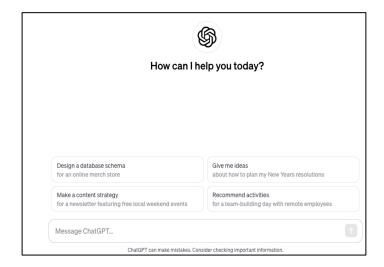
ANNEX 1 Using ChatGPT

- 1. If this is your first use of ChatGPT you should access the main OpenAI webpage (www.openai.com) and create a user account. The basic (free) account will suffice to make a start on using a generative AI system. If you've already done this, proceed to step 2.
- 2. Sign in to your OpenAI user account.
- 3. This (or similar) dialogue box appears:



4. Give an instruction (or prompt) to ChatGPT in the 'Message' box. For example, 'Describe the moon'. The ChatGPT response is provided almost immediately and indicated by a downward-pointing arrow. You can copy the answer for use elsewhere using the clipboard symbol beneath the text.

ChatGPT:

The Moon is Earth's only natural satellite and is one of the most prominent objects in the night sky. It has fascinated humans for centuries, and here are some key characteristics and information about the Moon:

- 1. Appearance: The Moon appears as a bright, silvery-white, or greyish disk in the night sky when it reflects the Sun's light. Its surface is marked by a variety of features, including dark areas called maria, which are large, flat plains, and bright areas known as highlands, which consist of rugged terrain. The Moon also has numerous impact craters, mountains, and valleys.
- 2. Size and Distance: The Moon is relatively small compared to Earth, with a diameter of about 3,474 kilometres (2,159 miles), making it roughly 1/6th the size of our planet. It orbits Earth at an average distance of approximately 384,400 kilometres (238,855 miles).
- 3. Phases: The Moon goes through a cycle of phases as it orbits Earth. These phases include the new moon, first quarter, full moon, and last quarter, among others. These phases are the result of the changing angles between the Moon, Earth, and the Sun.
- 4. Gravity: The Moon has less gravitational pull than Earth, with its surface gravity being about 1/6th that of Earth's. This lower gravity makes objects on the Moon weigh much less than they do on Earth, which has important implications for lunar exploration.
- 5. Lack of Atmosphere: Unlike Earth, the Moon has a very thin and virtually non-existent atmosphere, often called an exosphere. This means there is no air to breathe, and the lunar surface is exposed to the harsh conditions of space, including extreme temperature variations and cosmic radiation.
- 6. Lunar Day and Night: A day-night cycle on the Moon, known as a lunar day, lasts about 29.5 Earth days. This extended day and night are due to the Moon's slow rotation on its axis, which takes about the same amount of time as its orbit around Earth.
- 7. Exploration: The Moon has been the target of both robotic and crewed space missions. The Apollo program, run by NASA, successfully landed astronauts on the Moon between 1969 and 1972, with a total of six manned missions. Recent lunar exploration efforts have focused on robotic missions and plans for future human missions and lunar bases.
- 8. Impact History: The Moon's surface is heavily cratered, indicating a history of collisions with meteoroids and asteroids. Some of these impacts have created large basins, such as the South Pole-Aitken Basin, which is one of the Moon's largest impact features.

In summary, the Moon is Earth's natural satellite, with a distinctive appearance, various surface features, and a role in human history and scientific exploration. It continues to be a subject of study and interest in both astronomy and space exploration.

This answer is general and may be inappropriate. This is because the prompt was **not specific enough**. This is known as zero-shot prompting, as we have asked a question without providing context.

We can now start a dialogue to get ChatGPT to provide the information that we need. For example, we can ask, 'What does the moon look like?' and on a new line, obtained by pressing Shift-Return, enter 'Answer in no more than 50 words.'

(If you press Return by mistake rather than Shift-Return, ChatGPT will try to generate an answer to an unfinished question. You can stop the erroneous result by clicking on the small square inside a circle icon in the dialogue box.)

ChatGPT:

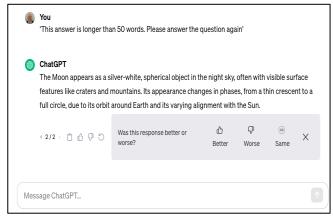
The Moon appears as a greyish-white, silvery disk in the night sky, with visible surface features such as craters, mountains, and plains. Its appearance changes in a cycle of phases, from a thin crescent to a full, round disk, due to its changing position relative to the Earth and the Sun.

ChatGPT produced this 51-word paragraph and did not fulfil the request in detail. The dialogue can continue. We can ask again, for example, 'This answer is longer than 50 words. Please answer the question again.'

This time, a 37-word output is provided:

The Moon appears as a silver-white, greyish disk in the night sky. Its surface features include craters, mountains, and plains. Phases range from a thin crescent to a full circle as it orbits Earth, reflecting sunlight differently.

When chatting with bots like ChatGPT, many people use pleasantries like 'please' and 'thank you' to make the dialogue more human-like. You can give ChatGPT feedback by using the thumbs-up and thumbs-down icons. You can repeat the same question using the regenerate symbol, and ChatGPT will ask if the second response is better, worse or the same as the first.



This example illustrates that each answer from GenAI is influenced by results from a statistical (random) process, and it is important to set clear guidelines for the chatbot to get to the required result quickly.

Here is a prompt using the moon as the context for a school homework question.

You:

You are a teacher of 9-year-old students and want to check their understanding of the poem 'The Moon' by Robert Louise Stevenson <Start of poem>
The moon has a face like the clock in the hall;
She shines on thieves on the garden wall,
On streets and fields and harbour quays,
And birdies asleep in the forks of the trees.

The squalling cat and the squeaking mouse, The howling dog by the door of the house, The bat that lies in bed at noon, All love to be out by the light of the moon.

But all of the things that belong to the day Cuddle to sleep to be out of her way; And flowers and children close their eyes Till up in the morning the sun shall arise.

<End of poem>

Provide three questions that evaluate:

- 1. The students' understanding of the poem's vocabulary.
- 2. The use of simile.
- 3. The mood of the poem.

Ask the questions using a reading age of about 9 years.

For each question, provide an answer that the students would understand and make clear the links between the answer and the words or phrases used in the poem.

ChatGPT:

Based on the poem "The Moon" by Robert Louis Stevenson, here are three tailored questions to check the understanding of 9-year-old students, along with answers that draw connections to the text:

1. Understanding of the Poem's Vocabulary:

Question: What does the word "thieves" mean in the line "She shines on thieves on the garden wall"? Model Answer: "Thieves" are people who take things that do not belong to them. In the poem, this word means that the moonlight is shining on the garden wall where people who might be sneaking around can be seen.

2. Use of Simile:

Question: The poem begins with "The moon has a face like the clock in the hall." What does the moon's face and the clock's face have in common?

Model Answer A simile is when you say something is like something else. Here, the poem says the moon's face is like a clock's face because both are round, and they both shine or glow, so you can see them in the dark.

3. Mood of the Poem:

Question: How do you think the poem wants us to feel about night time? Are there any words that make you think it's supposed to be a happy and peaceful time, or a scary time?

Model Answer The poem makes night time seem like a happy and peaceful time. Words like "shines," "asleep," and "cuddle" make us feel that night is a time for rest and the moon is watching over everything kindly, not scary at all.

These questions aim to evaluate specific aspects of the student's understanding in a manner that is approachable for their age group, guiding them to connect their answers with phrases directly from the poem.

This is a fair answer. We can ask ChatGPT to 'go again'. Here is a regenerated version.

ChatGPT:

Here are three questions tailored for 9-year-old students, based on Robert Louis Stevenson's poem "The Moon," along with answers that explain how they link to specific words and phrases in the poem:

1. Understanding of the Poem's Vocabulary:

Question: What does "squalling" mean when talking about the cat, and can you think of a time when you heard a cat make this sound?

Model Answer: "Squalling" means making a loud, harsh cry. It's the sound a cat makes when it's upset or angry. If you've ever heard a cat yowl when it's bothered or frightened, that's what squalling sounds like.

2. Use of Simile:

Question: The poem says "The moon has a face like the clock in the hall." What does this simile mean? How is the moon's face like a clock?

Model Answer: A simile is when we say something is like something else. The moon is like a clock because it has a round shape, and we can imagine it has numbers and hands moving around it, just like a clock.

3. Mood of the Poem:

Question: How does this poem make you feel? Is it supposed to be scary, happy, or calm and why? Look at the words used to describe the night and the moon to help you answer.

Model Answer: The poem feels calm and a little magical. Words like "shines," "asleep," and "cuddle" are soft and gentle. They make us picture a peaceful night where everyone is quietly resting, and the moon is watching over them.

Each of these questions encourages the students to directly engage with the text, think critically about the language, and understand the emotional landscape of the poem.

This is a very similar answer. However, the format of the answer is not convenient to give to the students. You can ask ChatGPT to place the questions on one page and the answers on another. This illustrates that ChatGPT remembers the previous result, and you can ask for it to be refined or reformatted. It also shows that extended text can be entered into the dialogue box. This can be done directly or by copying and pasting a document in Word or PDF format into the dialogue box.

Writing 'good' prompts

The emerging wisdom on good practice in prompting is that there is no single word or phrase that works consistently well. The essential features of writing good prompts are:

- Be clear and specific: state as clearly as you can what you want the AI to do.
- Provide the context: tell the AI the relevant background, including the purpose and audience of the output. For example, the answer should be understood by a 15-year-old student.
- Break down complex tasks into a series of simple steps. For example, ask the AI to do this, then
 this and this.
- Where possible, provide a sample answer that the AI can use to guide its responses
- Iterate and refine: ask the AI to clarify, elaborate or evidence its output.