

## Geology CR - Tasks

### **1. Practice reading with proper intonation - waving at underlined words.**

Although the Czech Republic only covers a small part of the Eurasian continent (78 790 km<sup>2</sup>), it is very rich in geological resources, | and evidence suggests | that the country's land mass has been developing for nearly 2.5 billion years. Hence, | when you look at a geological map of the area, | it is possible to see a rich mosaic of colors.

### **2. Ask about the underlined part of the sentence.**

In its geological history, the land area of the CR was covered several times by shallow and sometimes even deep seas.

The area was also affected by volcanic activity, old folding, tropical and even glacial climates.

The border with Slovakia is located along the young Alpino-Carpatian mountain belt.

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Geological events moved many rocks deeper into the earth's crust which was then metamorphosed by high pressure and/or temperature. **What .....** **metamorphosis?**

During geological processes which followed, some of these rocks were shifted upward, near the earth's surface,

and were partially uncovered by surface geological activities.

### **3. Intonation again - When you give the list of examples, change the tone (the pitch) by lowering your voice, unless you want to emphasize the items.**

For these reasons, it is possible to find all well-known types of rocks which settle on the bottom of seas, lakes or rivers (*sandstone, conglomerate, slate, limestone, coal, sand, gravel etc.*), metamorphic rocks (*phyllite, gneiss*), deep igneous rock (*light granite and dark gabbro*), and volcanic rocks (*black basalts, light phonolite and andesite*).

### **4. Learn the following paragraph from memory to inform your foreign guest.**

It's also possible to find many fossils in the sea and lake sediments.

A large number of these fossils were originally discovered in the CR, especially from a fossil-rich area in the SW vicinity of Prague known as the Barrandian, named after the famous paleontologist Joachim Barrande (1799-1877).

The most famous fossils which Barrande discovered were the trilobites.

You can find beautiful collections of minerals and fossils, including Barrande's collection, in the National Museum on Wenceslas Square in the center of Prague.

**5. Use the words from the clue to fill the missing words in the text.**

**abundance**      **construction**      **exhausted**      **generation**      **medieval**  
**of (twice)**      **ores**      **raw (twice)**      **substantial**      **varied**

Because ..... the Czech Republic's ..... geological composition, an ..... of mineral deposits exist. At the present time, deposits of coal are used as ..... materials for the ..... of energy, and deposits of granites, basalts, sandstones, limestones, sands, clays and gravels as ..... material for ..... and the country's well-known ceramic and glass industries.

The poly metallic (copper, lead, tin, zinc) and precious metal (gold, silver) deposits were mostly ..... during the country's long mining history and at present have no ..... economic value. Graphite deposits are ..... local importance. Extraordinarily rich deposits of silver greatly increased the importance and development of the Czech state in ..... times. The exploitation of rich uranium ..... in the recent past caused great damage to the environment.

**6. Find the synonyms (words with similar meaning) in the text below to fit the following meanings:**

**Precious stones =**

**Diversity =**

Interesting part of geology are gemstones. The best known types of Czech jewelry are moldavites, garnets (pyropes) and a variety of quartzes (agate, jasper), which were used to decorate some of the country's historical landmarks, such as Prague's St. Vitus cathedral and the castle at Karlstejn.

**7. Underline the key words and paraphrase the last paragraph to inform your foreign guest.**

The morphology of the earth's surface is determined by the geological composition, rock quality and rock resistance. In the small area that in the present days CR covers, it is possible to find, with the exception of big mountains and deserts, most types of landscapes.

Some impressive sights are the 25 M year old preserved volcanic landscape in NW Bohemia (the dark blue color on the map), with its occurrences of so-called "geological organs", extensive rock cities (some of these rocks are up to 100 M years old) in the NE part of Bohemia, with rock-towers, bridges, canyons, table mountains and areas of karst with caves which are richly decorated with stalactites (especially in the Moravian karst area).

Source: most probably Czech Geological Survey

Adapted and provided with tasks by Věra Hranáčová, CJV RMU 2011