

# 01. Czech Republic

## Location and Geography

Landlocked country (enclosed by land only)

Central Europe; **Neighbours:** Germany, Poland, Slovakia, Austria

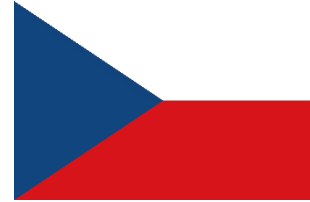
Highest mountain: “**Sněžka**” (1603 m)

Capital is **Prague**

Divided into 3 parts: Čechy (Prague), Morava (Brno), Slezsko (Ostrava)

Other mountains: the Šumava, the Český Les, the Krušné Hory, the Jizerské hory, the Krkonoše, the Orlické Hory, Bohemian Moravian highland (west), the Jeseníky and Beskydy (North)

**Rivers:** the Vltava, the Labe, the Morava



## People

About 10 million inhabitants

## Climate

Moderate, warmest area in the South Bohemia

## Places of Interest

### Castles, spas

Karlštejn, Křivoklát, Konopiště, Hluboká, Lednice, Zvíkov

Karlovy Vary (King Charles IV discovered hot springs while hunting), Mariánské lázně, Františkovy Lázně, Jánské Lázně

### Historical towns

Praha, Kutná Hora, Tábor, Kroměříž, Telč, Olomouc, Jihlava...

## Political system

Independent republic

The President is elected for five years

The President = “**Miloš Zeman**”

Government is divided into 3 branches

- Legislative (represented by the Parliament)
- Executive (President and government)
- Judicial (represented by courts)

Parliament = the Chamber of Deputies – 200 members (4 years)

The Senate = 81 members; every 2 years one third is renewed

Elections: public, secret, democratic, direct, universal

## History

State was created at 1.1.1993. First president was “Václav Havel”. Before “Česká Republika” was created we were kingdom with the most famous king Charles IV, who founded University, Charles bridge...

## **Other**

### **Flag**

Consist of 2 horizontal stripes (white on top; red on the bottom) and blue wedge

### **Emblem**

Is a coat of arms divided into quarters

- 1 and 4: silver two tailed lion with a golden crown
- 2 and 3: Moravian and Silesian eagles

### **Anthem**

Kde domov můj (J.K.Tyl)

## 02. Prague

### Location

Situated on the **Vltava** River  
In the centre of the **Bohemian** Basin  
Area of is about 500 m<sup>2</sup>

### Population

The most populous city in the Czech Republic  
Over than **1.2 million** people

### Importance

One of the oldest towns in the Europe → rich history

### Places of interest

**Dancing House** – very non-traditional design

**Prague Castle** – seat of power for kings of Bohemia, Holy Roman emperors, and presidents of Czechoslovakia. The Bohemian Crown Jewels are kept within a hidden room inside it

**St. Vitus Cathedral** – tombs of many Bohemian kings

**Lesser town** – Hradčany; Prague Castle; St. Vitus Cathedral

**Old town** – Astronomical Clock (Orloj)

**New Town** – Wenceslas square

### Culture and sports

The biggest events usually take place in **O2 Arena**

**National Opera** → every year The Prague spring takes place there

### History

The city was established in the **9<sup>th</sup> century**

Charles IV, Bohemian King, and Holy Roman Emperor, chose the city as the capital of his whole Empire

Charles IV founded, Charles University, St. Vitus cathedral, Charles Bridge and the New Town

Prague is connected with the Czech religious reformer **Jan Hus** and the Hussite movement

In 19<sup>th</sup> century was built **Czech National Theatre** which was financed by Czech people

In 1918, the city became the capital of the independent Czechoslovakia

After the peaceful division of Czechoslovakia in 1993, it became the capital of the Czech Republic

## 03. Great Britain

Capital of England is **London**.

Capital of Scotland is **Edinburgh**.

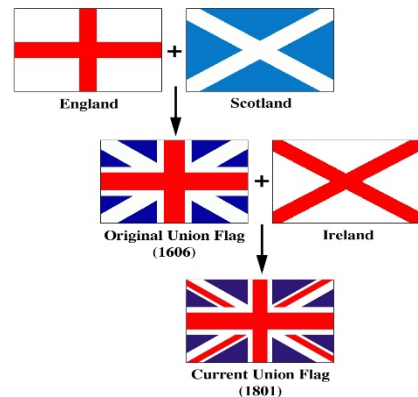
Capital of Wales is **Cardiff**.

UK contains of:

Great Britain (England, Scotland, Wales)

Northern Ireland with capital city Belfast

Britain is just England and Wales!!



### Geography

The north-western coast of Europe

Highest mountain: **Ben Nevis** (1343m)

**The English Channel** (la Manche) – channel between France and the UK

**The Irish Sea** – separates GB from Ireland

**Rivers:** the Thames, the Severn, the Avon, the Clyde, the Mersey

### Climate

Mild, no extreme temperatures, cold summers

### Important Cities

**London** – the Tower of London, the Tower Bridge, Buckingham Palace, Trafalgar Square

**Oxford** – oldest university in the UK

**Stratford upon Avon** – Shakespeare birth place

**Stonehenge** – group of huge stones; no one knows where they come from

**Liverpool** – the Home of Beatles, major seaport

**Edinburgh** – historic city, medieval castle

### Political System

Constitutional Monarchy

**Parliament:** **Queen** (Elizabeth II – since 1952), **the House of Common** (lower) and **the House of Lords** (upper)

### People, languages

**Population:** 60 million people (English, Scottish, Welsh, and Irish)

**Languages:** English, Welsh, Gaelic

### Other

**Anthem:** God save the Queen

**Flag:** called **the Union Jack**; combining three crosses – English, Scottish and Irish

## 04. London

### Location

Capital of the UK  
Situating in south-eastern Great Britain  
River the Thames flow through London

### Population

Huge metropolis  
Two small cities in the centre  
    The City of London (oldest part)  
    The City of Westminster (political centre)  
Largest city in the UK, third largest city in Europe  
About **7.8** million citizens.

### Means of Transport

Signature black taxis (**cab**); Red double decker; Underground  
The oldest underground in the world with 11 lines and it is known as “**tube**”

### Important buildings

There are lots of historical monuments and buildings, where the most known are:

**Big Ben** – Bell in Clock Tower

**The houses of parliament**

**Buckingham palace** – place of queen

**Madame Tussauds museum** – wax museum with famous people

**221b Baker street** – Home of Sherlock Holmes

**10 Downing Street** – number 10; house of prime minister

**Tower of London** – historical castle; prison; crown jewels

**St Paul's Cathedral** – most known cathedral

### Other

Green capital = many large parks  
**Hyde Park** – Most famous park; “**Speakers' Corner**” → free speech

## 05. United States

### Geography

the Southern part of North America

Capital **Washington D.C.**

Between **Mexico** (in the south) and **Canada** (in the north)  
and **Russia** (by Alaska)

**Mountains:** The Appalachian Mountains (in the east),  
Rocky Mountains (in the west)

**Mount Mc Kinley** – the highest mountain (Alaska)

**Rivers:** The Missouri, the Mississippi, the Ohio, the Colorado (the Grand Canyon)

5 huge lakes on the border with Canada: **Michigan, Ontario, Superior, Erie and Huron**

**National parks:** Yellowstone, Yosemite, Sequoia

Niagara Falls: Two parts – American Falls (USA), Horseshoe Falls (Canada)



### Climate

The Pacific Coast – warm summers; mild winters

The Atlantic Coast – cold; warm, humid summers

Death Valley – the hottest place in the world; lowest point of the US

Alaska – -40 °C in winter

### Important cities

- New York
  - Central park
  - The Statue of liberty
  - Manhattan Island
  - The Empire state building
  - 9 / 11 / 2001
  - ...
- Washington
  - The White House
  - The Capitol
  - The Pentagon
  - The Washington Monument
  - The Lincoln Memorial
  - ...
- San Francisco
  - The Golden Gate bridge
  - Lombard Street
  - Cable cars
- Detroit
  - Ford; Chrysler
- Houston
  - NASA
- Las Vegas
  - Quick marriage
  - Gamblers paradise
- Los Angeles
  - Hollywood

### Government and Political system

Federal republic

50 states (48 + Hawaii + Alaska + Washington)

President = Barrack Obama

## **Government**

Each state has own government, laws, education system, taxes...

Federal government is responsible for matters concerning the whole country (foreign affairs, defence and finance)

Government is divided into three branches – Legislative (congress – make laws), executive (president) and judicial (supreme court – watch over congress and president)

Congress = Senate (100 members) House of Representatives (435 members)

## **People, languages**

About 275 million inhabitants

Main languages: American English (little bit different from British English); French; Spanish

## **Other**

### **Flag**

6 white stripes + 7 red stripes = 13 original states

50 white stars = 50 states

Since 1777

### **Anthem**

The Star-Spangled Banner

## 06. New York and other big cities

### Location

In the north of **east coast** in America; on the river **Hudson**

### Population

The most populous city of the USA

One of the largest cities in the world

About **8** million people

### History

The area was inhabited by Indians, which is resembled by the name of the oldest part – Manhattan Island. This island was bought from the Indians by the Dutch in 1625

The original name was New Amsterdam → In 1644 was renamed it New York

### Parts of New York

New York has five boroughs: *Manhattan, Brooklyn, Queens, the Bronx* and *Staten Island* (Richmond)

**Manhattan** – Its scenery is formed by skyscrapers (the Empire State Building). It is the centre of cultural life and the centre of trade. It is the most important.

**Brooklyn** – It is the most popular borough. It is the home of the Brooklyn Museum, the Brooklyn Academy of Music and the Botanic Garden.

**Queens** – It is the largest borough. Queens is known for its numerous and enormous cemeteries.

**The Bronx** – It is one of the biggest Afro-American communities. There is Yankee Stadium.

**Staten Island** – It is mostly family houses.

### Places of Interest

**The World Trade Centre** – was built in 1973 and has 110 floors and more than 100 000 people come and go here every day; 9/11

**Empire State Building** – 102 floors, TV tower and a restaurant at the top. There are also many others – e. g. **Chrysler Building, Pan Am Building and UN building**

**Harlem** – black quarter with many poor and unemployment people

**Time square** – centre of entertainment, department stores, restaurants, nightclubs and hotels.

**Broadway** – more than 19km long, 33 theatres (Metropolitan Opera, Carnegie Hall...), cinemas, restaurants, clubs and bars



# Washington D.C.

Washington, DC is **not a state or city**, nor is it part of any state. It is a unique „federal district, “created specifically to be the seat of government

## History

In 1790 was establishment by the Act of Congress as a site of the capital city

It was chosen by President Washington himself

Before this, capital city was for example in New York or Philadelphia

## Location

Washington lies on the Potomac River and consisted of 4 sections: **northeast, northwest, southeast** and **southwest**

There were differences between the north and the south and Washington had to be in the middle, also the two cities nearby were a source of goods shipping

## Population

623,000 people inhabit the capital city

Some of 360 000 people living in the metropolitan area and they are employed by the Federal Government

All of them work in the federally buildings, which occupy 40 % of the city's land

## Plan of the city

The layout of the city was initially a square measuring 10 miles (16 km) and is arranged in a grid.

Plan of the city designed by Pierre Charles L'Enfant (broad roads, National Mall, federal buildings).

## Government buildings

- **the White House:** the president's residence, exterior walls made of sandstone and painted white, universally recognised as the symbol of the US presidency; official rooms on the first floor, second and the third floor reserved for the presidential family
- **the Pentagon:** the largest single structure building in the world, headquarters of the Department of Defence
- **the Capitol:** centre of US Government; the **Library of Congress** (Thomas Jefferson building) added to the Capitol, it is the largest library in existence

## Other Sights

- **Washington monument:** a white marble obelisk
- **Jefferson Memorial:** an adaptation of the ancient Roman Pantheon with a statue of T. Jefferson holding the Declaration of Independence
- **Lincoln Memorial:** inspired by Greek architecture, a Doric temple reminiscent of the Parthenon in Athens with a statue of seated Lincoln
- **Smithsonian Institution:** one of the largest museum and research complexes in the world; comprises of 14 museums and the National Zoo; the symbol is the red sandstone Castle which functions as a visitor's information centre

- **Georgetown University:** the oldest and best reputed in Washington; 1789, the first Catholic institution of higher learning in the country
- **Mount Vernon:** 16 miles south of Washington; Washington's private mansion, he and his wife are buried in its grounds

## 07. Canada

2<sup>nd</sup> largest country in the world (after Russia)

Consist of 10 provinces and 3 territories

### Geography

in Northern part of North America

the Mackenzie Mount, Rocky Mountains

Highest mountain: **Mt. Logan 6050m**

5 great Lakes: **Erie, Huron, Michigan, Ontario, Superior**



### Climate

The majority of Canada has a **cold** or severely cold winter climate

Southerly areas are warm in summer

Area near **The Greats Lake** is warmer in winter (lakes stabilized temperature) → temperature rarely go under zero of Celsius

### Important cities

Capital is **Ottawa**

**Montreal** – largest

**Toronto** – the most populated city

**Vancouver** – XXI. Winter Olympic Games

**Edmonton** – centre of heavy industrial in Canada

### Political system

**Constitution monarchy** lead by **Queen (Elizabeth II)**

General Governor represents queen

Parliament democracy with federal layout

### Population

About 35 million people

One of the least dense populations in the world

### Languages, history

Official languages are **English, French**

French is rather used in province of Quebec

Canada was established in **1867** when received independence on United Kingdom

### Other

Borders with the USA longest border in the world (5500 km)

Maple leaf, Curling, Ice Hockey, NHL, Lacrosse

## 08. Australia, New Zealand

Official Name: **Commonwealth of Australia**

20 million inhabitants



### Geography

Between Indian and Pacific; Smallest continent, 6<sup>th</sup> largest country

One of the smallest density in the world

Centre = flat

Mountains – Uluru (Ayers Rock), Australian Alps (Mt. Kosciuszko – 2230m)

Deserts – Great Sandy Desert, Victoria Desert

River – Murray – only large river; Darling

Great Barrier Reef – biggest coral reef in the world

### Climate

Driest inhabited continent in the world

The Northern part – tropical climate

South-east, South West – moderate climate

Two thirds of the country are arid or semi-arid (vyprahlý)

### Political System

Part of the British Commonwealth → head: Queen Elizabeth II

Governor-General (prime minister)

Federation of **6 states** (*Queensland, New South Wales, Victoria, South Australia, Northern Australia, Tasmania*) and **2 territories** (*Northern territory, Capitol territory*)

### History

1770; James Cook mapped eastern coast → claim country for Britain → penal (trestanecký; vězení) colony → Aborigines (original inhabitants) died because new illnesses

### Cities

Canberra – Capital; between Sydney and Melbourne; build because of argument which city will be capital (S || M)

Sydney – largest, oldest city; Opera house, Harbour Bridge

Melbourne – art, entertainment

Darwin, Perth, Hobart, Brisbane, Adelaide...

### Other

#### Flag

In left Union Jack; stars in constellation of Southern Cross; seven pointed star (6 states, 1 represent territories)

# New Zealand

4,6 million inhabitants

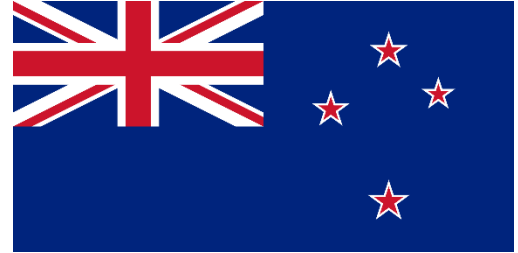
Official languages: English, Maori

## Geography

In the south Pacific

Two large islands (South, North)

Southern Alps – **Mount Cook** (3754 m)



## Climate

North Island – warm climate; volcanic activity

South Island – cooler; higher rainfall

## Political System

Head: Queen Elizabeth II

Democratic country; own parliament

## History

1642; Abel Tasman → 1769; James Cook

## Cities

Wellington – Capital

Auckland – Largest

Christchurch, Hamilton...

## Other

### Flag

In left Union Jack; 4 red (white borders) star in constellation of Crux

### Interest

First country to give the vote to women in **1893**

**Tuatara** – reptile; survived from the era of the dinosaurs

**The Weta** – largest, heaviest insect in the world

**The Kiwi** – symbol; cannot fly

**Haka** – Maori war dance

## 09. William Shakespeare

One of the most famous Britain's writers and important dramatics  
16<sup>th</sup> century in the period of the Renaissance

### Life

Was born on **23<sup>rd</sup> April, 1564** in **Stratford-upon-Avon**

When he was 18 he married **Ann Hathaway** → daughter Susan and the twins, Hamnet and Judith

Died on **23<sup>rd</sup> April, 1616**, after birthday celebration at the age of 52

### Classification of work

During a period of **20** years he wrote **37** plays

They can be divided into: tragedies, comedies, historical plays and poetry

### Poetry

In 1593 and 1594, when the theatres were closed because of plague, Shakespeare published two narrative poems on erotic themes, "Venus and Adonis" and "The Rape of Lucrece".

### Elizabethan drama

English Renaissance theatre, also known as early modern English theatre, or as Elizabethan theatre, refers to the theatre of England between 1562 and 1642. It is the style of the plays of William Shakespeare. Characteristic is the pursuit of the most accurate interpretation of the text of plays.

### Shakespeare's plays

#### Romeo and Juliet

This play is about the unhappy love and death of Romeo Montague and Juliet Capulet. They got married in secret because their families were fighting. Few days after wedding, Romeo unfortunately killed one of Juliet's cousins. Romeo was sent to exile. Juliet took a drug which made her fallen into such a deep sleep that people thought, that she was dead. Romeo found her body a thought that she is dead and poisoned himself.

#### Hamlet

Is based on the Danish legend. Hamlet's uncle called Claudius murdered Hamlet's father, the king of Denmark. Claudius married Hamlet's mother, Queen Gertrude, and then he appropriates the throne. The ghost of death king asks Hamlet for revenge. Hamlet pretends madness to find some proof of Claudius' guilt. Hamlet finds the truth about Claudius but Hamlet accidentally kills Polonius, Ophelia's father. Ophelia was in love with Hamlet. Ophelia's brother Laertes wants revenge for murder of his father. Claudius and Laertes become allies. After final fight everybody die.

## 10. Notable days in the Czech Republic

### 1<sup>st</sup> of January; New Year

This day celebrates the start of the New Year. It usually starts late, as people have been out celebrating late the night before. Many people prepare a big meal including pork for good luck and lentils for prosperity. Stay away from fish or poultry today. Those meals may force you luck to swim or fly away!

### Easter Sunday and Monday

Christian holiday celebrating the Resurrection of Jesus. The date is different every year, as it falls on the first Sunday after the spring full moon, so the **first full moon after March 21**. The symbols of Easter are much the same as the symbols for spring, lamb and eggs, representing new life.

### 1<sup>st</sup> of May; Labour Day; Workers Day

This day commemorate the efforts of labour unions to improve working conditions for all people. On May 1, 1886, labour unions organized a strike in Chicago to protest against miserable working conditions. At the time, most workers worked ten to twelve hours a day, six days a week. The strikers wanted an eight hours work day. The police attacked the strikers for no reason, killing two and wounding several others. This led to protests in many other places. Today, Labour Day is meant to honour all workers, by giving them a day off.

### 8<sup>th</sup> of May; Liberation Day

This day celebrates the end of World War II on May 8, 1945. On this day, the Germans agreed to an unconditional surrender and the country was liberated from Nazi occupation. It's a good time to remember the people who fought and died for our freedom.

### 5<sup>th</sup> of July; Cyril & Methodius Day

In 863 St. Cyril and St. Methodius brought Christianity to the Slavic people of central Europe. They also wrote down the standard Slavic language at the time, which was the forerunner of Czech, Slovak, Polish and Russian languages.

### 6<sup>th</sup> of July; Jan Hus Day

This day commemorates Jan Hus, a Catholic priest and the rector of Charles university. He was burned at the stake as heretic because of his efforts to stop corruption in the Catholic Church. Because of his beliefs, he became the conscience of the Czech people.

### 28<sup>th</sup> of September; St. Wenceslas Day

This day commemorate the anniversary of the death of Prince Wenceslas, son of Vratislav I, Duke of Bohemia. About 935 AD, the Prince was murdered by his brother. He soon became St. Wenceslas, patron saint of the Czech Nation, His fame has spread outside the country, due to his starring role in a popular Christmas carol, Good King Wenceslas.

**28<sup>th</sup> of October; Czechoslovak Independence Day**

In 1918 the independent Czechoslovak Republic was founded. After World War I, the Austro-Hungarian Empire disintegrated and an independent country was established. Czechoslovakia's first president became Tomáš Garrigue Masaryk.

**17<sup>th</sup> of November; Struggle for Freedom and Democracy Day**

This day honours the student demonstrations against the Nazis in 1939, as well as the protests against the Communists in 1989. In 1939 huge demonstration took place here against Nazi occupations. The Nazis suppressed the protest, and medical student, Jan Opletal, was shot and killed. On the day of his funeral, hundreds of people, mostly students demonstrated again, and the Germans violently suppressed the protests. The tensions culminated on November 17 when the Gestapo and SS units attacked student hostels arresting more than 1200 students and taking them to concentration camps. Adolf Hitler ordered the closing of colleges.

Fifty years later many students protested again and it's marked as the beginning of the "Velvet Revolution."



# 11. Notable days in Great Britain

## 14<sup>th</sup> of February; Valentine's Day

Historically the Feast of St. Valentine, nowadays this is a celebration of romance. Many people in the UK go out for dinner with their sweethearts, and give them a Valentine's card, chocolate or flowers. If you're single, you might receive an anonymous card from a 'secret admirer'!

## 25<sup>th</sup> – 28<sup>th</sup> of March; Easter Weekend

Easter is a Christian holiday celebrating the resurrection of Jesus Christ. It is always on a Sunday in March or April (called Easter Sunday), and the previous Friday (Good Friday) and following Monday (Easter Monday) are bank holidays. People celebrate Easter in different ways, but many give each other chocolate eggs and eat 'hot cross buns' (sweet buns with a cross design), while children decorate eggs or take part in Easter egg hunts.

## 13<sup>th</sup> of June; The Queen's Official Birthday (Elizabeth II. is ~90 y.o.)

Although the Queen's real birthday is on the 21<sup>st</sup> of April, it has been a tradition since 1748 to celebrate the king or queen's birthday in June. A military parade known as Trooping the Colour is held in London, attended by the Royal Family.

## 23<sup>rd</sup> – 24<sup>th</sup> of June; Midsummer Night

Known as the summer solstice, Midsummer represents the middle of summer and the longest day of the year. Midsummer is traditionally celebrated in England on June 24 with Midsummer Night celebrated on June 23. Steeped in tradition and ancient belief, Midsummer Night is a time for celebration and ritual surrounding the power of the sun, fairies and spirits.

### Midsummer Night in theatre:

A Midsummer Night's Dream is a Shakespeare stage play. The play concerns fairies, spirits and dreams on the night before Midsummer.

## 31<sup>st</sup> of October; Halloween

The modern way of celebrating Halloween is based on the Christian feast of All Hallows' Eve and the Celtic festival of Samhain. Children go trick-or-treating (knocking on neighbours' doors to ask for sweets) or carve pumpkins, while older students go to parties and Halloween events at pubs, clubs or Students' Unions. The important thing is to dress up as gruesomely as you dare!

## 5<sup>th</sup> of November; Guys Fawkes Night

Also known as Guy Fawkes Day, Bonfire Night and Firework Night. Historically, this marks the anniversary of Guy Fawkes' plot to blow up the House of Lords and assassinate King James I in 1605 – the failed 'gunpowder plot' is remembered in the children's rhyme 'Remember, remember the 5<sup>th</sup> of November; gunpowder, treason and plot'. Today, it is commemorated with spectacular displays of fireworks.

**11<sup>th</sup> of November; Remembrance Day**

Is a memorial day to honour members of the armed forces. The aim is to remember those who lost their lives in battle, so many peace campaigners also support the event. The Royal British Legion charity sells paper poppy flowers to raise funds for veterans and their families (the poppy is a symbol of Remembrance Day), and it is customary to observe a two-minute silence at 11am.

## 12. Jihlava

### Location

Capital of the **Vysočina** Region

Situated on Jihlava River on the historical border between Moravia and Bohemia

The oldest mining town in the Czech Republic

### Population

About 50 000 people

Largest settlement is “**Březinova**”, also known as “**Březinky**”

### Transport

Multiple ways how to transport in Jihlava

Buses, cars, Trolleybuses → replaced outdated tram service and they are frequently used

Airport is located in area of “Henčov”

### Culture and sports

“Horácké divadlo”, swimming areal “**Vodní Ráj**” or **Sokol**, **CineMax** and summer cinema on **Heulos**

Ice hockey club is the most successful club in Czech Republic

### Shopping

The biggest shop centre is “**City Park**” → about 90 shops

Centre of town is full of small shops and restaurants

Supermarkets (Albert, Kaufland, Billa...)

Cars dealers like Mercedes, Audi...

### History

The first mention of the Jihlava settlement comes from **1233**

In 19<sup>th</sup> century Jihlava was second biggest producer of cloth

In 1969 “**Evžen Plocek**” burned himself as remonstrance due occupation of army forces

Jihlava became the capital of Vysočina in 2000

### Places of interest

Jewish cemetery; gothic churches of St. Jacob; baroque church of St. Ignatius of Loyola; museums...

## 13. My school

### Type of school

- Secondary Engineering, Technical and Automotive School
- It consists of 3 joined schools: Engineering, Technical, Automotive
- It has been joined since September 2014

### Location

- The building of our Engineering school is situated on Street Legionářů 3
- The other buildings are in close range

### Size

- Big school with over than 1200 students (650 engineering students)

### Fields of study

- Information Technology
  - Pure IT
  - MAW – Multimedia and Webdesign
- Engineering
- Electronics

### School year

- 1<sup>st</sup> September → June; 10 months + main summer holiday
- Autumn holidays – October
- Christmas(Winter) holidays – December
- Spring holidays – February
- Easter – March

### School leaving exam

- In 4<sup>th</sup> grade
- Consist of 3 parts:
  - Practical Maturita – End of April
  - State writing part
  - Oral part of Maturita – May / June

# 14. School System in the Czech Republic

## Kindergarten

In the Czech Republic is compulsory education, but kindergarten isn't mandatory. Children are picked to kindergarten, when they are 3 years old. In kindergarten they learn colours, numbers and geometric shapes. Children play games with friends in the kindergarten.

## Basic schools

Basic school has two levels. Kids go to first level while they are 6 years old. Children have one teacher on the first level as opposed to the lower second level, where they have a lots of teachers. From the first level kids can go to lower second level or to the secondary grammar school. Children have one teacher for one subject in the second stage and higher education levels too. Sometimes they have one teacher for 2 or 3 subjects. Basic school is compulsory education unlike other education levels in the CZ. Kids go out from basic school, when they are 15 years old.

## Secondary schools

Next education level are secondary schools, which are a lot of kinds. They are secondary grammar school, conservatories, secondary technical schools and secondary vocational schools.

## Secondary grammar schools

Secondary grammar schools are for 4, 6 or 8 years learning. When child goes to secondary grammar school in the 11 years, he will learn 8 years. When child goes to secondary grammar school in the 13 years, he will learn 6 years. When child goes to secondary grammar school from basic school in the 15 years, he will learn 4 years. Secondary grammar school is general school. Children go out from secondary grammar school in 19 years, like other secondary schools. Secondary grammar school end with maturita exam.

## Conservatories

Conservatories are for 6 years learn and children go out from conservatories in the 21 years old.

## Secondary technical schools and secondary vocational schools

Secondary technical schools and secondary vocational schools have practice and people can from them go to follow up courses, when people are 19 years old. STS and SVS are finished with final exam, final exam and apprenticeship certificate or maturita exam. Follow up courses are finished with maturita exam.

## Higher education and post-secondary technical schools

Next education level are higher education or post-secondary technical schools. Post-secondary schools are for 2; 2,5; 3 and 3,5 years. Higher education has two kind of schools: masters studies and bachelor studies. People are 4 to 6 years in the masters studies and they are 3 to 4 years in the bachelor studies. From bachelor studies people can go to masters studies, which are 2 years long. All higher education end with final state exam.

## Doctoral studies

People can go from masters studies to doctoral studies, which are finished with doctoral state exam.

## 15. School System in Great Britain

### Pre-education (3 - 4)

Children younger than 5 years go to the **nursery** schools or nursery classes. Children in these schools rather play than learn.

### Primary schools (5 - 11)

From 5 to 11 years is the first compulsory school attendance. Primary school is divided into infant school – for children from 5 to 7 years and junior schools – for children from 7 to 11. Students in primary schools are called **pupils**.

### Secondary school (12 - 16)

Most secondary schools are known as **Comprehensives**, but in some towns there are Grammar Schools, where admission is based on a successful selection test. Children in the UK have a lot of homework and write long essays for History and English Literature.

When children are 16, they take **GCSE (General Certificate of Secondary Education)** exams. After these exams they can leave school or go to college. If they want to go to college, they have to pass GCSE exam. Which college they go to depends on their GCSE exam result.

### College / 6<sup>th</sup> form College (16 - 18)

Children study for A-Levels (Advanced Level), these are the same as Maturita. Most students choose up to 5 subjects, but average is 3. They will study only these subjects, but the workload is big. Children can take a different specialist Diploma, such as Art, Design, Photography, Engineering. Which is equal to A-Level, but specialised. Some schools are free but some schools are charged.

### University (18+)

Places at University depend on A-Level results. There is usually no entrance exam. A Bachelor degree is 3 years. An additional year will give you a Master degree. People study longer for a PhD or Doctorate. Unless you are a Doctor, titles are not used by people.

### Independent / Private schools

Mostly this term is used for primary and secondary educational level. It is almost never used of universities. Some of the older, expensive and more exclusive schools for the 13 – 18 years old students in England and Wales are known as Public schools.

# 16. Computer Hardware

## Computer types

### Personal computers

Mainly single user computer system having moderately powerful microprocessor

### Work Station

Technically same as PC, but more powerful

### Mini Computer

### Main Frame

### Super Computer

Extremely fast computer which can execute hundreds of millions instructions per seconds

## Peripherals

### Input devices

Interact with computer (mouse, keyboard...); send data

### Output devices

Provide output to the user from computer (monitors, printers...)

## Processors

Central processor unit (CPU)

Logical circuit

Respond to and processes basic instruction that drive a computer

Single or Multiple cores (threads)

Speed is determined by clock rate / frequency

## Memories

### ROM

Read Only Memory

Only read but cannot write on it

Information is stored permanently in such memories during manufacture and stores required instructions to start computer

### RAM

Read/Write memory

Stores until machine is working

As soon as machine is switched off, data is erased

## History

The first computer with RAM was introduced in 1955 → revolutionary computer that was first digital computer with magnetic core RAM and real-time graphics → called Whirlwind machine

The first microprocessor intel 4004 was introduced in 1971 and it was first processor with a 4-bit register, clock speed 740kHz, smaller than a human thumbnail

# 17. Internet, networks

## Types

Basic types of networks divided by area (PAN, LAN, WAN, GAN)

## Basic Terms

Network is created from nodes (PC, Switch, Router...)

Structure of connection these devices is called topology (Bus, Star, Ring...)

Connection between devices is made by medium. Medium determines the speed and stability of data transport (Fibre, Coaxial, Twisted pair)

## History

The internet was created for sharing information on research and development in scientific and militia

The creators were M.I.T. and ARPA in 1962

In 1965 scientist from M.I.T. developed a way of sending information from one computer to another that he called "packet switching"

In 1969, **ARPAnet** delivered its first message "node-t-node" between computer at UCLA and Stanford

In few years, many of American university add into this network

In 1970 was solved the problem with integration news computer networks into a single worldwide network, "**internet**"

## Services

### World Wide Web

For sharing web pages, using HTTP and HTTPS protocols

### Communication, Email

Email is using SMTP and POP3 protocols; Facebook; Teamspeak; Skype

### Data transfer

## Dangers

Viruses; private disruption; scams; trolls; stalkers; pornography

## Other

Computer Crime...



# 18. Car, car culture

## Advantages of Having a Car

- Mobility
- Lots of roads
- Comfort
- Fast

## Disadvantages of Having a Car

- Quite expensive
- Care of car
- Careful while driving
- Don't underestimate skills / status

## My Experience with Driving and Your Opinion

- What age can you start driving a car in the Czechia/ the USA?
  - Czech – 18
  - USA – 18
  - GB – 17

## History

The first cars were developed in the end of 18<sup>th</sup> century (steam engine). The very first combustion (spalovací) engine was made in 1886.

History of nowadays cars has been written since 1885, it is connected with the name **Karl Benz**. Another famous car makers were: **Wilhelm Maybach**, **Rudolf Diesel** (known as father of diesel engine) and **Henry Ford** with his model T, which started a mass production of cars in **1908**

## Description

### Outside

Roof  
Side / outside mirror  
Door  
Wheel; tyre  
Exhaust – výfuk  
License plate  
Rear window  
Gas Tank  
Trunk  
Rear Bumper  
Door Handle  
Headlight  
Hood – Kapota

Windshield – přední sklo

### Inside

Tachometer  
Steering Wheel  
Horn  
Pedals – Clutch, Break, Accelerator  
Handbrake  
Gear Shift