

READING CHALLENGE

How People Tell the Time

From the sun in the sky to the phone in your pocket — people always wanted to know what time it is

Level	A1 (Beginner)
Age Group	Teens (11-16)
Topic	True Stories
Duration	~12 minutes
Skill	Reading

What time is it? You probably look at your phone. Or you look at a clock on the wall. It is very easy today. But thousands of years ago, there were no phones. There were no clocks. So how did people know the time? This is the story of how people learned to tell the time. It is a long story. It starts with the sun. It ends with your phone.

The Sun

The first "clock" was the sun. People looked at the sky. When the sun was low in the east, it was morning. When the sun was high, it was the middle of the day. When the sun was low in the west, it was evening. And when there was no sun, it was night. This was simple. But it was not very **accurate**. You could not say "it is three o'clock." You could only say "it is morning" or "it is afternoon." People needed something better.

Sundials

About 3,500 years ago, people in Egypt made the first **sundials**. A sundial is very simple. It has a flat plate with numbers. It has a stick in the middle. When the sun shines, the stick makes a **shadow**. The shadow moves during the day. It points to different numbers at different times. In the morning, the shadow is long. At noon, the shadow is short. In the afternoon, the shadow gets long again. Sundials worked well. The Romans used them. The Greeks used them. The Chinese used them too. But sundials had one big problem: they did not work at night. And they did not work on cloudy days. No sun means no shadow.

Water Clocks

People needed a clock that worked at night. So they made water clocks. A water clock is a bowl with a small hole at the bottom. You put water in the bowl. The water **flows** out slowly through the hole. There are marks on the inside of the bowl. When the water goes down to a mark, you know how much time has passed. Water clocks worked day and night. They worked on cloudy days too. The Egyptians used water clocks about 3,400 years ago. The Greeks made better water clocks. Some Greek water clocks could ring a **bell** at a certain time. That was like an alarm clock. Water clocks were popular for many **century** after century.

Candle Clocks and Sand Clocks

In China, people used **candle** clocks. A candle clock is a tall candle with marks on the side. You light the candle. As the candle burns, the wax gets shorter. When it reaches a mark, one hour has passed. Simple. King Alfred the Great in England also used candle clocks in the 800s. He used six candles in a day. Each candle burned for four hours. Then there was the **sand** clock. You probably know it. It has two glass parts. Sand flows from the top to the bottom. When all the sand is at the bottom, a certain time has passed. Sailors on ships used sand clocks a lot. They turned the sand clock every 30 minutes. This helped them know the time at sea.

The First Real Clocks

In the 1300s, people in Europe **invented** the first mechanical clocks. These clocks used metal parts that moved. They were big and heavy. They were put in church **towers**. People could not have them at home. They were too big. But they were very useful. The clock in the tower rang a bell every hour. Everyone in the town could hear it. People knew what time it was. They could go to work on time. They could go to church on time. One of the most famous tower clocks is Big Ben in London. It started working in 1859. It is still working today. The bell is very loud. You can hear it far away.

Smaller Clocks

In 1510, a German man named Peter Henlein made something new. He made a small clock. It was not in a tower. It was small enough to carry. It used a metal **spring** inside to keep time. These small clocks were not very accurate at first. They could be wrong by 15 minutes every day. But they were small. Rich people loved them. Later, people made **pocket** watches. A pocket watch is a small clock on a chain. You put it in your pocket. Men in the 1700s and 1800s carried pocket watches everywhere. It was very important to have a nice pocket watch. Then, in the early 1900s, wristwatches became popular. A wristwatch is a small clock you wear on your arm. At first, only women wore wristwatches. Men thought they were not for men. But during World War I, soldiers needed to see the time quickly. A pocket watch was too slow to use. So soldiers wore watches on their wrists. After the war, everyone wanted a wristwatch.

Electric and Digital Clocks

In the 1900s, clocks got even better. People made electric clocks. These clocks used a **battery** or electricity from the wall. They were more accurate. They did not need winding. In the 1920s, scientists made quartz clocks. A quartz clock uses a tiny piece of crystal. The crystal shakes very fast — about 32,768 times every second. This makes quartz clocks very, very accurate. Most clocks and watches today still use quartz. Then, in the 1970s, **digital** clocks arrived. A digital clock does not have hands. It shows the time as numbers on a screen. Many people liked digital clocks because they were easy to read. 3:45 is easier to read than looking at the position of two hands.

Time on Your Phone

Today, most people do not wear a watch. They use their phone. Your phone always knows the exact time. It gets the time from satellites in space. These satellites have very special clocks called atomic clocks. Atomic clocks are the most accurate clocks in the world. They lose only one second every 300 million years. That is amazing. Your phone knows the time at noon. It knows the time at **midnight**. It always knows. Think about the journey. We started with looking at the sun. Then we used shadows, water, candles, and sand. Then big tower clocks. Then pocket watches. Then wristwatches. Then digital clocks. And now, a tiny clock inside your phone that talks to a satellite in space. People have always wanted to know one simple thing: what time is it? And after thousands of years, we can finally answer that question perfectly. So next time someone asks you "What time is it?" and you look at your phone, remember: people spent thousands of years trying to answer that question. You are holding the answer in your hand. It was a long journey from the sun in the sky to the phone in

your pocket. But we got there. Right on time.

Vocabulary

Term	Definition
shadow	the dark shape on the ground when something blocks the light
sundial	an old clock that uses the shadow of the sun to show the time
candle	a stick of wax that you burn to make light
sand	the very small pieces of rock you find on a beach
flow	to move like water, slowly and smoothly
bell	a metal object that makes a ringing sound
tower	a very tall, narrow building or part of a building
spring	a piece of metal that goes back to its shape after you push it
pocket	a small bag in your clothes where you put things
invent	to make or think of something new for the first time
accurate	exactly correct, with no mistakes
battery	a small thing that gives power to a clock, phone, or toy
midnight	twelve o'clock at night, the middle of the night
century	one hundred years
digital	showing numbers on a screen, not with hands on a clock face

Comprehension Quiz

1. What did the first sundials use to show the time?

- A) Water
- B) The shadow of the sun
- C) Sand
- D) A candle

2. How did a water clock work?

- A) It used ice
- B) Water moved slowly from one bowl to another
- C) People put water on the sun
- D) It used rain

3. Who made the first small clock you could carry?

- A) A man in China
- B) A man in England
- C) Peter Henlein in Germany
- D) A man in Egypt

4. What is Big Ben?

- A) A famous watch
- B) A famous clock tower in London
- C) A type of sundial
- D) A digital clock

5. What do most people use to tell the time today?

- A) A sundial
- B) A water clock
- C) Their phone
- D) A candle clock

Answer Key

#	Answer	Question
1	B	What did the first sundials use to show the time?
2	B	How did a water clock work?
3	C	Who made the first small clock you could carry?
4	B	What is Big Ben?
5	C	What do most people use to tell the time today?