



- Photo: HKEJ

Guide dogs: the heroes with paws



CAN you imagine confidently walking through Hong Kong's busy streets if you were unable to see? That is where guide dogs come in and do their magic – these loyal, intelligent companions **lead the way** for people with visual **impairments**.

Guide dogs are more than pets; they are highly trained professionals. The Hong Kong Guide Dogs Association (HKGDA) works tirelessly to train labradors and golden retrievers to become life-changing partners.

The HKGDA, founded in 2011, provides free guide dog services for visually impaired, autistic, and disabled individuals, allowing them to experience **independence**. They breed, train, and match dogs to clients, while adhering to International Guide Dog Federation standards. The HKGDA also raises public awareness through events and education.



• Guide dogs helping clients.

- Photo: HKEJ

Training takes nearly two years and includes teaching dogs how to avoid **obstacles**, stop at curbs, and even ignore distractions like food or other dogs.

Why are guide dogs so important? For someone who is blind, independence can feel out of reach. These dogs give their handlers freedom – the ability to work, travel, and live without relying on others.

However, there is a challenge: Hong Kong still has too few guide dogs. The number of dogs currently available cannot meet the growing demand, and social **awareness** is still low. Some restaurants and taxis even refuse entry to guide dogs, despite laws supporting **access**.

Though the relationship is more formal than that between pets and their owners, many guide dogs form similarly unbreakable bonds with their **handlers**. They remember routes and even develop little habits, like pausing at a favourite snack shop or wagging their tails when they reach a park.

Guide dogs are not just helpers – they are trusted friends and symbols of inclusion. Supporting guide dog programmes through donations or volunteering helps more people experience this incredible partnership. **e**



• Guide dogs are still only welcomed by a number of fast food shops.- Photo: HKEJ

Lead the way

THE idiom "lead the way" means to show others how something should be done, or to guide others forward, like a leader or pioneer.

Idiom



VOCABULARY

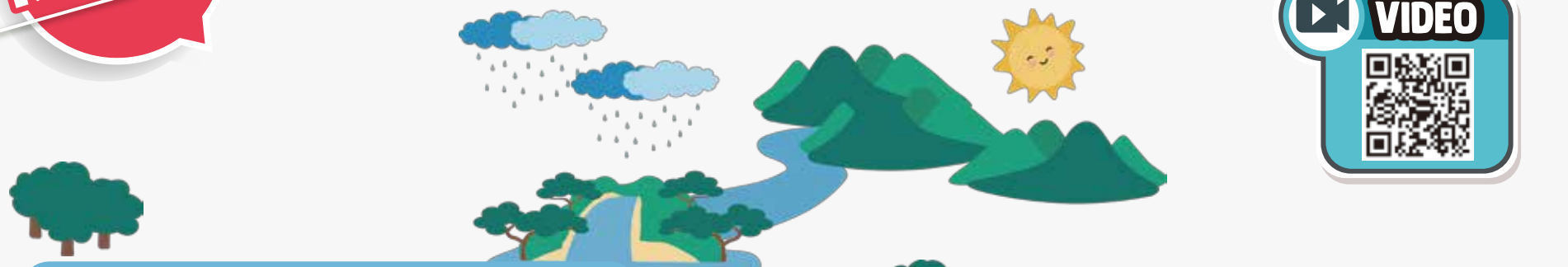
1. **impairment** (n) 損害
2. **independence** (n) 自立

3. **obstacle** (n) 障礙
4. **awareness** (n) 意識

5. **access** (n) 使用權
6. **handler** (n) 領犬員



Roles of a river



Water supply



Rivers are a major source of **freshwater**, which can be used for drinking, agriculture, and industrial purposes.

Biodiversity

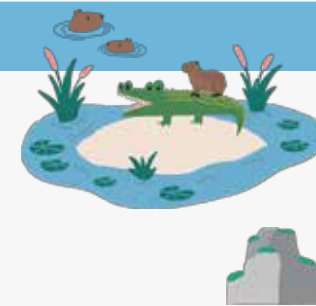
Rivers create **diverse** habitats that support a wide range of plants and animals.



Food source



Fishing in rivers provides a **significant** source of food for many communities worldwide.



Hydroelectric power



Rivers can be **harnessed** to create electricity. Water turbines generate clean and renewable energy.

Recreation



Rivers offer **recreational** opportunities, including boating, swimming, and other activities.



Flood control

Rivers act as natural drainage systems, carrying away excess water during periods of heavy rainfall or snowmelt.



VOCABULARY

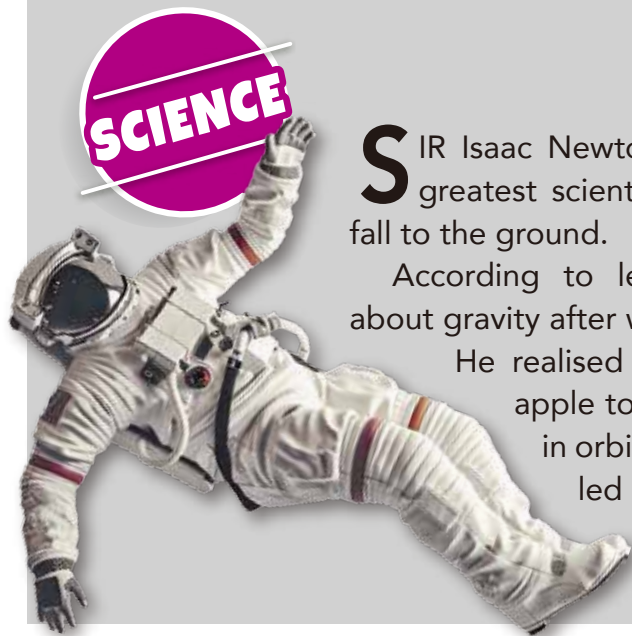
- 1. **freshwater** (n) 淡水
- 2. **diverse** (adj) 多樣的

- 3. **significant** (adj) 重要的
- 4. **harness** (v) 利用

- 5. **recreational** (adj) 娛樂的
- 6. **snowmelt** (n) 融雪

Discovering gravity

SCIENCE



SIR Isaac Newton is considered one of history's greatest scientists since he realised why things fall to the ground.

According to legend, Newton began thinking about gravity after watching an apple fall from a tree.

He realised that the same force pulling the apple to the ground also keeps the Moon in orbit around the Earth. Newton's work led to the **Law of Universal Gravitation**, which states that all objects with mass attract

each other with a force equal to their masses and the distance between them.

Newton's discovery revolutionised our understanding of the universe, laying the foundation for modern physics and astronomy. His work is still used today to explain everything from **planetary motion** to the behaviour of tides.

FUN FACT

The famous apple tree associated with Newton still grows at his family home in England!

HISTORY

The origins of paper

PAPER is an essential part of our daily lives. We can thank the ancient Chinese for **coming up with it**.

Cai Lun (蔡倫), a court official during the **Han Dynasty**, is considered the inventor. He made paper by mixing tree bark, hemp, and old rags with water, pressing the mixture into sheets, before drying them under the sun. Thanks to him, there was a new way to send messages and keep records in China.

Paper eventually spread to the Islamic world and Europe through trade and cultural exchange. By the 13th century, paper mills were established in Spain and Italy, making paper more widely available. It is hard to imagine a world without paper, so one must be thankful to all these people for devising it!



FUN FACT

Before paper, people wrote on materials like bamboo, animal skins, and clay tablets!

INVENTION

Inventing the bicycle



BIKES may be ubiquitous today, but it took a lot of work to figure out its modern design.

The first version of the bicycle, called the "Draisine", was invented in 1817 by Karl von Drais, a German inventor. It had two wheels and was moved by pushing off the ground with one's feet. In the 1860s, the pedal-powered bicycle was developed in France, leading to the creation of the "**penny-farthing**", a bicycle with a large front wheel and a small rear wheel.

By the late 19th century, the modern bicycle, with equal-sized wheels and a **chain drive**, became popular. Bicycles have helped people move around in a cheap and easy manner, and likely will remain one of the world's most popular forms of transport, now and in the future.

FUN FACT

There are more bicycles in the world than cars, with over 1 billion bikes in use globally!



PHRASES

- 1. Law of Universal Gravitation 萬有引力定律
- 2. planetary motion 行星運動
- 3. come up with 想出來
- 4. Han Dynasty 漢朝
- 5. penny-farthing 高輪自行車
- 6. chain drive 鏈條驅動

An ever-growing challenge

Mount Everest is the highest mountain on Earth, but exactly how tall is it? The answer will surprise you as it differs depending on when you ask the question.

STANDING today at about 8,849 metres above sea level, Mount Everest is the ultimate climbing challenge. But what is less well known is that Everest is still growing. The mountain could potentially be even higher for future climbers.

Everest sits in the Himalayan mountain range, which was formed around 50 million years ago. At that time, the Indian **tectonic** plate collided with the Eurasian plate. These gigantic slabs of the Earth's crust continue to push against each other.

As they do, the land is forced upwards, lifting mountains like Everest even higher. Scientists estimate it rises a few millimetres each year, which may not sound like much, but over the centuries it adds up.

However, measuring Everest's exact height is complicated. Snow, ice, and even **earthquakes** can change its height temporarily. In fact, the **devastating** 2015 Nepal earthquake lowered some of the surrounding areas and raised questions about Everest's height.

In 2020, China and Nepal jointly announced its "official" new height: 8,848.86 metres. This showed how carefully modern technology, such as **satellites** and laser instruments, is used to keep track of the mountain's changes.

For climbers, each added millimetre technically makes the challenge a little greater, but the difference in practical terms is very small. Everest's true challenge comes not from its height but from its **extreme** conditions.

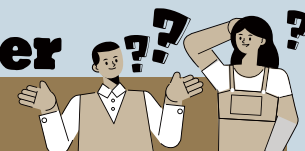
Temperatures can fall below -30 degrees Celsius, and the air at the **summit** has only one-third the **oxygen** of sea level. These dangers make climbing Everest one of the toughest human adventures on the planet.

Still, the idea of Everest continually rising captures the imagination. It reminds us that Earth is alive and moving. **e**



- Photo: Xinhua

I Wonder



'Thin air' at high altitude

AT high altitudes, atmospheric pressure decreases because there is less air pressing down from above. While oxygen still makes up about 21 percent of the air, the lower pressure means oxygen molecules are more spread out. This reduces the partial pressure of oxygen, making fewer oxygen molecules available per breath. Your lungs cannot extract as much oxygen per breath, leading to the description of "thin air".

Tectonic

"TECTONIC" is an adjective that means relating to Earth's surface and the way it forms, changes, and moves by the forces inside it. "Tectonic shift" is a noun phrase that literally means the movement of Earth's plates, which reshapes continents over millions of years. The term also means having a strong and widespread impact, referring often to a major, transformative change in areas like politics, technology, or society.

Vocabulary

REVIEW QUIZ

Test your understanding of ALL the articles. It includes the Challenge Quiz!



VOCABULARY

- | | | |
|----------------------------------|-----------------------------|-------------------------|
| 1. earthquake (n) 地震 | 3. satellite (n) 衛星 | 5. summit (n) 山頂 |
| 2. devastating (adj) 毀滅性的 | 4. extreme (adj) 極端的 | 6. oxygen (n) 氧氣 |



Download ALL the learning activities (Vocabulary List, Word Search, Anagrams, Review Quiz, etc.) from quest.hkej.com



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