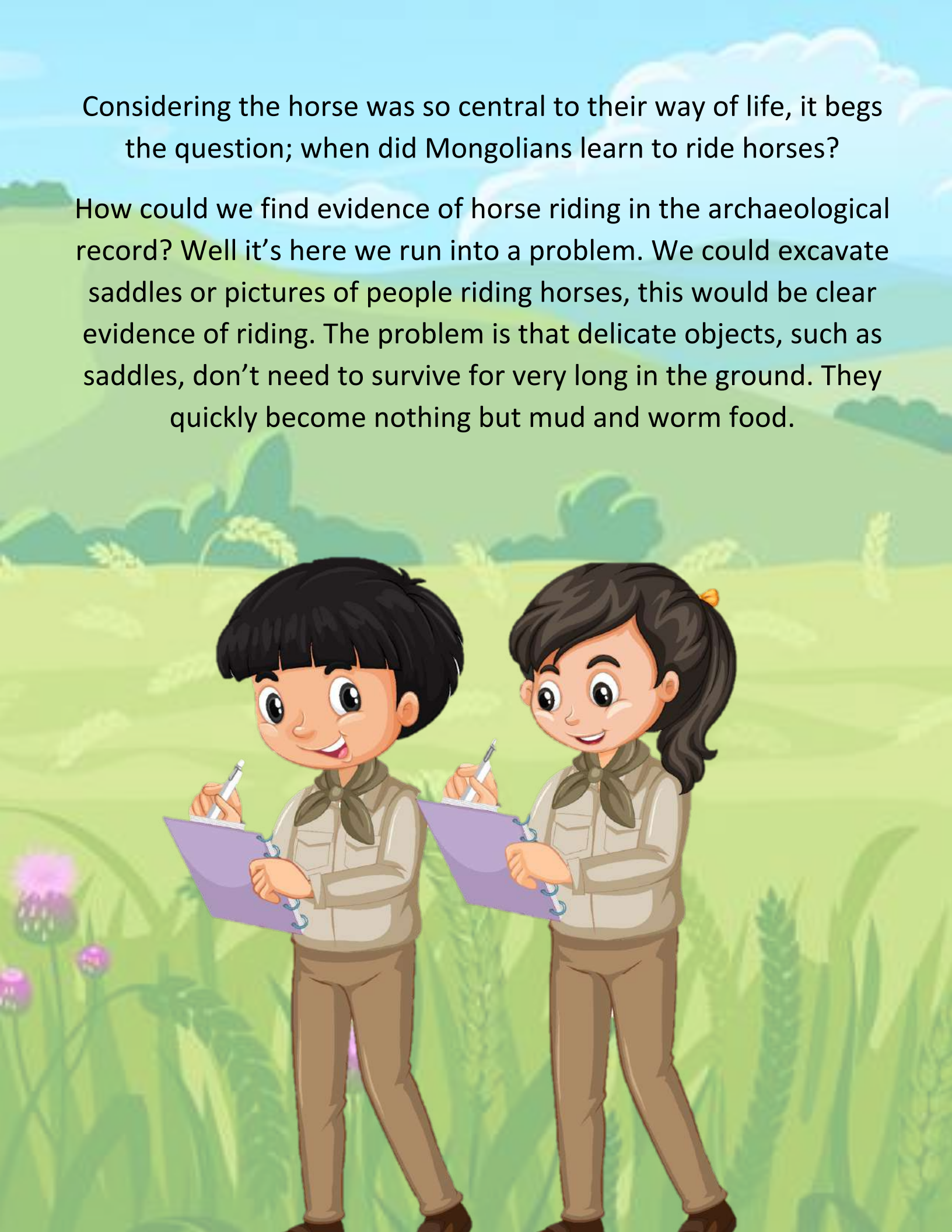

Tales of
Ancient Worlds
The Reign
of Horses
THINK
DIGITAL ACADEMY

The Mongolians are perhaps the greatest horse riders in history. The Asian steppe they call home is an ocean of swaying grass that stretches for 5000 miles (800 km) – absolute heaven for horses.

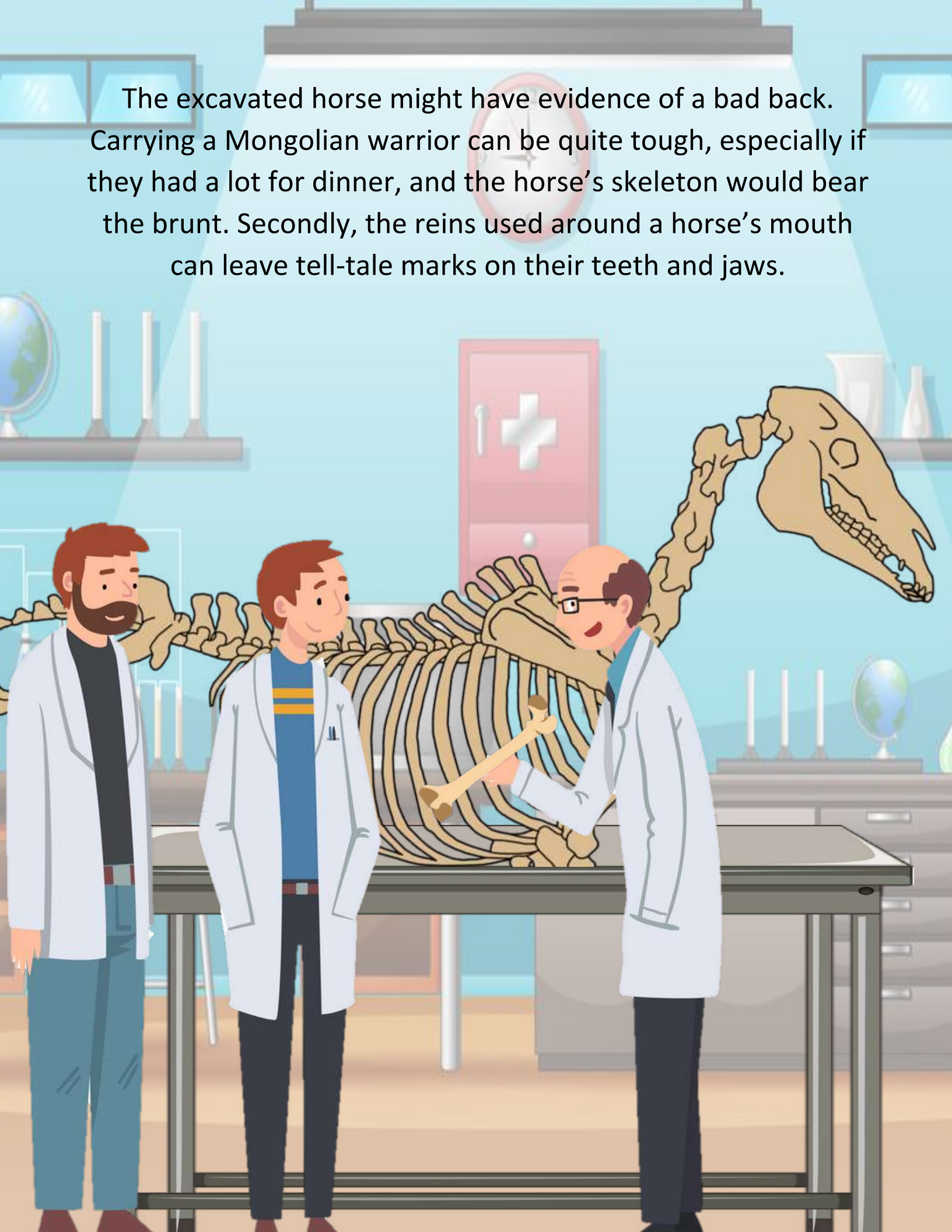
Famous leaders, like Genghis Khan, organized the nomadic horse-riding Mongolians into the most formidable army in history. These mighty soldiers travelled night and day across the wild lands, sleeping in round tents called yurts and conquering all who stood in their way.

Considering the horse was so central to their way of life, it begs the question; when did Mongolians learn to ride horses?

How could we find evidence of horse riding in the archaeological record? Well it's here we run into a problem. We could excavate saddles or pictures of people riding horses, this would be clear evidence of riding. The problem is that delicate objects, such as saddles, don't need to survive for very long in the ground. They quickly become nothing but mud and worm food.



The excavated horse might have evidence of a bad back. Carrying a Mongolian warrior can be quite tough, especially if they had a lot for dinner, and the horse's skeleton would bear the brunt. Secondly, the reins used around a horse's mouth can leave tell-tale marks on their teeth and jaws.

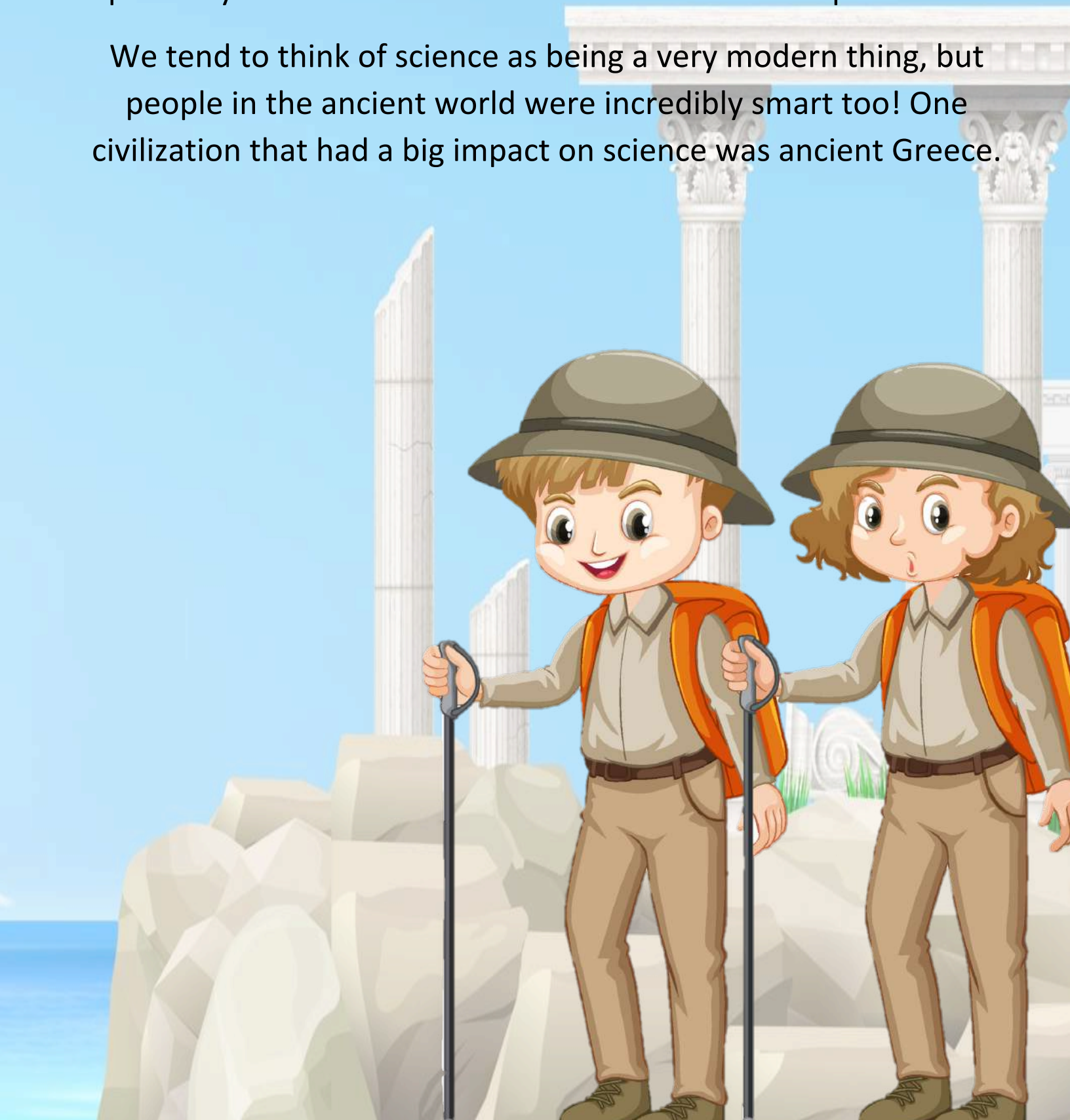


With this in mind, the team looked at the skeletons of horses belonging to the Khirigsuur culture of Mongolia. They found clear signs of riding on them. This means that the people of Mongolia have been riding horses for at least 3000 years!


The Math and
Science of
Ancient Greece

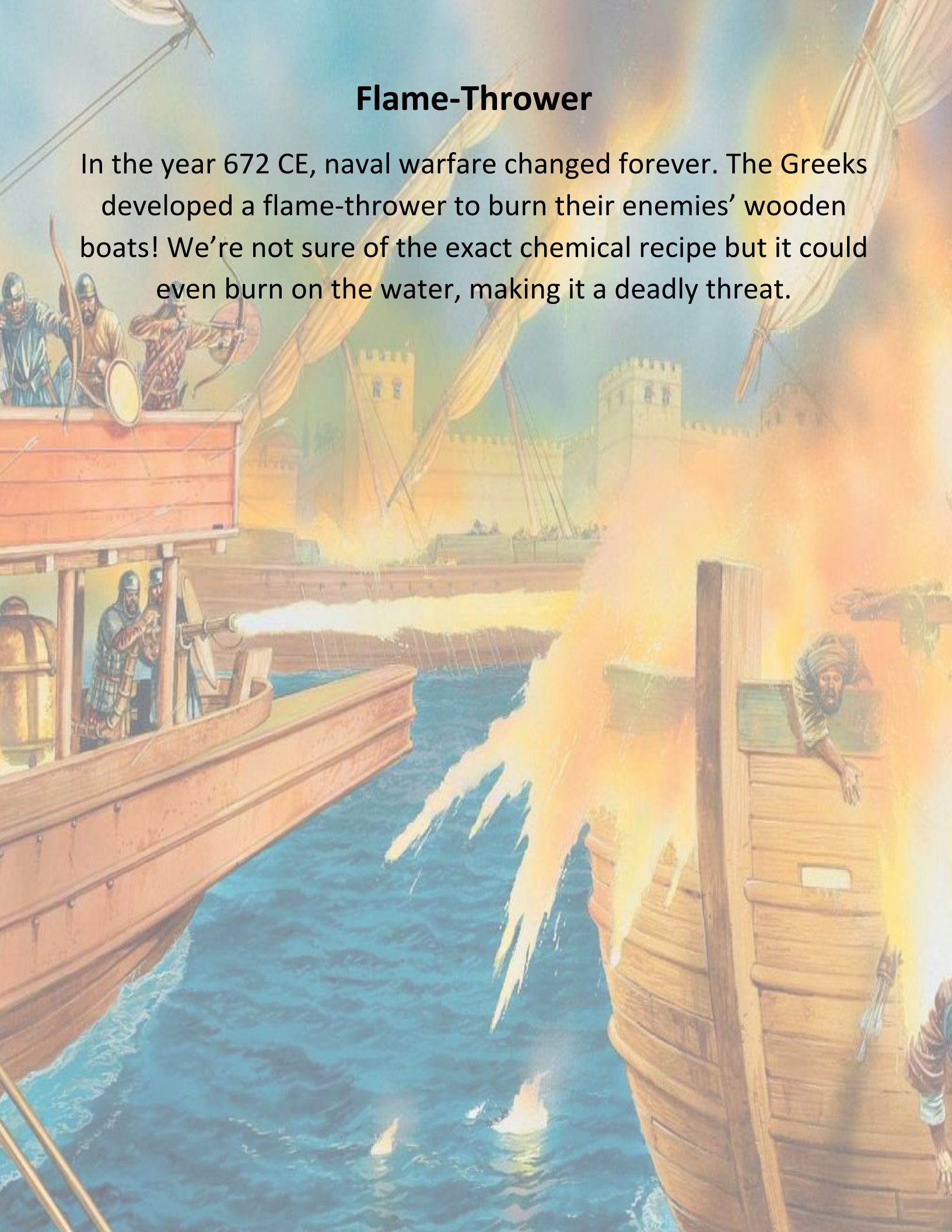
Science and maths are responsible for the world around us. The phone in your pocket, the computer in your home, and the freezer in your kitchen that keeps your delicious ice cream perfectly cold – there are all a result of scientific experiments.

We tend to think of science as being a very modern thing, but people in the ancient world were incredibly smart too! One civilization that had a big impact on science was ancient Greece.



Flame-Thrower

In the year 672 CE, naval warfare changed forever. The Greeks developed a flame-thrower to burn their enemies' wooden boats! We're not sure of the exact chemical recipe but it could even burn on the water, making it a deadly threat.



Steam Engine

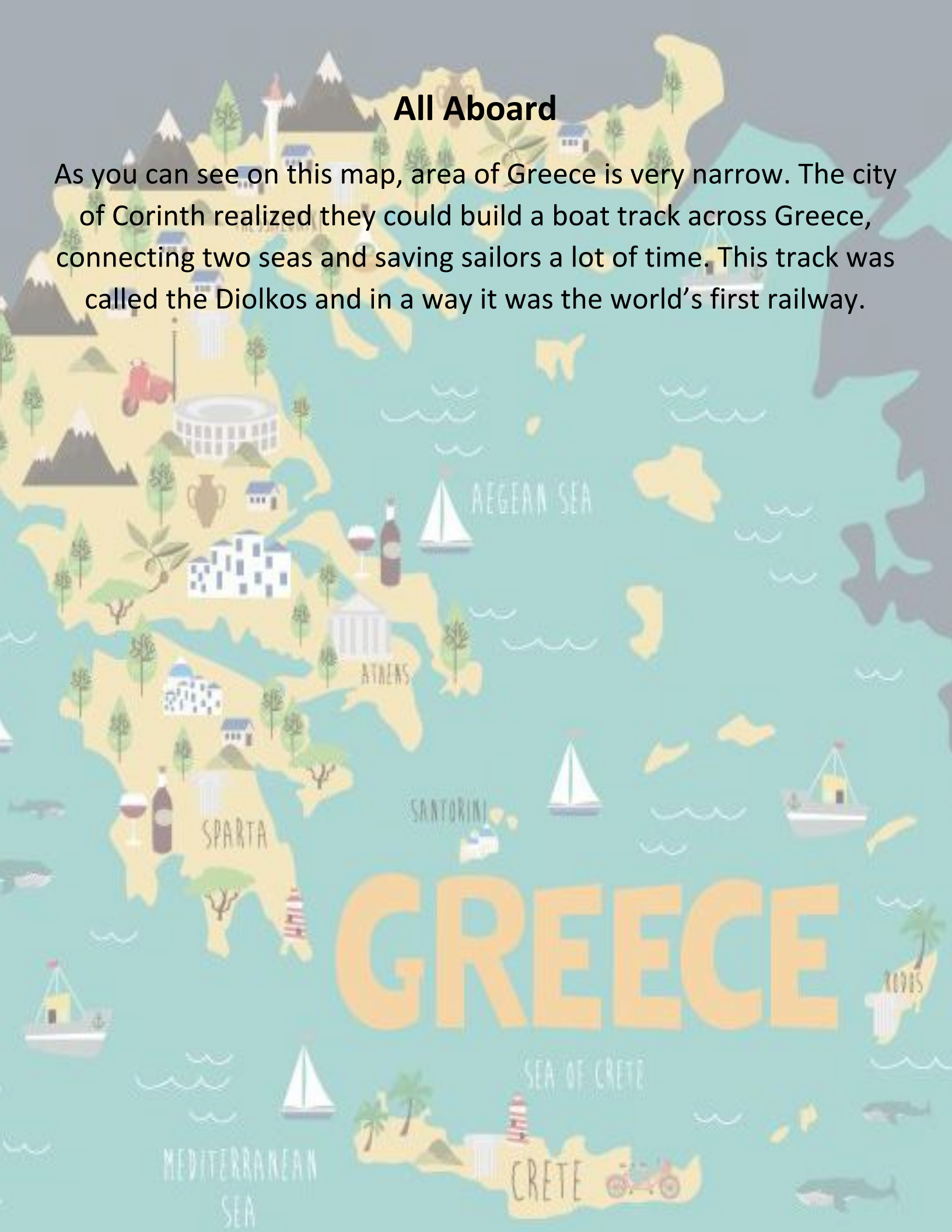
In 100 BCE, Hero of Alexandria developed a working steam engine! A cauldron of water would be placed above a fire. As the water heated up it shot out steam, spinning the machine.

Hippocrates

Hippocrates was the father of modern medicine. He was one of the first people to understand that disease was caused by problems within the body, not angry gods. He realized that through observation we could understand and treat illnesses. His oath “to do no harm” is still repeated by doctors today.

All Aboard

As you can see on this map, area of Greece is very narrow. The city of Corinth realized they could build a boat track across Greece, connecting two seas and saving sailors a lot of time. This track was called the Diolkos and in a way it was the world's first railway.



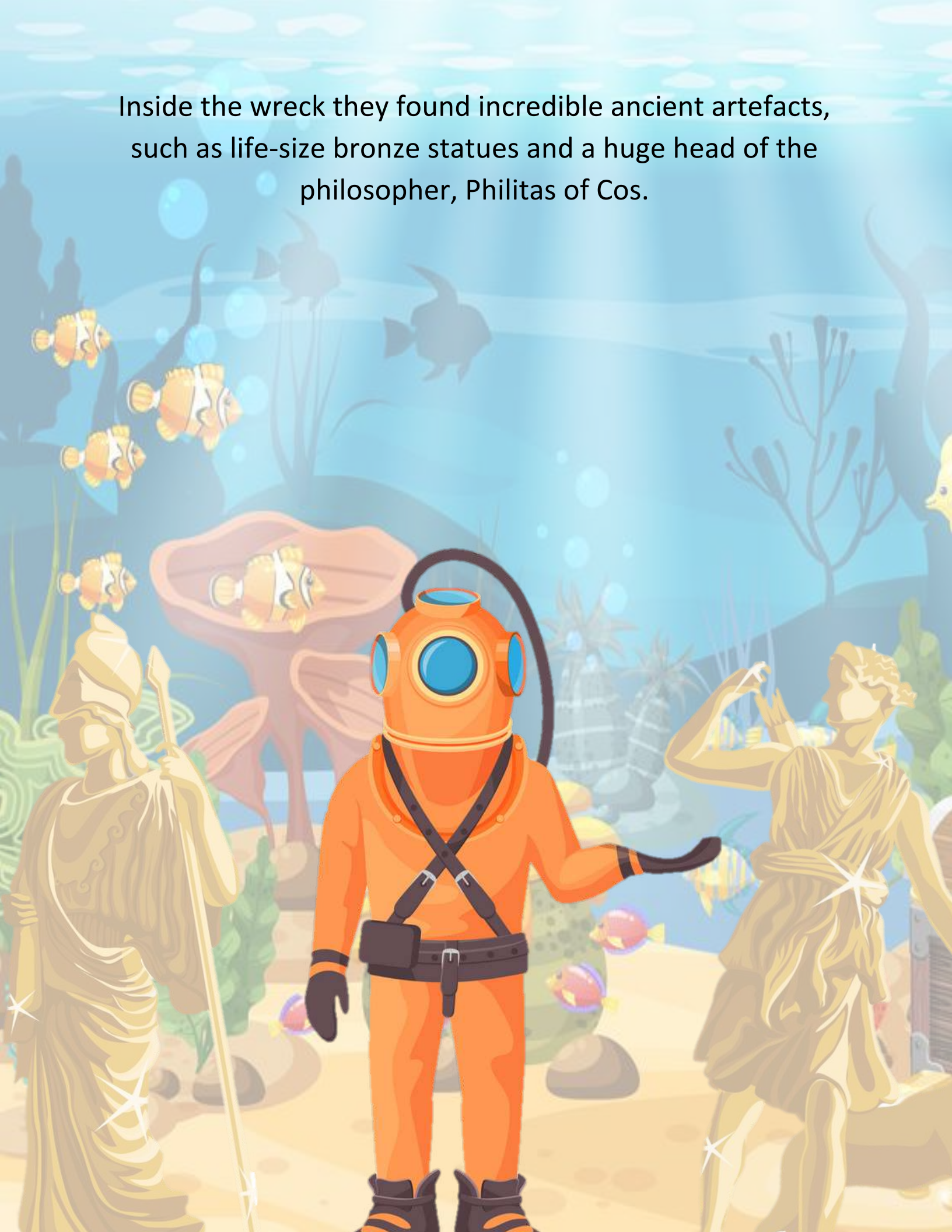
Pythagoras

Pythagoras lived around the year 500 BCE and is most famous for working out a formula for discovering the area of a triangle. This might sound a bit boring, but it was actually a huge discovery. Every time you drive across a bridge without it collapsing, thank Pythagoras!

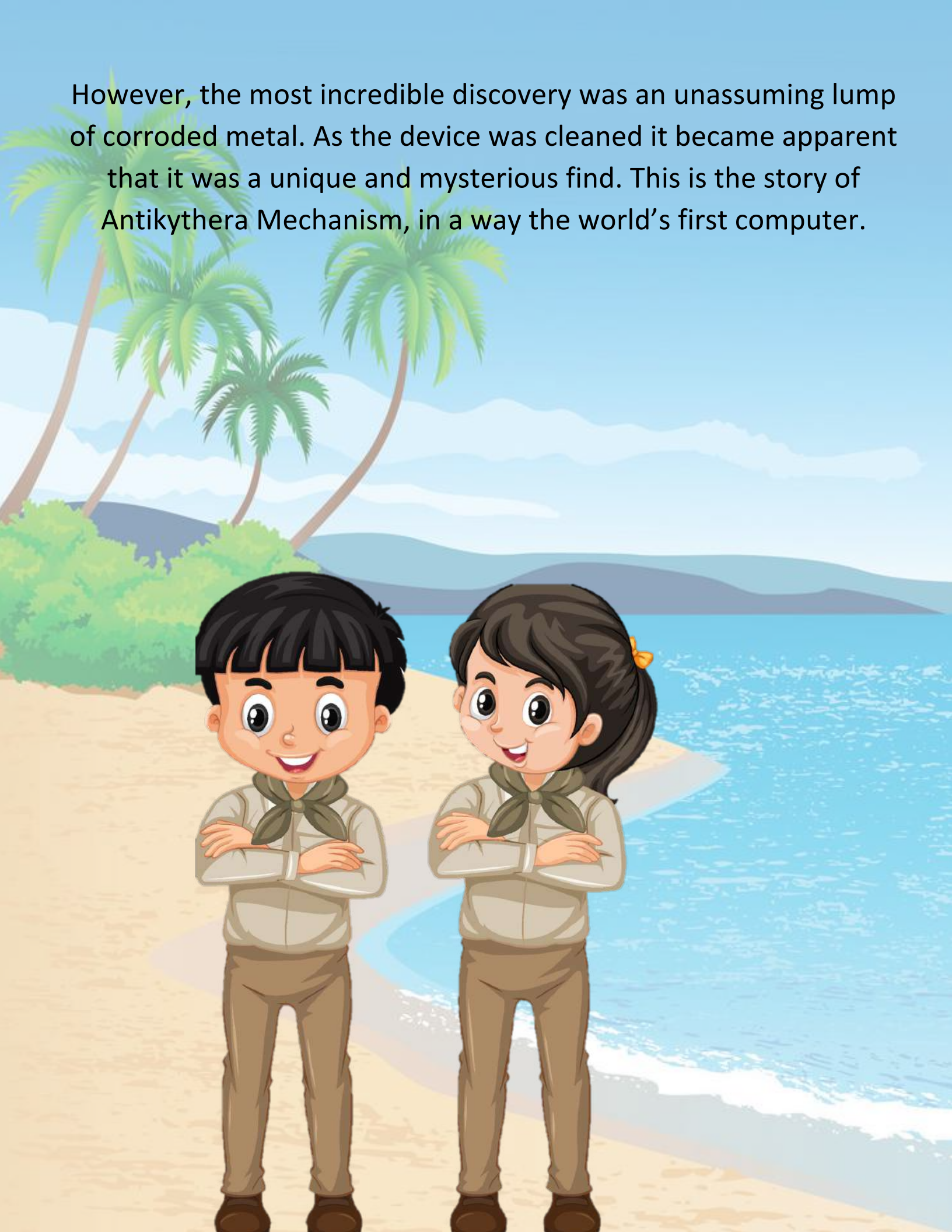
The Ancient Computer

In the year 1900 sponge divers (yup, those guys again), were diving off the Greek island of Antikythera when they discovered a shipwreck that had been lying peacefully under the waves for 2000 years.

Inside the wreck they found incredible ancient artefacts, such as life-size bronze statues and a huge head of the philosopher, Philitas of Cos.



However, the most incredible discovery was an unassuming lump of corroded metal. As the device was cleaned it became apparent that it was a unique and mysterious find. This is the story of Antikythera Mechanism, in a way the world’s first computer.

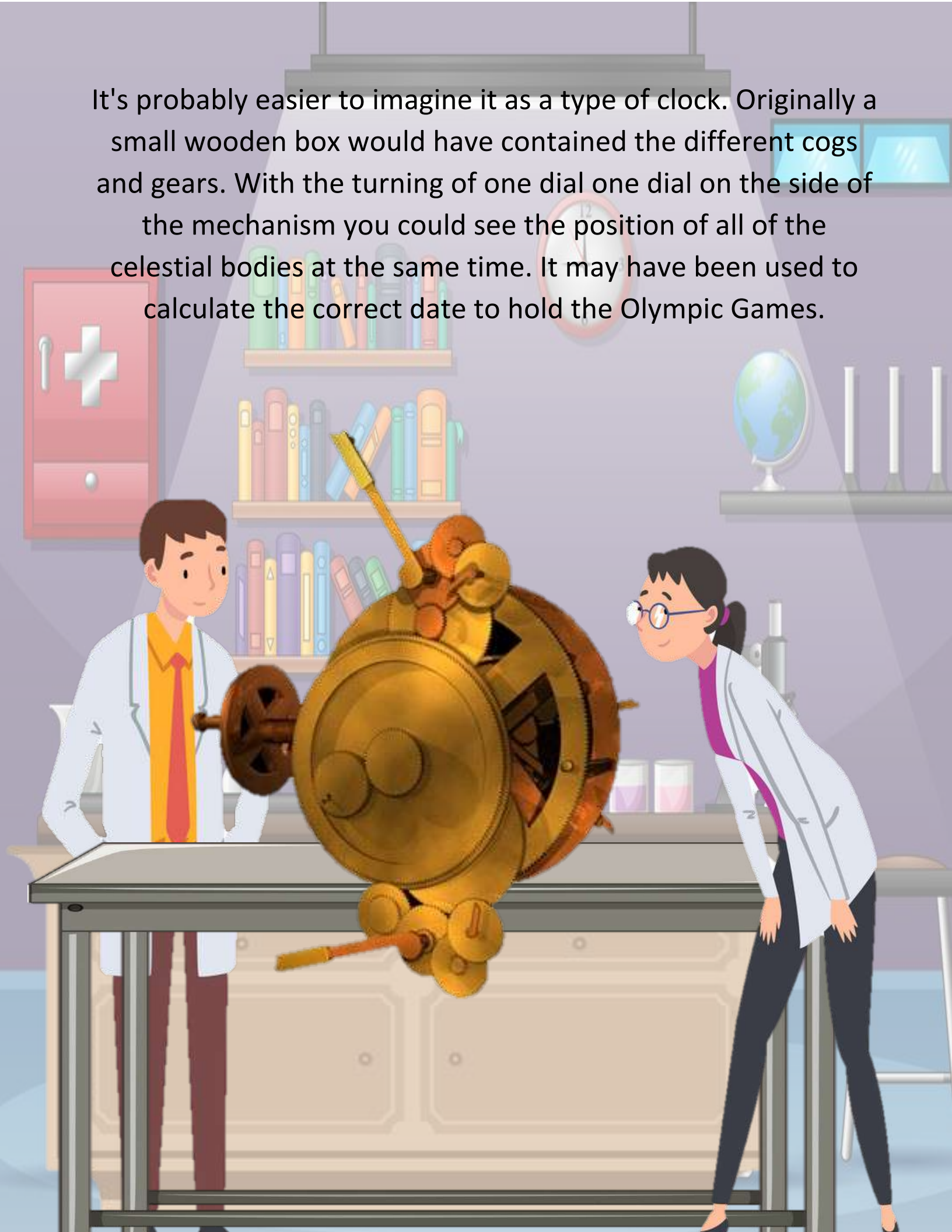


Now this was not a computer in the modern sense. It couldn’t play any games, you couldn’t watch videos of funny dogs on it, or do your homework. Its exact function was not understood in 1900.

It wasn't until the 1970s that x-ray results first revealed what it did, and not until 2006 that we fully understood what was going on inside this funky piece of metal.

The Antikythera Mechanism was a device for calculating the positions of the planes and bodies in the Solar System, or at least the ones that are visible to the naked eye; the Sun, the Moon, Mercury, Venus, Mars, Jupiter and Saturn.

It's probably easier to imagine it as a type of clock. Originally a small wooden box would have contained the different cogs and gears. With the turning of one dial one dial on the side of the mechanism you could see the position of all of the celestial bodies at the same time. It may have been used to calculate the correct date to hold the Olympic Games.



Historians had heard of such devices – old Roman and Greek texts mention them – but they weren't 100% sure if they truly existed or exactly how they worked. Until those sponge divers found the Antikythera wreck, we had never ever seen one! It really is a fantastic testament to the scientific talents of the ancient Greeks.

Not only could they calculate the movements of the planets without telescopes, but they could also produce cogs and dials accurate enough to reproduce these movements in one convenient box. Genius!


THINK
DIGITAL ACADEMY