So many inventions, big or small, funny or serious, have transformed our lives and revolutionized the world!

Seize this opportunity to travel through time and space, from one device to another. Set off on a quest around the world to discover these treasures for yourself. Figure out your own itinerary and use historical, yet sometimes silly, means of transport to reach the country of origin for each of the featured inventions.

Gear up, because this trip around the globe is much more than a simple sightseeing tour. Over the course of your journey, you will need to keep your eyes wide open for clues, and collect all the letters that will allow you to solve a final riddle…
So many inventions, large or small, amusing or serious, have changed the world, sometimes a little, and sometimes a lot!

Here is your opportunity to travel back in time, from one country to another, and from one invention to the next. Following your very own itinerary, and riding an assortment of historical vehicles (some quite crazy!), you will discover these ingenious treasures scattered around the globe.

Careful! This voyage around the world is no walk in the park! During your trip you will need to collect the letters that will let you solve a riddle...
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The Search for Ingenious Treasures
The names in parentheses are the names of the cities today.
What odd warning was inscribed on the first telephone models?

Don’t ___ ___ ___ (Middle East) ___ ___ ___ (East Asia)

___ ___ (Oceania) ___ ___ ___ (South America) ___ ___ ___ (Europe)

___ ___ ___ (Africa) ___ ___ ___ (North America)

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The treasure hunt

Here's your riddle:

What odd warning was inscribed on the first telephone models?

Don’t

(Middle East)

(East Asia)

(Oceania)

(South America)

— — — — — — — —

the

(Europe)

(Africa)

(North America)

World map

For the purposes of this adventure, the world has been divided into seven main geographical areas, each one presenting a number of discovery destinations. You will find these areas, the discovery destinations and the riddle to be solved on the map of the world on pages 4 and 5. We suggest you photocopy this map. It will help you know where you are at any time. You can also use it to mark out your route and write down the letters as you find them.

Hidden letters

Each discovery destination is linked to an article in the book. Reading the article may help you find one or more letters in the riddle. After you have traveled around the world to find every letter, you will need to put them in the right order! Each geographical area contains letters that together make up one of the words in the riddle.

Navigation

The last page of each article gives you a choice of three new discovery destinations. It’s up to you to decide which direction to take. Careful! You may sometimes have to retrace your steps to reach your desired destination.

Destination

The sign shows you the destination and the number of miles (kilometers) to travel to get there. The number over the sign refers to the destination number on the map of the world. The color of the sign is associated with a particular geographical area.

Page

The paragraph under the sign indicates the mode of transport you must use to get to the destination of your choice. The page of the discovery destination is printed in bold type. The arrow shows you in which direction to turn the pages.

Mode of transport

The mode of transport to be used is accompanied by a drawing and a paragraph describing the vehicle and its inventor.

Ready for the adventure?
Start your voyage in Boston, on page 7.

Extrait de la publication
You are walking in the streets of Boston, one of the oldest cities in the United States. Here in the intellectual capital of the country, the streets are bustling with professors, students, and ideas.

It is March 10, 1876. You pass the Boston Common, an immense and very old public park. Suddenly, a curious premonition draws you to 5 Exeter Place. Are the walls of this house hiding something valuable? As you approach the front entrance, the door creaks open, beckoning you to enter. Quick, step inside!

Shhh… In a room adjacent to the vestibule, you spy a bearded man through the partially open door. He is alone, and is totally captivated by a strange funnel-shaped container before him. Intrigued, you continue to observe him when, suddenly, the man begins to speak to the container.
“Mr. Watson, come here! I want to see you.”

Could he be mad?

Instantly, there is a hubbub on the floor above, then the sound of footsteps running down the stairs. A triumphant-looking individual appears. “It works! I heard every word you said!”

Extraordinary! For the first time, two people in two different places can talk together. The men in question, a little mad, perhaps, but mainly mad with joy, are none other than the inventor Alexander Graham Bell and his colleague Thomas Watson. And right before them, a dazzling invention, the very first model of the telephone!

“The day is coming when… friends converse with each other without leaving home.”

Alexander Graham Bell

That year, Bell’s “toy” was the star attraction at the centennial exhibition in Philadelphia. The first telephone lines were installed two years later, and, by 1900, the telecommunications company founded by Bell counted more than a million subscribers. Today, there are hundreds of millions of telephone lines linking the four corners of the world!
The word “telephone” is a combination of two Greek words, “tele” (distance) and “phone” (sound).

Every sound creates its own particular vibration in the surrounding air. These distinct vibrations are sent to a transmitting device that converts them into electrical signals. The signals travel over the telephone line and are then converted back into sound vibrations by the receiving device at the other end of the line.  

*Elementary, my dear Watson!*

The first wall-mounted telephone appeared in 1879. The mouthpiece (for speaking into) and the earpiece (for listening) were separate.

Dial telephones appeared around 1924. The caller could dial a number directly without the assistance of an operator.

With the advent of the cellular phone in the 1980s, its user can be reached at any time and anywhere.
Before you leave Boston, take the time to sample the local specialty: Boston baked beans, an appetizing dish consisting of beans, salted lard, onions, and molasses. Yum!

Most of all, don’t forget to take along some chocolate chip cookies for the road (invented right here in Massachusetts), as well a letter in the riddle: the first letter in the first name of Alexander Graham Bell’s colleague.

And now, from Boston, you can go to...

- **New York, USA**
  - 185 miles (300 km)
  - Embark on the steamboat Clermont.
  - Sail to page 141 ➜

- **Menlo Park, USA**
  - 215 miles (350 km)
  - Ride the amphibious vehicle built by American Oliver Evans.
  - Roll (or splash!) your way to page 71 ➜

- **Valcourt, Canada**
  - 250 miles (400 km)
  - Put the key in the ignition of the Sunraycer solar-powered vehicle and follow the road to page 93 ➜

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The Clermont was the first commercial steamboat. Built by American Robert Fulton, it first sailed on the Hudson River in 1807, linking New York to Albany.

In 1805, this boat on wheels traveled 2 km through the streets of Philadelphia before undertaking a voyage on the Schuylkill River. This curious means of transportation was one of the earliest steam-driven vehicles.

In 1987, General Motors launched the Sunraycer. Equipped with solar panels, this car ran at 40 mph (65 km/h) without a drop of gasoline. Its cost? About $4.5 million!
You are wandering the streets of Middelburg, a prosperous town on Walcheren Island. Your wooden clogs echo rhythmically on the cobblestones. Suddenly you stop in front of a spectacle maker’s shop. You are surprised to discover that spectacles, or eyeglasses, come with lenses of many different sizes and shapes: large, small, round, square, bulging, and hollow…

You enter the shop and take a closer look. While you amuse yourself trying on the different eyeglasses, you notice a strange phenomenon. If you put both the hollow and the bulging lenses in front of your eyes at once, everything you look at becomes larger! Even the weathercock on the nearby church steeple suddenly looks a lot closer.
The spectacle maker, Hans Lippershey, is observing you. He is intrigued by your little experiment. It inspires him to combine a bulging (or convex) lens with a hollow (or concave) lens in a long tube, making him the first person in history to market the telescope.

Spectacles were undoubtedly the precursors of the telescope. They first appeared in Italy in the 13th century. Initially, spectacle makers shaped the glass into convex forms. These types of lenses slightly enlarged images, and made reading easier for people who had trouble seeing things that are close. Concave lenses were invented in the 15th century. These lenses helped nearsighted people to view distant objects.

In 1608, Lippershey brought the two types of lenses together. He perfected the first telescope, which was able to enlarge images three to four times. The following year, Italian scientist Galileo Galilei improved on Lippershey’s telescope, hoping to make observations of space. The instrument he came up with allowed him to enlarge images of distant objects up to 20 times! Galileo Galilei made many important astronomical discoveries with his powerful telescope. He studied the craters of the moon, sunspots, Jupiter’s satellites, the movements of the planets, and many stars that are invisible to the naked eye.
The word “telescope” comes from the Greek “tele,” which means “distance,” and “scope,” which means “to watch.” In the word “microscope,” “micro” means “small” in Greek.

In 1668 English scientist Isaac Newton broke new ground by inventing the reflecting telescope. Instead of a lens, Newton used a curved mirror to collect and focus the light of astral bodies. In addition to being more powerful than an ordinary telescope, Newton’s telescope also reduced the blur that came from using glass lenses. The larger the mirror, the better it captured the light. Today’s Keck I reflecting telescope in Hawaii is equipped with a mirror that measures 32 feet (10 m) across, making it possible to study distant galaxies.

Toward the end of the 16th century, Dutch spectacle maker Hans Jansen and his son Zacharias perfected the first microscope. By mounting a convex lens at each end of a tube, they were able to look at extremely small objects. The microscope transformed biology by revealing numerous tiny organisms whose existence was unknown. By the 17th century, a Dutchman named Antonie Van Leeuwenhoek used a microscope that could enlarge objects about 270 times, and observed for the first time bacteria, spermatozoids, microscopic animals, and blood cells. Today’s electronic microscopes can enlarge up to 1 million times!
It is time to go on a discovery of the Netherlands by bicycle. Don’t worry—you won’t get tired bicycling across this flat terrain! A gentle breeze pushes you along and turns the blades of the many windmills that dot the landscape. Take a deep breath and enjoy the wonderful scents coming from the vast fields of flowers that surround you.

From the Netherlands, you can go to...

7 Mainz, Germany 250 miles (400 km)
Mount a draisienne and propel this strange bicycle along to page 75 ➞

2 London, Great Britain 185 miles (300 km)
Climb on board a hovercraft and ride with your hair blowing in the wind to page 107 ➞

11 Bjorko, Sweden 750 miles (1,200 km)
Settle yourself comfortably in the royal coach and let the coachman drive you to page 45 ➞

The draisienne was the earliest precursor of the bicycle. Invented in 1818 by German Baron Karl von Drais, it consisted of a bar and two wheels and had no brakes or pedals. The rider did a kind of run… but remained seated!

In 1955 British engineer Christopher Cockerell invented the hovercraft. Floating on a thin cushion of air, the hull of this craft never touches the surface it is traveling across. The hovercraft is able to move over water, land, snow, and ice.

In the 16th century European royalty began to travel by coach, a splendidly decorated vehicle invented in Holland. The suspension and cushions made the coach far more comfortable than an ordinary cart.
You wander the vast African plain silently, searching for small prey, some fruit, or a few roots to eat. Suddenly, you notice something rustling in the tall grass. You approach quietly…

Uh oh… You suddenly find yourself face to face with… not a prey, but a member of an enemy tribe. Seeing you advance, your adversary begins to growl and suddenly raises his arm toward you, ready to attack. You quickly jump away! There is something strange about his hand… it’s pointed and sticks out like a giant claw.

There’s no competing with an adversary like this one! Run for your life!
In 1960, British archaeologists Mary and Louis Leakey made a spectacular discovery in the Olduvai Gorge in Tanzania. They found the world's oldest known stone tools, made by *Homo habilis* about 2.5 million years earlier. Known as choppers, they were made from stones that had been crudely shaped using another stone to make their edges sharp. Choppers probably helped prehistoric men and women to cut up animal carcasses, carve wood, crack open nuts, or break bones to get the marrow inside.

**THE FIRST TOOLS**

Your adversary is called *Homo habilis*. That means “handy man.” Like you, he is a distant ancestor of modern man. But *Homo habilis* possesses something that sets him apart from all other groups of humans in his time. At the end of his long arm is, no, not a claw, but the very first tool in history: a stone tool!

Through his ability to sharpen a stone, *Homo habilis* became history’s first inventor. His tool, and all the others that followed, were to set humans apart from all other animals.
The stone tool continued to be improved upon. Hundreds of thousands of years after the first choppers, humans were fashioning bifacial, or double-edged, tools. They were very pointed, sharpened on both sides, and made from a kind of rock called flint. These bifacial stone tools were as sharp as shards of glass!

Tools designed for specific purposes began to appear. There were blades for slicing, scrapers for working with animal skins, chisels for carving wood or bone, and spears and daggers for hunting. Prehistoric people found a use for everything around them. The bones, ivory, and antlers of animals, for example, could be fashioned into sewing needles, harpoons, and hooks. Armed with advanced tools, prehistoric people were able to hunt and fish more easily.

Tools are the basis of all human progress. Because of them, human beings are able to manufacture clothes, practice agriculture, build houses, and, more than anything else, design new tools!
Prehistoric people made the very first boats (or canoes) from hollowed-out tree trunks. Over time they learned that by tying several tree trunks together, they could construct rafts, which were much more stable than single tree trunks.

Dhows are the graceful kind of sailing boats that have been navigating the Indian Ocean for more than 2,000 years. Africans, Arabs, and Indians have long used these boats to transport spices, ivory, porcelain, wood, and sometimes slaves.

In 1924 and 1925, eight half-track vehicles crossed the African continent from Algeria to Madagascar in an expedition known as the “Black Cruise.” The half-tracks drove 17,400 miles (28,000 km) through desert, savannah, bush country, and rivers. Quite a journey!

Equipped with binoculars and a camera, go on the hunt for images at the foot of Tanzania’s spectacular Mount Kilimanjaro. Around this snowcapped volcano stretches the savannah, as far as the eye can see. It’s an ideal landscape for a photosafari. Large herds of gnus, zebras, and elephants make the ground tremble underfoot as they move past you. Get your camera ready! Click… a giraffe. Click… a lion. Click… a letter in the riddle: the first letter in the name of the humans who made the first tools.

Use a tree trunk as a boat and try to float down the Nile without capsizing until you reach page 123.

Join the crew of a dhow and be rocked by the waves to page 55.

Join the “Black Cruise” and explore Africa in a half-track until you reach page 137.

From Tanzania, you can go to...

- **Edfu, Egypt**
  2,200 miles (3,500 km)
  Use a tree trunk as a boat and try to float down the Nile without capsizing until you reach page 123.

- **Ujjayini, India**
  3,400 miles (5,500 km)
  Join the crew of a dhow and be rocked by the waves to page 55.

- **Swartkrans, South Africa**
  1,600 miles (2,500 km)
  Join the “Black Cruise” and explore Africa in a half-track until you reach page 137.

Prehistoric people made the very first boats (or canoes) from hollowed-out tree trunks. Over time they learned that by tying several tree trunks together, they could construct rafts, which were much more stable than single tree trunks.
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p. 147 Chinese paper money: Calgary Coin Gallery/calgarycoin.com

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Riddle
Don’t talk with the ear or listen with the mouth.
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Seize this opportunity to travel through time and space, from one device to another. Set off on a quest around the world to discover these treasures for yourself. Figure out your own itinerary and use historical, yet sometimes silly, means of transport to reach the country of origin for each of the featured inventions.

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