



# Learn English Through Stories

A1 Stories

Elementary Level

**Adapted and modified by  
Kulwant Singh Sandhu**

<https://learn-by-reading.co.uk>



# Super Structures

Fiona Undrill

# Super Structures

By Fiona Undrill

## CHAPTER ONE

### Tunnels

Tunnels go underwater, underground, or through the ground. We use tunnels for mines, trains, and road traffic, or to carry things like gas or water. Tunnels are usually made of metal and concrete.

One of the longest tunnels in the world is the Seikan Tunnel in Japan. It's nearly 54 kilometres long! It goes between two islands. It was built because it's too dangerous to travel by boat. The tunnel is for trains, but now many people prefer to travel by plane.

One of the longest road tunnels is the Laerdal Tunnel in Norway. The tunnel is nearly 25 kilometres long and it goes through a mountain. It was built because there's too much snow on the mountain roads in winter.

In the tunnel, there are three big caves where drivers can stop and rest.

## CHAPTER TWO

### Bridges

Bridges go over water or over ground.

On a beam bridge, the pillars carry the deck. One of the longest beam bridges is the Lake Pontchartrain Causeway in the USA. This bridge is about 38 kilometres long and it has over 9,000 concrete pillars. It goes over water and carries road traffic.

On a suspension bridge, the cables and towers carry the deck. The anchorages hold the cables.

Suspension bridges move a little when it's windy. This isn't usually a problem, but in 1940 the Tacoma Bridge in the USA collapsed in light winds. It was only four months old.

## CHAPTER THREE

### Skyscrapers

When there isn't much ground, we can build tall buildings. Very tall buildings are called skyscrapers. The first skyscraper was the Home Insurance Building. It was built in Chicago in the USA in 1885. It was 42 meters tall. The tallest skyscrapers are now much taller than this.

The Petronas Twin Towers in Kuala Lumpur in Malaysia are the tallest twin buildings. There is a bridge between the two towers called a skybridge.

One of the tallest skyscrapers is the Burj Dubai. It's in Dubai in the United Arab Emirates.

It's 818 meters tall - that's nearly a kilometre! It's made of a special, strong concrete called reinforced concrete.

The Burj Dubai has apartments shops, swimming pools, hotels, restaurants, and a library.

It's like a very tall town! Do you like it?

The concrete in the Burj Dubai weighs the same as about 100,000 elephants!

## CHAPTER FOUR

### Dams

Some of the biggest structures are dams. They hold back water and make a lake called a reservoir. Dams supply water, stop floods, and they also make electricity.

Gravity dams are made of a lot of concrete. They are very big and heavy, and this weight holds back the water. The Itaipu Dam is a gravity dam. It's in South America between Paraguay and Brazil. It's 196 meters tall and nearly 8 kilometres long.

Arch dams are also made of concrete. They are usually smaller than gravity dams and they are curved. The curve holds back the water. The Moiry Dam in Switzerland is an arch dam. It's 148 meters tall and 610 meters long.

The first dam was built more than 4,000 years ago in Egypt. It never worked because it fell down in heavy rain.

## **CHAPTER FIVE**

### **Olympic Structures**

There are many super structures in Beijing in China. Some of them were built for the Olympics in 2008.

Terminal 3 of Beijing Capital International Airport is one of the biggest airport terminals in the world. The floor area is more than a square kilometre. There are seven floors, and two of the floors are underground.

Red and gold are traditional colours for Chinese buildings. Red is the Chinese colour for good luck.

The Beijing National Stadium is one of the biggest metal buildings. It's red and gold. It has 80,000 seats. There were 11,000 extra seats for the Olympics. It also has underground pipes to make it warm in winter and cool in summer.

Sometimes it's called the Bird's Nest - can you see why?

## **CHAPTER SIX**

### **Different Shapes**

With new building materials, people can build structures in many different shapes.

The O2, in London in the United Kingdom, is a dome. It was built for the millennium, the year 2000. The roof is made of a special plastic and glass material. It's 365 meters wide - one meter for every day of the year. It has also 12 support towers - one tower for every month of the year.

In 2008, David Fisher designed the first rotating skyscraper. It uses energy from the wind. People want to build these rotating skyscrapers in Dubai and in Moscow.

Each floor can rotate a full circle. People can decide when to rotate their floor. The skyscraper can be a different shape every day!

## CHAPTER SEVEN

### Glass and Ice

Most buildings are made of concrete, bricks, metal, or wood. Some buildings use different materials.

'Biosphere-2' in Arizona in the USA is made of glass and metal. It's nearly as big as two and a half American football fields. Inside, there's a rainforest, an ocean, a desert, a farm, and places for people to live and work. It's a research centre.

In a village in Sweden, near the Arctic, there is a hotel made of ice called Ice Hotel. The hotel is open from December to April. It has 80 rooms. There are ice sculptures in the rooms. The beds, chairs, and tables are also made of ice. Even the drinking glasses are made of ice!

Every year, Ice Hotel is built again with new ice.

## CHAPTER EIGHT

### Amazing Places

Did you know that people also build structures under the ocean and on ice?

The Poseidon Undersea Resort in Fiji is a hotel 12 meters under the ocean. It's made of very strong metal and plastic. The windows are made of special, clear plastic, so people can see fish and other ocean animals from the hotel. To get to the hotel, you travel by submarine!

Halley 6 is a research station in the Antarctic. It's built on ice. The ice moves 400 meters every year and the structure moves with it. Halley 6 is on skis so people can move it back to the right place. Building in the Antarctic is very difficult because of the very, very cold weather.

## CHAPTER NINE

### Structure in Space

There are also structures in space. The International Space Station (ISS) is a research station. It's about 350 kilometres above Earth.

It goes around Earth about 16 times every day. It travels at 27,700 kilometres per hour - that's nearly 8 kilometres per second!

You can see ISS from Earth without a telescope.

The ISS is made of metal. It uses energy from the sun. The first part of the ISS went into space in a rocket in 1998. No astronauts went with it. Most other parts went with astronauts. Sometimes, astronauts do a spacewalk outside the ISS to attach new parts.

## CHAPTER TEN

### Animals Structures

Animals can build super structures, too!

Termites build their homes with mud. These homes are tall towers called termite mounds. The tallest termite mounds are about 13 meters high. They are termite skyscrapers!

Termites are insects. The tallest termite mounds are thousands of termites tall!

Wombats build underground tunnels called burrows. They dig with their front paws and bite through things with their teeth. A wombat can dig about 2 meters per hour.

Beavers build dams on the water to protect themselves from other wild animals like bears. They build the dams with small trees, stones, and mud. Their dams can be a kilometre long.

- THE END -