

THE  
TUTOR  
TRUST

# ChatGPT for educators:

Practical approaches to  
lesson planning



A free charity webinar by Tutor Trust | Striving for equity in education | Championing the North



# A bit about us



- Award-winning charity established in 2011, having since worked with some 30,000 young people.
- Successfully supports primary and secondary schools in Greater Manchester, Merseyside, and West Yorkshire.
- Aims to help young people reach their potential.
- Delivery partner of Government's National Tutoring Programme (NTP) since 2020.
- Provides subsidised tutoring to schools, at no cost to parents or carers.



# Introduction



- Strong advocacy among testing group
- Teacher & tutors saved time
- Lower effort required to prepare lessons
- Improved lessons & higher quality resources



## Teaching with ChatGPT

The Hg  
Foundation

BAIN  
& COMPANY



Ark

THE  
TUTOR  
TRUST

MOUNTS BAY  
ACADEMY

NEWCASTLE  
SIXTH FORM COLLEGE



THE MIRFIELD  
FREE GRAMMAR

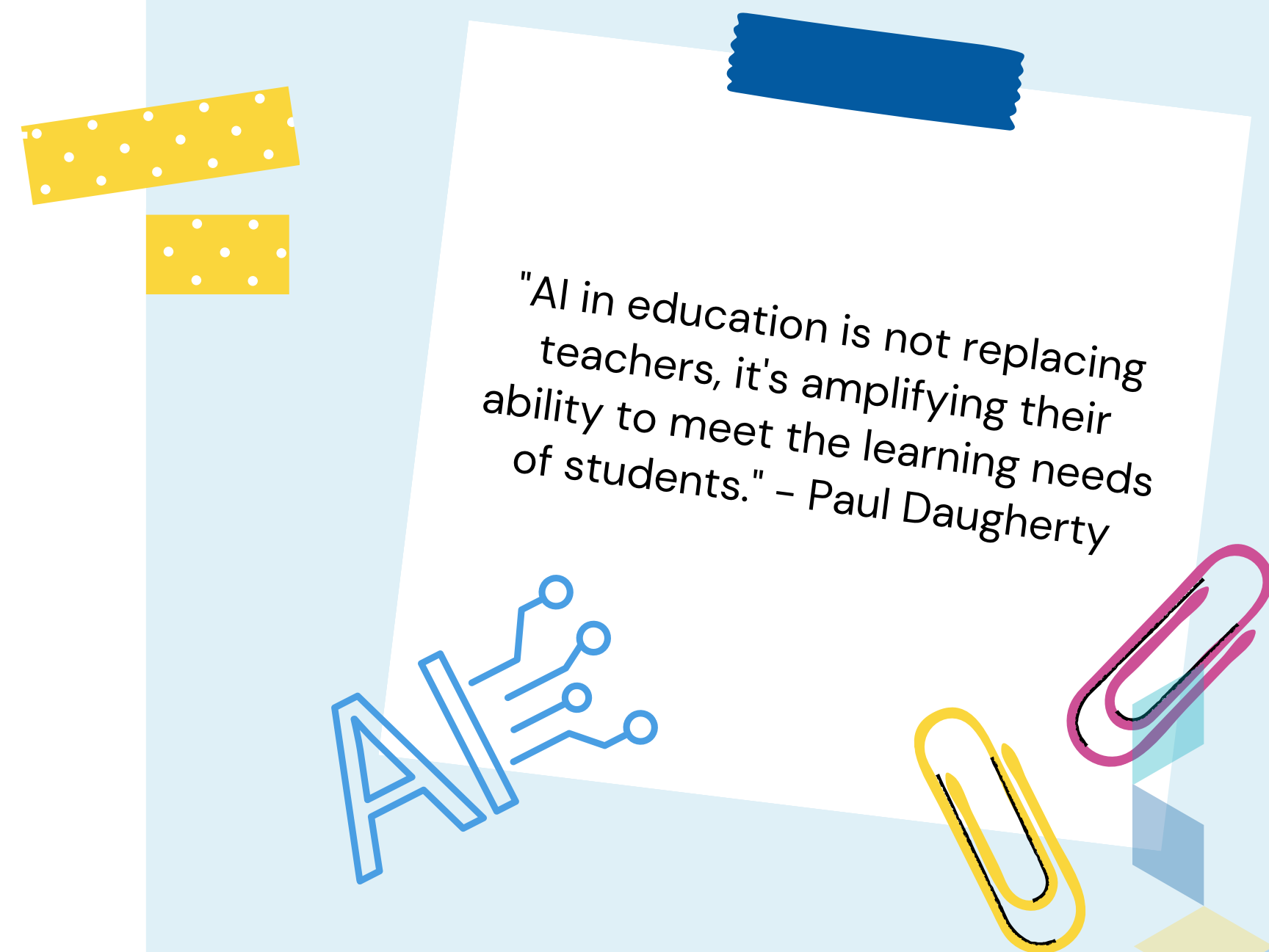


William Tyndale  
Primary School




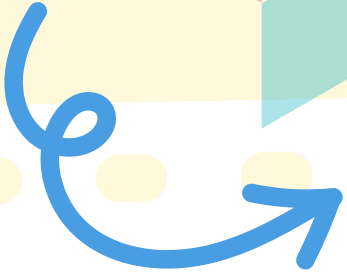
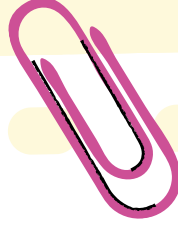
# Aims

- Introduce practical AI tools for better lesson planning.
- Show how AI saves time without compromising quality in planning.
- Share AI applications that simplify processes and improve results for educators.

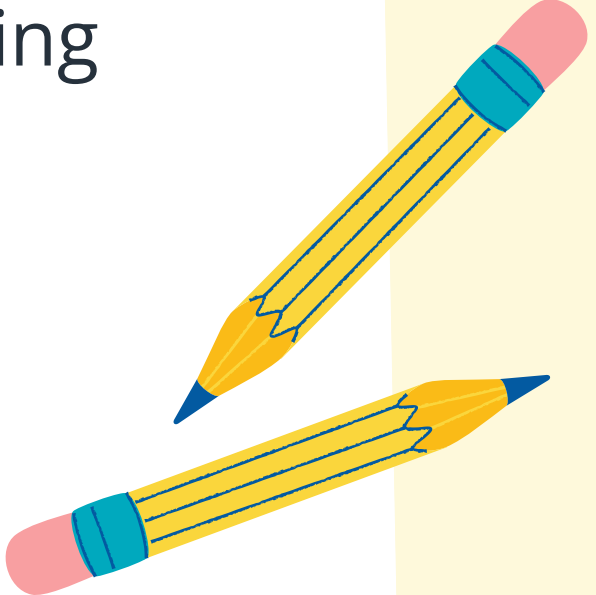


"AI in education is not replacing teachers, it's amplifying their ability to meet the learning needs of students." – Paul Daugherty





# Outline- 40 mins

- **A word of caution**
  - **Practical application 1:** Custom instructions & P.R.E.P.A.R.E
  - **Practical application 2:** Adaptive instruction
  - **Practical application 3:** Assessment for Learning
  - **Your turn and Q&A**
- 

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# Use ChatGPT to come up with ideas, questions & examples

## ? What is ChatGPT?

- ChatGPT is a **chatbot** which can **generate human-like text** by predicting the next word in a sequence, based on its experience of a huge database of internet text

## ✓ Dos

- **Check output** carefully for inaccuracies and bias
- **Break requests down** into simple questions
- **Ask for more options** than you need

## ? How is ChatGPT helpful?

- ChatGPT can be **very useful** for performing a range of **writing-based tasks**, such as **creating written content** and suggesting answers to questions
- In teaching, this might include coming up with **practice questions, new examples, activity ideas** and more

## ✗ Don'ts

- Enter **sensitive or personal data**
- Rely on ChatGPT for factual information
- Use ChatGPT to do **calculations**



# Custom instructions & P.R.E.P.A.R.E



- Tailor guidance for specific responses.
- Includes tone, style, and topic focus.
- Personalise interactions for relevance.
- Enhance quality and engagement.

Example with no CI

Example WITH CI



Comment in the chat  
any custom  
instructions that have  
worked well for you.



**Anonymous**

I am teaching a Year 7 English lesson about a Midsummer Night's Dream and metaphors. I need a learning objective for this lesson.



**ChatGPT**

Sure, here's a learning objective for your Year 7 English lesson:

"By the end of the lesson, students will be able to identify metaphors in Shakespeare's 'A Midsummer Night's Dream,' analyze their meaning within the context of the play, and explain how these metaphors contribute to character development and thematic exploration."

**WITHOUT any custom instructions**



**ChatGPT**

Sure! How about this learning objective:

"By the end of the lesson, students will be able to identify and explain metaphors in 'A Midsummer Night's Dream', demonstrating understanding of how Shakespeare uses figurative language to convey deeper meanings in the play."

**WITH custom instructions**







**PROMPT**

*Introduce what you want*



**ROLE**

*Give it a role*



**EXPLICIT**

*Be explicit with your instructions*



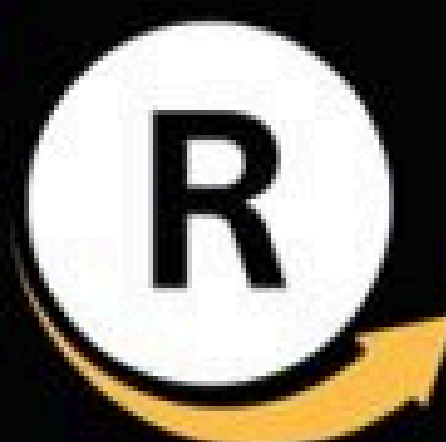
**PARAMETERS**

*Set the parameters of the answer*



**ASK**

*Ask it to ask you follow up questions*



**RATE**

*Ask it to rate its response*



**EMOTIONS**

*Appeal to its emotions*



**EVALUATE**

*Evaluate the strength of the response*



**DETERMINE**

*Determine accuracy & corroborate*



**IDENTIFY**

*Identify any bias & misconceptions*



**TRANSFORM**

*Update content*

**Example WITH PREPARE**



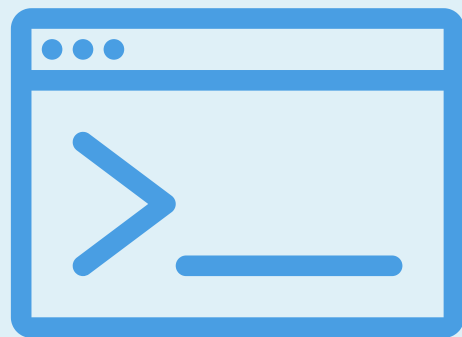
**Dan Fitzpatrick** · 2nd

I talk about AI & education | Helped 42k+ embrace AI | Best selling author | Get The AI Classroom now on Amazon | Former educational leader

Thirdbox

Durham University

## Prompt



### Anonymous

- P** Explain the process of photosynthesis and its importance in plant growth. Use simple language suitable for 14-year-old students in the UK.
- R** You are a passionate teacher explaining the concept of ecosystems to a group of curious 14-year-old students in the UK.
- E** Break down the process of photosynthesis, step by step. Include examples and ensure the explanation is suitable for 14-year-old students studying Biology in the UK.
- P** Keep the response within 300 words, maintain a neutral tone suitable for educational content, and use language appropriate for 14-year-old students in the UK.
- A** Ask me questions in bullet points to enhance your understanding of the topic.
- R** On a scale of 1 to 10, how clear do you think your explanation is? Please highlight specific phrases or examples that contribute to the clarity or areas that may need improvement.
- E** Ensure that you connect with the reader in a human way.



## Response



ChatGPT

What do you already know about plants and how they grow?

- Plants need sunlight, water, and air to survive.
- They use something called photosynthesis to make their food.

**So, let's dive into photosynthesis! Imagine you're a plant soaking up the sun. Here's what happens next:**

1. **Sunlight:** Plants have these special parts called leaves. Think of them as tiny solar panels. When sunlight hits these panels, something amazing starts to happen.
2. **Carbon Dioxide (CO<sub>2</sub>):** Just like we need oxygen to breathe, plants need carbon dioxide to make food. They get this from the air around them.
3. **Water:** Plants also slurp up water through their roots. This water travels all the way up to the leaves.
4. **Chlorophyll:** Inside the leaves, there's a green pigment called chlorophyll. It's like the chef in a kitchen, directing all the action.
5. **Mixing It Up:** The sunlight, carbon dioxide, and water all come together inside the leaf. This is where the magic of photosynthesis happens!
6. **Making Food:** Using the energy from sunlight, the plant turns carbon dioxide and water into glucose, which is a type of sugar. This is like the plant's version of a delicious meal.
7. **Releasing Oxygen:** Here's a cool part – while the plant is making food, it also releases oxygen as a by-product. So, not only do plants feed themselves, but they also give us the oxygen we need to breathe!

# Adaptive instruction

Have a think about the young people you work with:

- How many unique needs or interests do you have to adapt your lessons for each week?
- How long does this take? Is it feasible?

**Post some comments in the chat about your experiences of the questions above!**

Fast, efficient and  
easy



AI is a **tool** to **streamline** the time consuming elements of lesson planning, using **your knowledge and experience**, to create better lesson plans, quicker.



# How do we go about it?



Custom  
instructions



Detailed,  
structured  
prompts



Clear,  
constructive  
feedback

# Prompt engineering

- Specific info
- Simple language
- Be as clear as possible
- Break things down
- Be conscious of safeguarding

MM **You**

I am working with a new student. They have spent more than a year without consistent education. They are in year 10/11 and have no current working level. I have 1.25 hours to work with them and then I have been asked to set 45minutes of homework, this is to cover both maths and English. I want to start the session with my own icebreaker activity that should take 20-30minutes. I would like you to create an outline lesson plan for the rest of the time, covering elements of the Functional Skills Maths and English specification and incorporating the student's interest in business studies.

**Prompt**

Prompt Type	Description	Prompt Example
<b>Completion Prompts</b>	Involve providing an incomplete sentence and asking the AI model to generate a coherent continuation.	"Complete this sentence: Prompt engineering is..."
<b>Question Prompts</b>	Assume asking a specific question prompting the AI model to generate a related response.	"What are the key principles and techniques used in prompt engineering to optimize the output of AI models?"
<b>Instruction Prompts</b>	Involve providing explicit instructions for the AI model to follow, specifying the desired outcome.	"Write a step-by-step guide on effectively employing prompt engineering strategies when working with AI models."
<b>Comparison Prompts</b>	Make the AI model compare different elements, generating insights based on the provided criteria.	"Compare the effectiveness of prompt engineering in enhancing the performance of AI models versus using unstructured prompts."
<b>Creative Prompts</b>	Encourage the AI model to generate innovative ideas, stories, or artistic outputs.	"Imagine a future where prompt engineering has advanced to its full potential. Write a short story describing how prompt engineering revolutionized the field of AI and other industries."
<b>Translation Prompts</b>	Involve providing text in one language and instructing the AI model to translate it into another.	"Translate the term 'prompt engineering' into French."
<b>Summarization Prompts</b>	Ask the AI model to condense a given text or information into a concise summary.	"Summarize the benefits and challenges associated with prompt engineering in three concise points."
<b>Dialogue Prompts</b>	Instruct the AI model to generate responses from different perspectives or characters.	"Generate a conversation between two AI researchers discussing the significance of prompt engineering in improving the reliability and interpretability of AI models."





### ChatGPT

Creating a lesson plan for your student, particularly considering their interest in business studies, is a great way to engage them while covering the essential elements of the Functional Skills Maths and English specifications. Since you have 1.25 hours for the session (minus the icebreaker activity), this leaves approximately 55-65 minutes for teaching, and you'll also be setting 45 minutes of homework.

Here's an outline of a lesson plan tailored to your needs:

### Lesson Plan Outline

#### Part 1: Functional Skills English (Approximately 30-35 minutes)

##### 1. Introduction to Business-Related Vocabulary (10 minutes)

- Introduce key business terms (e.g., profit, loss, investment, marketing).
- Discuss the meaning of each term and use them in sentences.

##### 2. Reading Comprehension (10 minutes)

- Provide a short article or case study related to a business topic.
- Have the student read the passage and answer comprehension questions focusing on main ideas, details, and vocabulary.

##### 3. Writing Exercise (10-15 minutes)

- Prompt: Write a short paragraph on "The importance of marketing in business."
- Focus on sentence structure, spelling, and grammar.

#### Part 2: Functional Skills Maths (Approximately 25-30 minutes)

##### 1. Basic Financial Mathematics (10 minutes)

- Introduction to concepts like percentages, profit margins, and simple interest.
- Practical examples: calculating the profit margin of a product, understanding simple interest in a business loan.

##### 2. Problem-Solving Activity (15-20 minutes)

- Present a real-world business problem (e.g., calculating costs for a start-up, budgeting for marketing).
- Guide the student through solving the problem using maths skills.

#### Homework (45 minutes)

##### 1. English Homework (20-25 minutes)

- Reading: Assign a business news article or case study for reading.
- Writing: Summarise the article in a few sentences, focusing on key points.

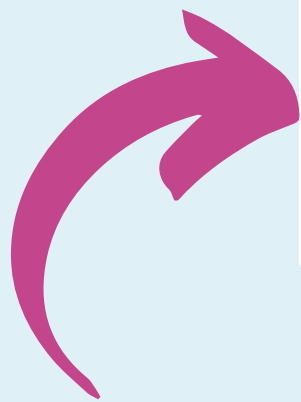
##### 2. Maths Homework (20-25 minutes)

- Practical Exercises: Provide a worksheet with problems on percentages, basic algebra, and simple interest calculations related to business scenarios.

#### Additional Tips

- **Differentiation:** Adjust the difficulty of tasks based on the student's responses and understanding.
- **Engagement:** Relate topics to the business world, which is their area of interest.
- **Feedback:** Offer constructive feedback throughout the session, especially after each activity.

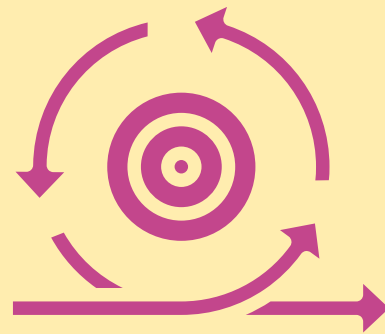
This lesson plan aims to cover basic elements of Functional Skills Maths and English, with a focus on business studies to keep the student engaged and motivated. Remember to be flexible and adapt the plan based on the student's responses and needs during the session.



**Response**

# Feedback: Multi-turn conversations

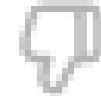
Iterative process



MM

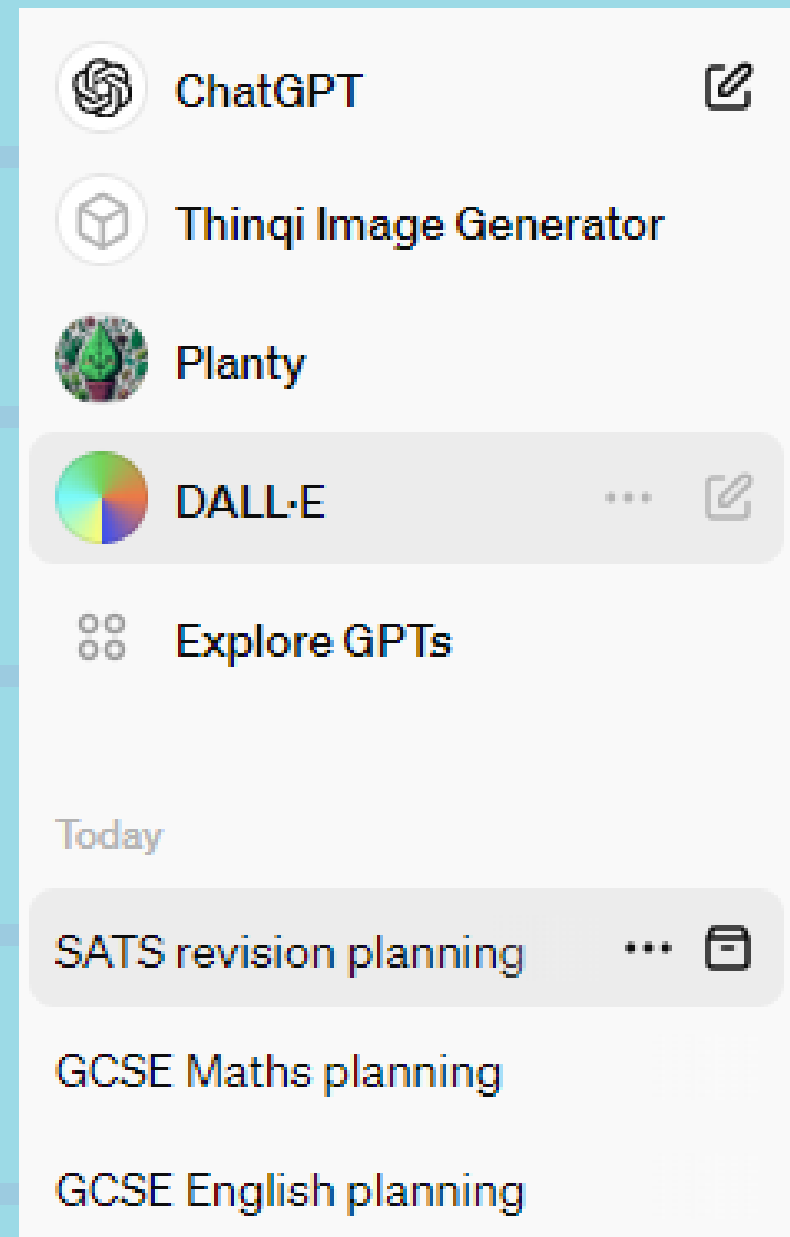
You

Can you regenerate the plan with longer timings for each task. For English build the reading and writing into the same task, finishing with a plan for writing an answer and writing the answer out as an extension. Also generate example questions for each section.

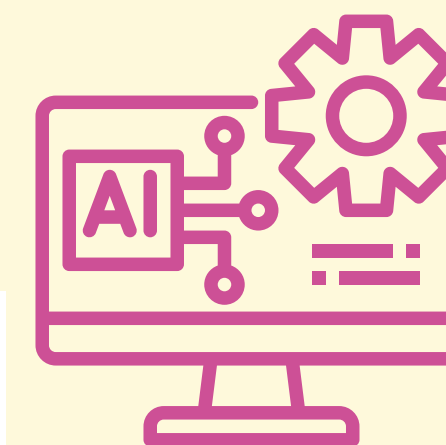




# Naming chats



# Assessment for Learning



## Anonymous

I am teaching Year 7 students about atoms as part of Year 7 Chemistry. What do they need to know about this, according to the National Curriculum?



## ChatGPT

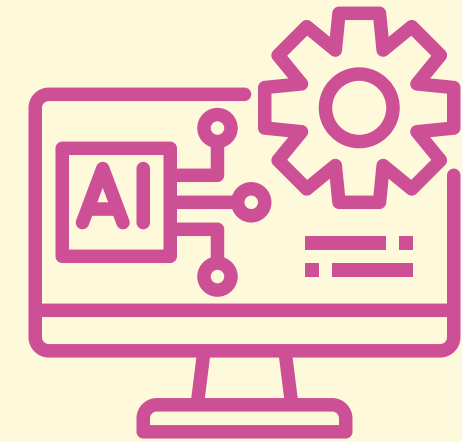
According to the UK National Curriculum for Key Stage 3 Science, Year 7 students should understand:

- The particle model: Everything is made of particles.
- Atoms as the basic unit of an element.
- Elements as substances containing only one type of atom.
- Differences between atoms, elements, and compounds.

These topics serve as an introduction to atoms and set the foundation for further study in chemistry.

Example: Year 7 Chemistry

# Assessment for Learning



## Anonymous

What questions can I ask to test understanding?



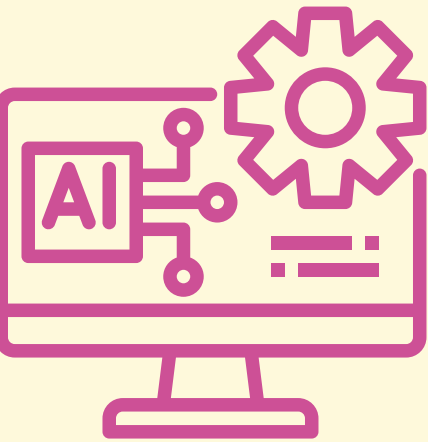
## ChatGPT

To assess Year 7 students' understanding of atoms according to the National Curriculum, you could ask the following questions:

1. What is an atom?
2. What is an element?
3. How is an element different from a compound?
4. Can you name an example of an element and a compound?
5. What does the particle model say about the structure of matter?
6. How many types of atoms are present in an element?
7. What is the basic unit that makes up an element?
8. Are all particles the same? Explain.
9. Is water an element or a compound? Why?
10. What are the particles in a solid like compared to a liquid or gas?

These questions align with the Early Career Framework by focusing on core content and facilitating subject-specific pedagogy.





# Assessment for Learning

**Extend:** Copy and paste a section of your lesson plan to Chat GPT and ask it to generate 2 ways to assess what the pupils have learned from that activity.

<b>Main (b) (50-75%)</b>	Look at the examples and analyse them looking at positives and negatives. Use the mark scheme and peer/self assessment document to support this. Students to plan own response including vocab etc.
<i>Guide and scaffold the pupils' practice</i>	On the PowerPoint, the image will be shown again, along with some example pieces of writing for students to read and consider. Looking at any errors and evaluating them.
<i>Paired and group activities</i>	
<i>(We do...)</i>	<p><b>Example 1:</b> Sunlight drifted in through the broken windows, dust dances in the shards of light and the smells of the rancid water filled his nostrils. He becomes aware of the water surrounding his feets and she looked for a place to take rest after the long journey away from the bad guys. He eventually found a rock adorned in deep green ivy and slimy to the touch. He scrambled atop and crouched, hunched against the biting wind and thinking sternly about his next move.</p> <p><b>Example 2:</b> The biting wind had followed him into the abandoned warehouse, his only company through this tiresome journey to a better life. His trainers squelched through the sodden ground as he picked his way between the puddles to a place of asylum where he would be able to survey his progress, and dwell on his mistakes. The sunlight cut through the stillness of the stale air and jolted the young boy into a vivid memory; shards of light escaping through the smallest crack in the curtains of the memory of a box room he shared with Tex.</p>


# 6 key areas of lesson prep where ChatGPT is most helpful

## Most promising ways to use ChatGPT


*Step-by-step written instructions, tutorial videos & example prompts and chats*



**Find activity ideas in seconds**



**Build your own mock exams & craft model answers**



**Get ready-made practice questions**



**Create step-by-step examples & get effective explanations**



**Adapt your materials to work for your class**



**Avoid misconceptions & test student understanding**

## Other ways you could use ChatGPT

*Short description & example chats*

**Lesson plans**

**ChatGPT as an information source**

**Marking & feedback**

**Teacher admin**

Areas with less reliable results in our testing

# Three outcomes



**Improved  
efficiency and  
accuracy**



**Real-time  
adaptation**



**Enhanced  
student  
engagement  
through  
interactive lesson  
plans.**





# Your turn and Q&A

- Custom instructions & P.R.E.P.A.R.E
- Adaptive instruction
- Assessment for Learning



# What's next?

Search the AI Educator Tool Repository

Made for Education Badges Category Pricing Model Type Default order

Free Reset all

**Quizmixer**  
QuizMixer.xyz is an advanced quiz generator powered by AI and using videos or documents.  
Productivity Free  
Find out more  
Go to the tool

**Keepi.ai**  
Keepi.ai: Store, research and summarize digital content, with instant ChatGPT answers via WhatsApp.  
Chat Productivity Free  
Find out more  
Go to the tool





# Register interest in tuition for your school

[www.thetutortrust.org/schools/register](http://www.thetutortrust.org/schools/register)

Or send this to a school leader who might be interested!

