lens

Take content from the analog to the digital world

Immersive Reader available for Office Lens on iOS



## Learning Tools

Comprehension, fluency and decoding aids

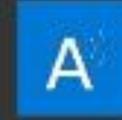
Word, OneNote, Outlook Web Access, and Edge



## Dictate

Use voice to get your best thoughts into your documents

Word, Excel, PowerPoint, OneNote, Outlook



## Read Aloud

Read your content with simultaneous word highlighting

Word, OneNote, Outlook Web Access, and EDGE



## Editor

Write easy-to-read documents, with more confidence

Word, Excel, PowerPoint, OneNote, Outlook

# AI in Math using Math Solver app

Get step-by-step  
explanations

**Solve for x**

Steps Using the Quadratic Formula ▾

$$x^2 - 4x - 5 = 0$$

This equation is in standard form:  $ax^2 + bx + c = 0$ . Substitute 1 for  $a$ ,  $-4$  for  $b$ , and  $-5$  for  $c$  in the [quadratic formula](#),  $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ .

$$x = \frac{-(-4) \pm \sqrt{(-4)^2 - 4(-5)}}{2}$$
$$x = \frac{-(-4) \pm \sqrt{16 + 20}}{2}$$
$$x = \frac{-(-4) \pm \sqrt{36}}{2}$$
$$x = \frac{-(-4) \pm 6}{2}$$

Write naturally  
as on paper

Scan Type Draw

$$4x + 5y = 6$$
$$x + 7y = 3$$

Scan and solve  
math problems

**Algebra Assignment**

1. Solve the linear equation

$$(i) \frac{(2x-3)}{5} + \frac{(4x-1)}{10} = 1$$

2. Solve the quadratic formula

$$(ii) 5x^2 + 3x - 9 = 0$$

**Solve for x**

$$x = \frac{17}{8} = 2\frac{1}{8} = 2.125$$

Steps for Solving Linear Equation

Get step-by-step solution

**Graph**

# AI in Math using Math Solver app

$$\frac{3}{n^2} \cdot \frac{n-4}{1} \cdot \frac{2}{3n^2}$$

$$-6 \log_3(x-3) = -24$$

$$x^2 - 4x - 5 = 0$$

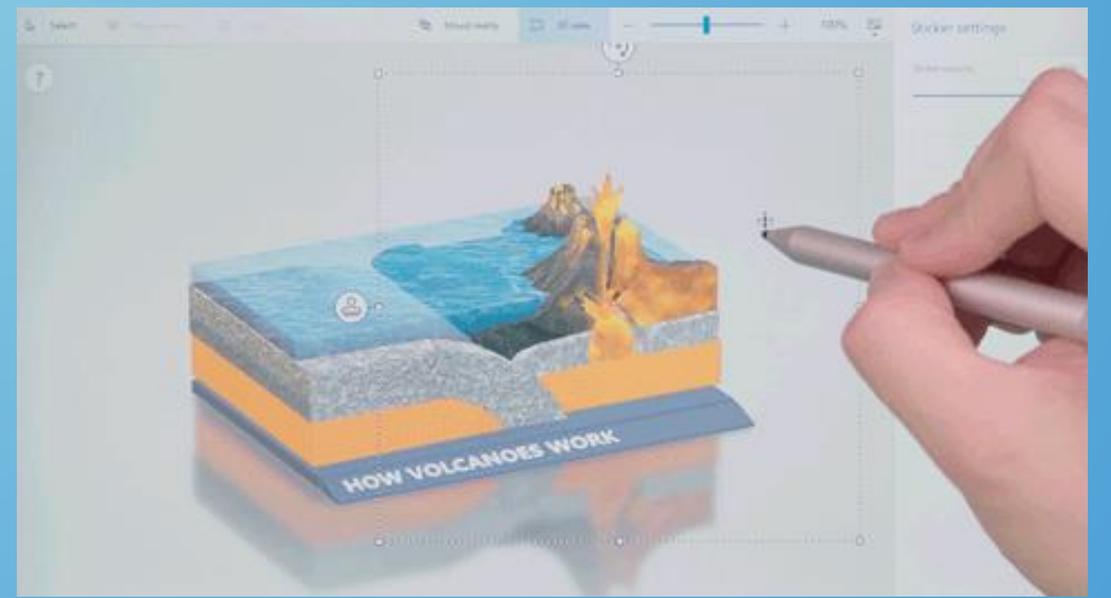
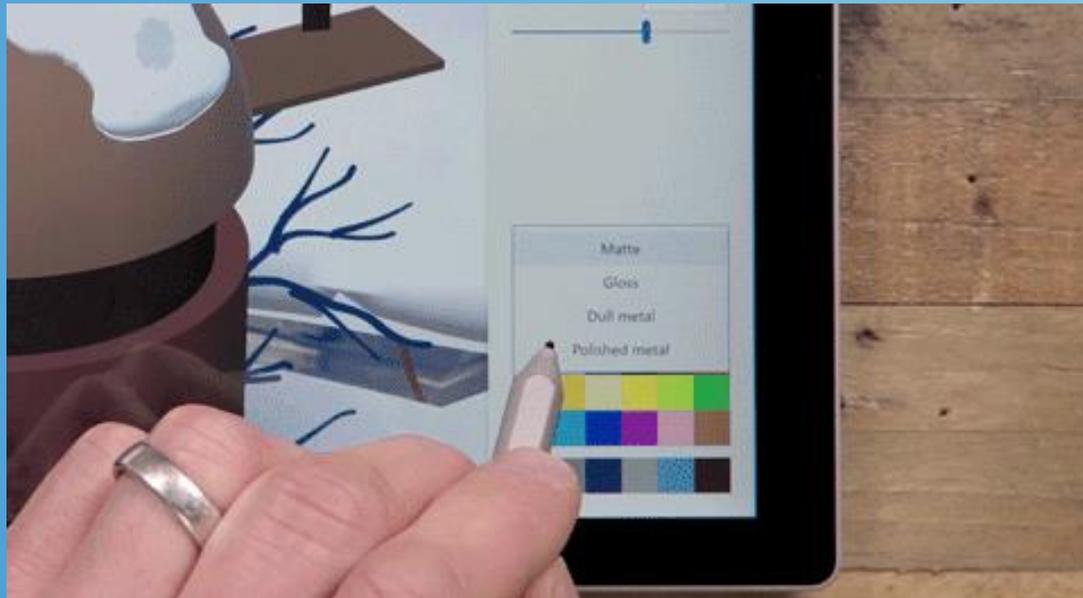
$$\begin{cases} 8x + 2y = 46 \\ 7x + 37 = 47 \end{cases}$$

$$\begin{bmatrix} 2 & 3 \\ 5 & 4 \end{bmatrix} \begin{bmatrix} 2 & 0 & 3 \\ -1 & 1 & 5 \end{bmatrix}$$

$x$	1	3	$\frac{4}{7}$
$y$	5	15	20

COS X COS X

# AI based learning platforms



**Check your knowledge**



**1. Editor in Word is much more robust than Spell Check. It can suggest and catch errors such as\_\_\_\_\_.**

- clarity and conciseness
- inclusive language
- formal language
- all of the above

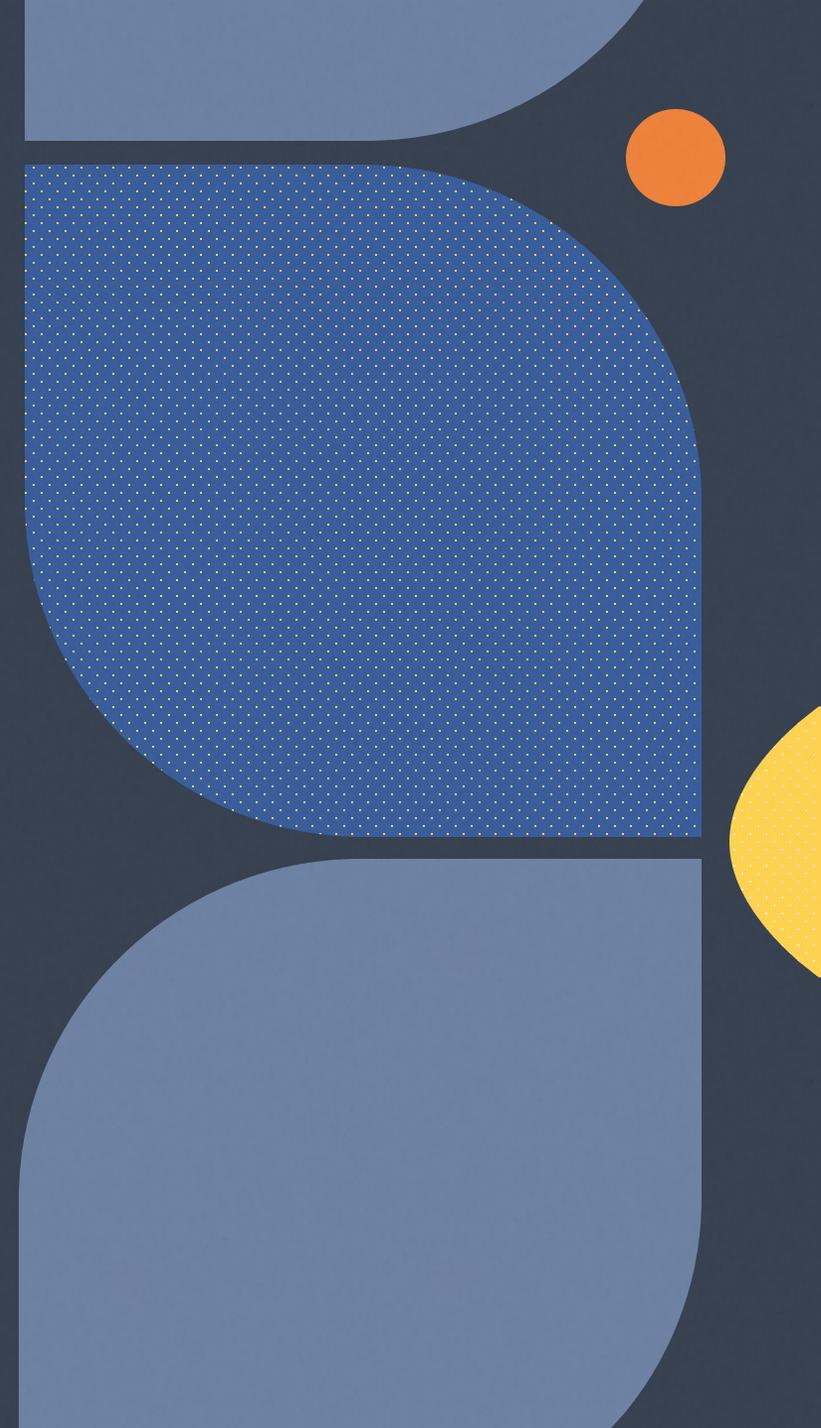
**2. Alt-text is what a screen reader reads when it comes across a document, image, or graph so that the user knows what is there.**

- False
- True



**3. Teachers can turn printed material into editable digital material with \_\_\_\_\_.**

- **a clipboard**
- **the Designer feature in PowerPoint**
- **the Accessibility Checker**
- **Office Lens**



4. The Translator feature can translate real-time audio so that two people who are speaking different languages can get a translation immediately during their conversation in \_\_\_\_\_.

- **Audio**
- **PowerPoint**
- **Teams**
- **Office Lens**

## 5. Students with learning differences can benefit from using:

- Learning Tools, Immersive Reader, Math Assistant, Office Lens
- only Office Lens
- only Immersive Reader



# AI based Bots



Talk to Miko:

- Any Information based question (for any age)
- Complex movements of Miko
- Multiplication Tables
- Time / Date / Year / Alarm / Reminder
- Songs / Dances / Riddles / Jokes
- Math Calculations
- Spellings
- Definitions
- Phonetics



# KWL - All About Energy!

## K - What I know:

Solar energy comes from the sun



Renewable Energy comes from wind and other natural forces

Fossil fuels come from the ground

Fossil fuels are Non-renewable

## W - What I Wonder:

Where exactly do fossil fuels come from?

How are these energy sources different?

How can we help the environment?



How do we get energy from the sun?

## L - What I Learned:

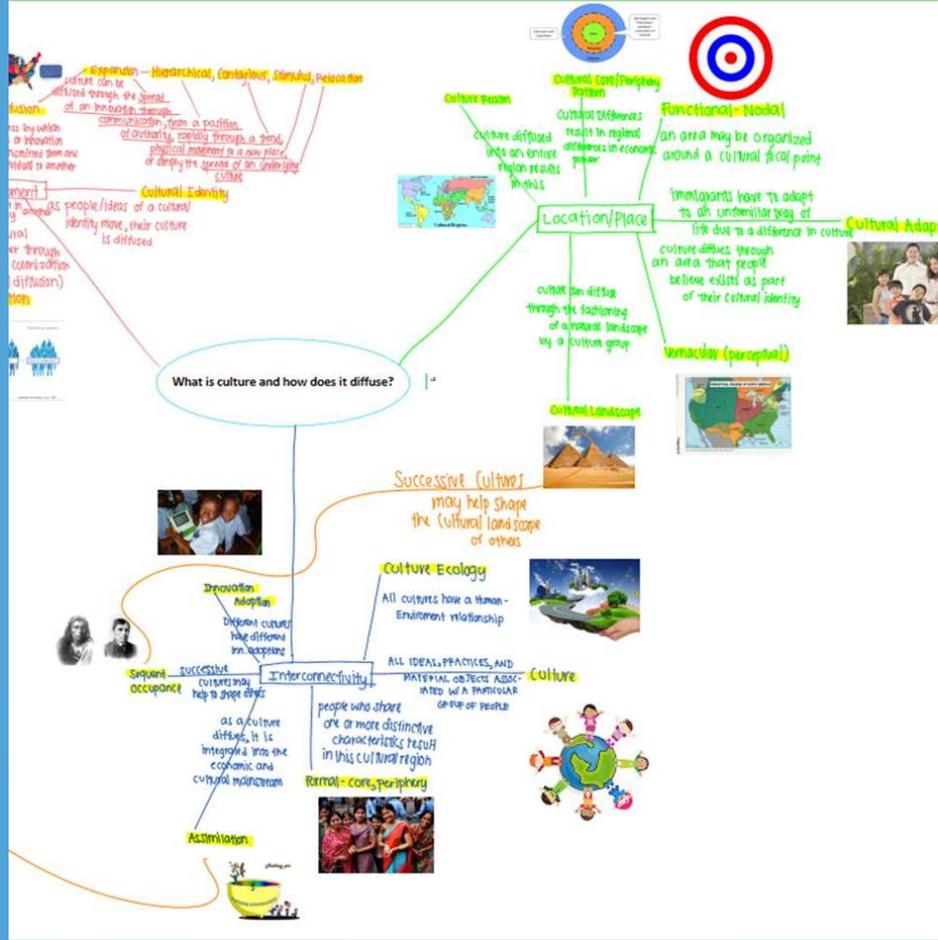
Coal and oil come from the remains of fossilized plants and animals.



Fossil fuels will eventually run out!

Waterfalls can also be used to make energy.





**Chapter 3**

1) Given a number, the quantity 2 plus is  $2x(2+4)$

2) 2 less than the product of 5 and y  $5xy - 8$

3) 4 fewer than 3  $3 - 4$

4)  $60 - 2(3 - 9)$   
 $60 - 2(-6)$   
 $60 - (-12)$   
 $60 + 12$   
 $72$

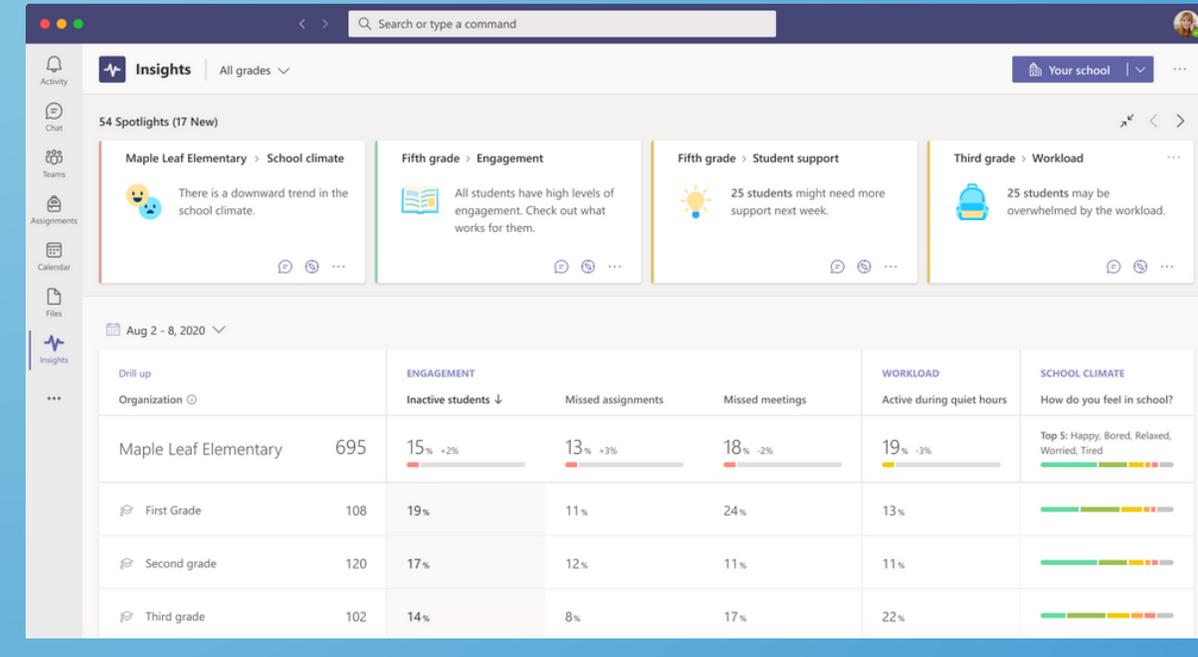
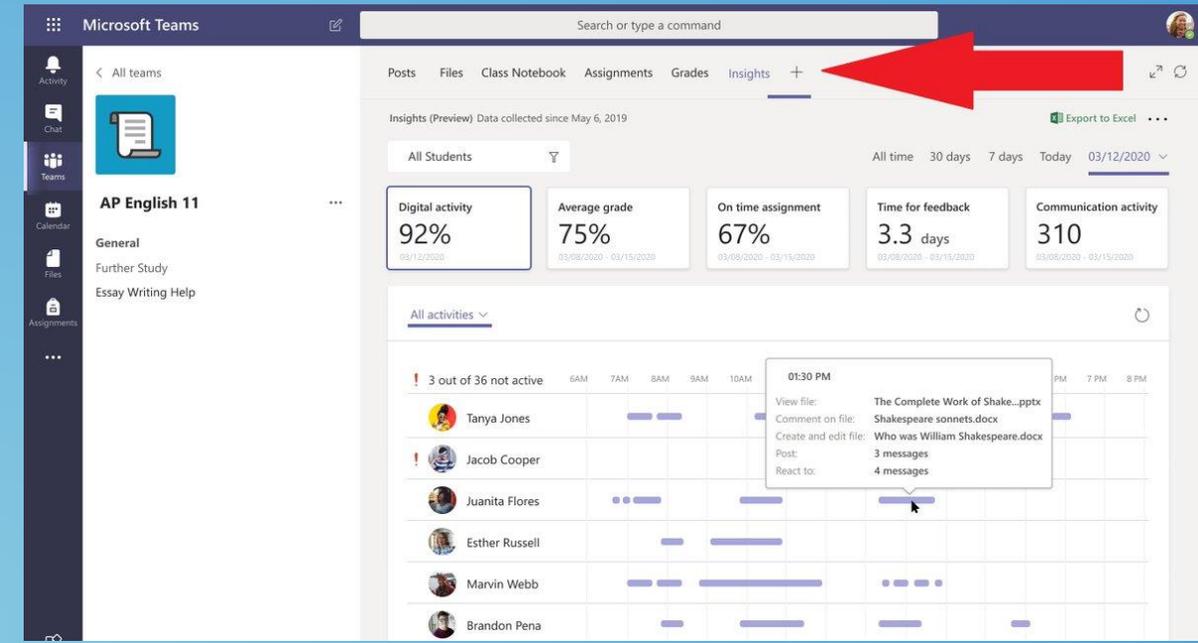
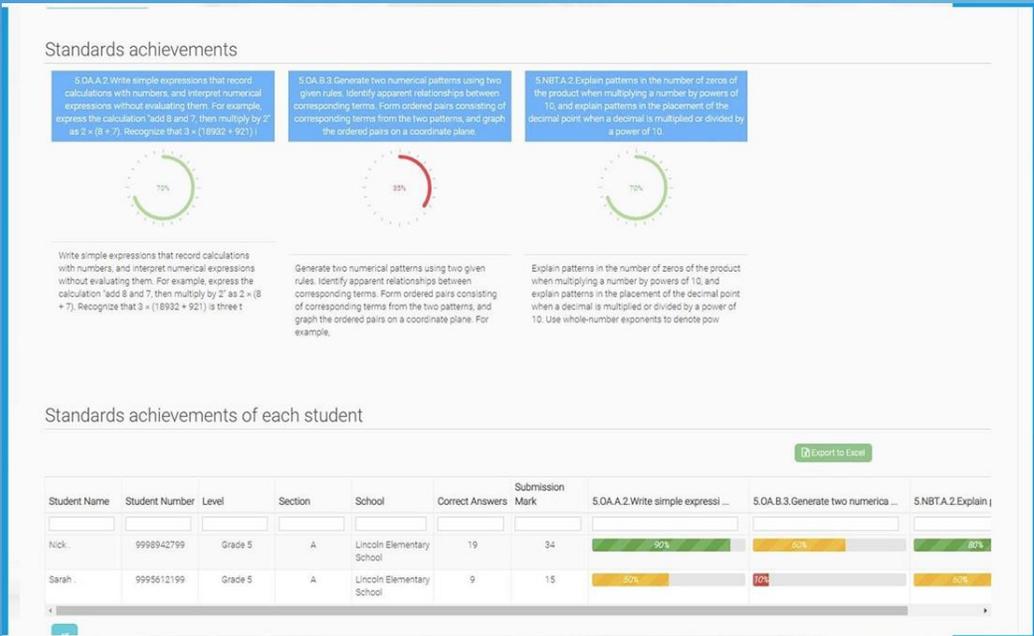
5)  $2(3 + (6 - 10)) - 8$   
 $2(3 + (-4)) - 8$   
 $2(-1) - 8$   
 $-2 - 8$   
 $-10$

6)  $2(6) + \frac{7+8}{3}$   
 $12 + \frac{15}{3}$   
 $12 + 5$   
 $17$

**Do NOT USE an X for multiplication**

Coordinate Plane: x-axis and y-axis. Points plotted at (1, 4), (2, 5), (3, 6), (4, 7), (5, 8). A red star is at (4, 5).

# AI based Dashboards



# Windows 10 Accessibility



## Vision

Make Your device  
Easier To See Or use  
With/Without screen



## Hearing

Make Your Device  
Easier To Hear Or  
Use Without Sound



## Physical

Make Your Device  
Easier To Use Of You  
Have Limited Reach Or Strength



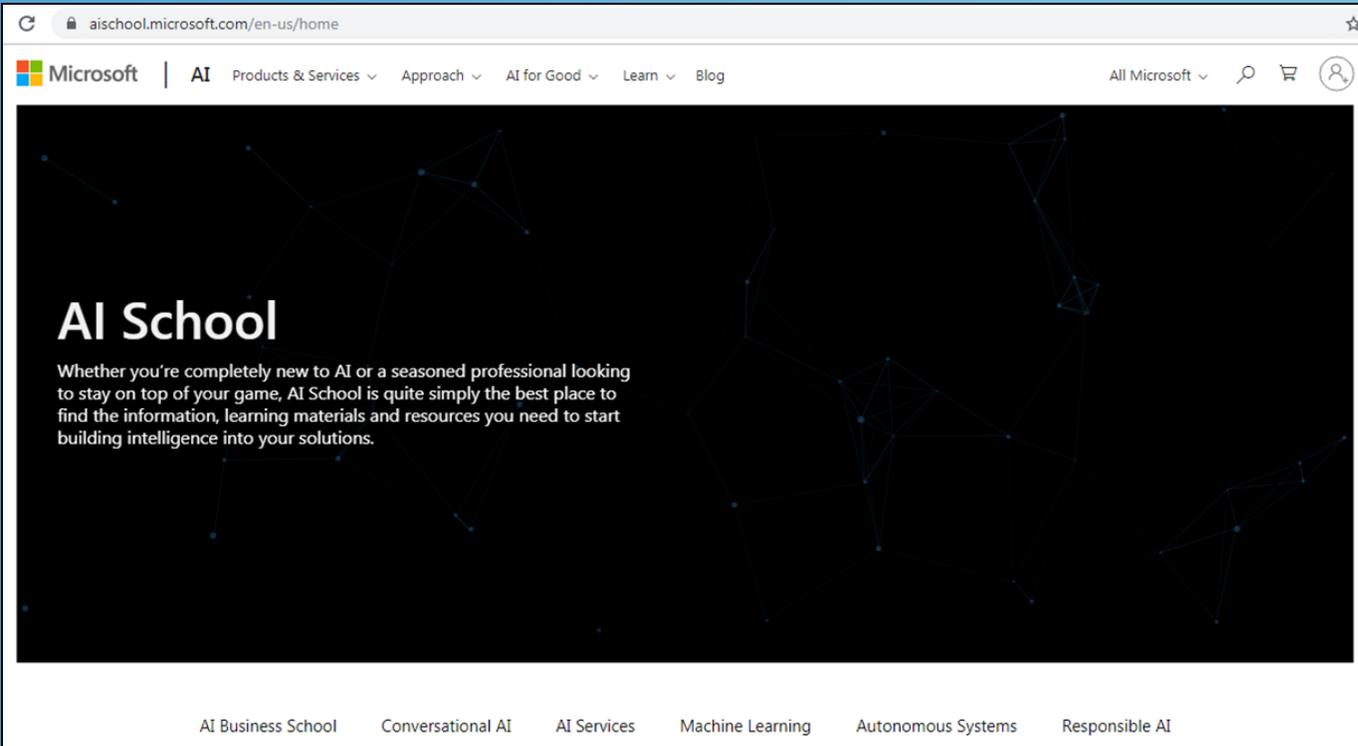
## Cognition

Make Your Device  
Easier To Focus And Get  
Things Done With Windows

# Opportunities to experience and learn about AI

## Introduction to Microsoft AI School

## Hands-On with AI



The screenshot shows the Microsoft AI School homepage. The URL in the browser is [aischool.microsoft.com/en-us/home](https://aischool.microsoft.com/en-us/home). The page features a dark background with a network diagram of nodes and lines. The main heading is "AI School" in large white text. Below it, a paragraph reads: "Whether you're completely new to AI or a seasoned professional looking to stay on top of your game, AI School is quite simply the best place to find the information, learning materials and resources you need to start building intelligence into your solutions." At the bottom, there is a navigation bar with links: "AI Business School", "Conversational AI", "AI Services", "Machine Learning", "Autonomous Systems", and "Responsible AI".

<https://aischool.microsoft.com/en-us/home>

 <h3>Video Indexer</h3> <p>Video Indexer creates intelligent insights automatically after indexing a video, including people, keywords, sentiment, and more. Upload your own video today and gain new insights.</p>	 <h3>Speech Authentication</h3> <p>Microsoft Cognitive Services Speech API decipher voices and determine if it's the same person speaking or not. Try it today by using different voices or use pre-recorded voices.</p>	 <h3>Text Analytics</h3> <p>Microsoft Cognitive Services Text Analytics API determines the sentiment of your message, typed or spoken. Try it out and see if the message is positive, negative, or neutral.</p>
 <h3>Face and Emotion Recognition</h3> <p>Microsoft Cognitive Services Face API can quickly analyze and compare to determine if two photos contain the same person or not. Test it out with your own photos or with a friend.</p>	 <h3>AI Route Planner</h3> <p>Bing Maps Distance Matrix API calculates travel time and distances for multi-stop routes and optimizes based on traffic patterns and other inputs. Try it to plan a sight-seeing trip.</p>	 <h3>Language Understanding</h3> <p>Microsoft Cognitive Services Language Understanding interprets human language and understands the intent. Type in a custom intent or try one of the predefined ones to affect the house.</p>

<https://aidemos.microsoft.com/>

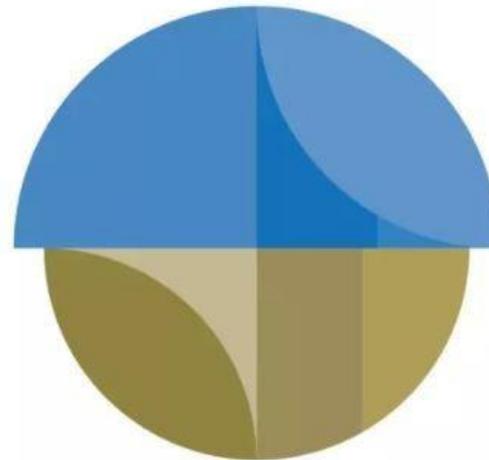
# Future Careers - AI



## Job landscape

By 2025, new jobs will emerge and others will be displaced by a shift in the division of labour between humans and machines, affecting:

**97 million**



**85 million**

### Growing job demand:

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. Big Data Specialists
4. Digital Marketing and Strategy Specialists
5. Process Automation Specialists
6. Business Development Professionals
7. Digital Transformation Specialists
8. Information Security Analysts
9. Software and Applications Developers
10. Internet of Things Specialists

### Decreasing job demand:

1. Data Entry Clerks
2. Administrative and Executive Secretaries
3. Accounting, Bookkeeping and Payroll Clerks
4. Accountants and Auditors
5. Assembly and Factory Workers
6. Business Services and Administration Managers
7. Client Information and Customer Service Workers
8. General and Operations Managers
9. Mechanics and Machinery Repairers
10. Material-Recording and Stock-Keeping Clerks

Source: Future of Jobs Report 2020, World Economic Forum.

How the jobs landscape will change in the next five years?



