

Reading Activities

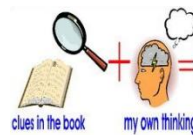
The first reading task I would like you to make links back to our topic from last term, Ancient Greece.

Read the mythical tale carefully and then answer the questions attached.

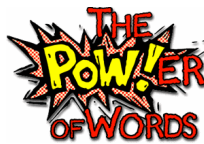
Remember, when answering our reading questions we use our five reading domains...



Retrieval



Inference



Language



Summarise +predict



Content

The Story of Icarus

King Minos was intrigued. He peered out of the window and watched as the boat drew closer. Ordinarily, he paid no attention to those entering or leaving Crete but the messenger had forewarned him: this man had been exiled from Athens yet all reports described him as a genius. It was rumoured that he had even fooled Hercules with his inventions. An idea sparked in the King's mind; maybe this man was the answer to all of his problems.



A short while after Daedalus had landed on the island of Crete, he was kneeling at the base of a large throne and vowing to become the King's master craftsman. "I require your skills," demanded the revered King. "There is a Minotaur who runs rampant around here. Despite our best efforts, we have been unable to contain it. I require you to build a maze that it will be unable to escape from."

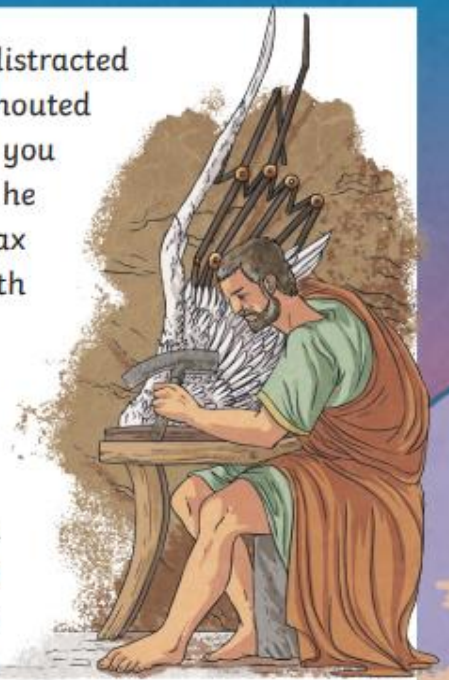


Pleased that his reputation as a skilled inventor had followed him, Daedalus set to work. Aided by his son, Icarus, the pair spent the next few months constructing an incredible and intricate labyrinth. When the time of its completion arrived, the Minotaur was captured and locked away. The people of Crete rejoiced and saw Daedalus and Icarus as heroes.

One day, Daedalus was approached by a man named Theseus. He explained to Daedalus that he planned to slay the Minotaur and needed his help to navigate the enormous maze. Unable to ignore the idea that this was a truly heroic feat which would cement his name firmly into Crete's history, Daedalus agreed. Joined by King Minos's daughter, the three completed their mission and escaped the labyrinth. However, instead of waiting to receive praise and glory, Theseus fled back to Athens with King Minos's daughter beside him. Daedalus was surprised by the hero's sudden departure and began to consider whether his actions were not heroic after all.

Less than an hour had passed before the King, furious about his lost daughter, had locked Daedalus and Icarus within the labyrinth. Without having plotted his route this time, Daedalus knew that there was no way out. Days went past and Daedalus crafted plot after plot. Icarus began to test each wall to see if they could be scaled but it was no use; the labyrinth had been too well designed and escape was surely impossible.

One day, as he was praying to the gods, Daedalus was distracted by a flock of birds flying high in the sky. "That's it!" he shouted to Icarus, "Go and collect every fallen feather that you can find." When Icarus had collected enough feathers, he carefully attached them to large wooden frames using wax from the candles which lit their prison. By sunrise, both Icarus and Daedalus had a pair of wings.



"Before we go," warned Daedalus, "I need you to listen carefully. While I'm sure that these wings will work, I have only been able to use the tools available within this labyrinth. Therefore, there are two rules which you must adhere to. The first is that you must not fly too close to the sea for the feathers will absorb the water and become too heavy to fly. The second is that you must not fly too close to the sun for, if you do, the wax which holds the feathers together will melt. Do you understand?"

Icarus nodded and the two began to beat their wings in unison. They rose higher and higher until the labyrinth was a mere speck below them. Daedalus looked at his son, who was soaring like an eagle, and felt proud. They had done it; they were free.



Looking upwards, Icarus realised that he was closer to the gods than any mortal had ever been.



Fascinated by this thought, he forgot his father's warning. He began to climb higher and higher until the heat became too much for the wax that held the feathers in place. With no feathers, Icarus began to spiral down towards the sea until he hit the surface with a crash and was never seen again.



Questions

1. Number the events from 1-4 to show the order that they happened in.

- ☐ Icarus thinks about how close he is to the gods.
- ☐ Theseus returns to Athens.
- ☐ King Minos hears news of Daedalus's arrival.
- ☐ Icarus and Daedalus begin to fly to freedom.

2. Which of the following does Daedalus **not use** when creating the wings? Tick one.

- ☐ wax
- ☐ feathers
- ☐ string
- ☐ wood

3. Look at the paragraph beginning **A short while after...** Find and copy one word which means the same as **respected**.

4. Why did Daedalus choose to help Theseus?

1.

2.

5. Explain what happened when Icarus flew too close to the sun.

1.

6. Argue that it was wrong of Daedalus to agree to help Theseus.

7. Imagine that you are Icarus. What is going through your mind as the feathers begin to drop from your wings?

8. Many Greek myths warn people not to think that they are gods. Do you think that this story is one of those myths? Tick one and give reasons for your answer.

☐

Yes

☐

No

Our next reading activity links back to our science topic from Spring Term. In science we explored forces, including the force of Gravity and Isaac Newton.

Isaac Newton's Colour Experiments Fact Sheet

Isaac Newton (1642 - 1727) was a famous scientist and mathematician. His experiments into light and colour were extremely influential in informing our understanding of these areas today.

Newton started looking into the "celebrated phenomenon of colours" in the late 1660s. At the time, the deadly Bubonic Plague was rife in Cambridge, where Newton usually worked, so he conducted his first experiment at his home in Lincolnshire.

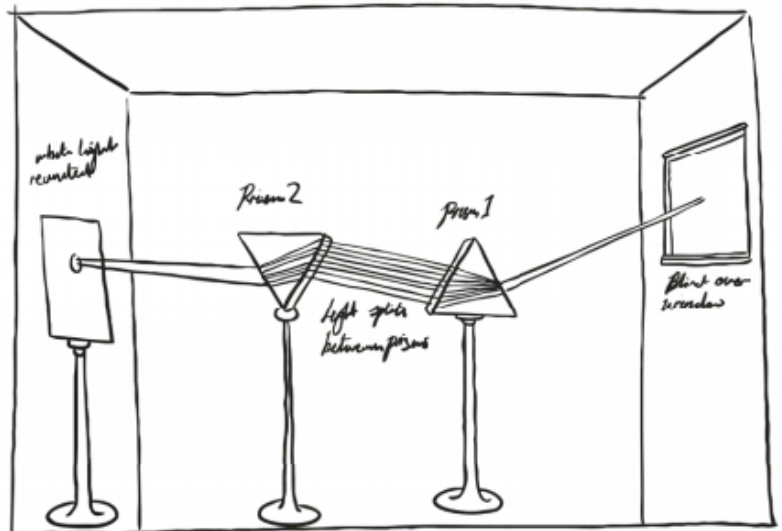
People then believed that colour was caused by a mixture of light and dark, and that red was the lightest colour with the least amount of dark added to it, while blue was the darkest colour, the last step

before black. They also thought that prisms actively coloured light. Newton set out to prove this view wrong in what was to become known as his crucial experiment. He used a hole in his shutter to direct a beam of sunlight into his room, and refracted this beam using a prism. He was able to see the spectrum of colours form, and then used another prism to refract the separated rays of coloured light back into a ray of white light. This proved that light is made up of colours; the prism simply allows them to be seen.

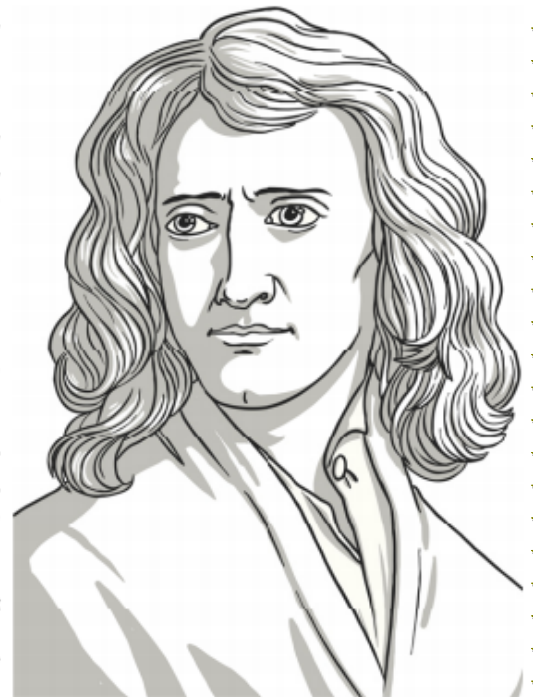
Newton coined the phrase 'the colour spectrum', and he chose to split the spectrum into the seven colours we know today; red, orange, yellow, green, blue, indigo and violet. Although the spectrum is continuous, with no boundaries between each individual colour, he selected the number seven because he believed it to be a special number.

He was able to show that each colour has its own angle of refraction. He used this to prove that an object's colour is a property of the light reflecting off it, rather than something inherent within the object itself.

Newton continued to carry out further investigations into light and colour, and published his book 'Opticks' in 1704. Some scientists consider this the most influential book of that century, and it explained how raindrops refract sunlight to cause rainbows for the first time.



Newton's sketch of his crucial experiment.



Isaac Newton: "If I have seen a little farther than others, it is because I stand on the shoulders of giants."

Newton felt that he learnt a lot from other scientists, such as Galileo and Copernicus.

Isaac Newton's Colour Experiments

Use the Fact Sheet above to answer these questions about Isaac Newton and his discoveries.

1. When was Isaac Newton born?

2. Where was his home?

3. Why did he conduct his experiment at home?

4. How did people in the 1660s believe colours were created?

5. What did Newton use to create a beam of light?

6. Why do you think his experiment is known as 'crucial'?

7. What did he prove about how we see an object's colour?

8. What was Newton's book called and what did it explain?

9. What do you think Newton means when he says he 'stands on the shoulders of giants'?

10. Can you think of a different caption for the sketch of Newton's crucial experiment?
