**Conversational Topic**

**The Structure of the Earth and Its General Features**

*Earth Structure and Composition*

The Earth’s structure consists of three parts, the ***crust***, ***mantle*** and ***core***. The crust is on the outside, while the mantle is in the middle and the core is the ***innermost*** section. The core is divided into two parts, the ***inner*** core and the ***outer*** core.

The structure of the Earth is ***similar to*** that of an egg. The Earth’s crust is like the ***shell*** of an egg, its mantle is like egg white and the core is like ***yolk***.

*What is Earth made of?*

*The Crust*

The crust is found beneath ***mountain ranges*** and can be as thick as 40 kilometres. However, the Earth’s crust under oceans is only about 8 kilometres thick.

*The Mantle*

Parts of the Earth’s mantle are made up of hot rock, so they melted. This ***molten rock*** ***seeps through*** cracks in the crust and ***pours out of*** volcanoes. This is called lava. When the lava cools down, it turns into stone.

*The Core*

Scientists believe that the Earth’s core is mostly made up of ***iron***. They feel that the inner core is ***solid*** while the outer core is in a ***liquid state***.

*How are Mountains Formed?*

The crust and the rocky ***upper layer*** of the mantle are together called the lithosphere. The lithosphere consists of huge tectonic ***plates*** that move very slowly. These plates may ***collide***, ***pull apart*** or even ***grind against each other***. When these plates collide, one slips beneath the other and this pushes up mountains and forms trenches in oceans.

*Interesting Facts about Earth*

Scientists understand the composition of the Earth’s interior better by studying seismic waves. Seismic waves are vibrations that spread out from the epicentre of earthquakes. Their strength is ***measured*** and ***recorded*** when they ***reach*** the Earth’s surface. These waves have also revealed that the lithosphere (which consists of plates that move as a result of ***convection currents*** in the mantle) is about 100 kilometres thick. The mantle is 2,900 kilometres thick. The core’s temperature ranges from 4,000 to 6,000 degrees Celsius.

**Активная лексика (в порядке встречаемости в тексте)**

**Crust** – кора

**mantle** – мантия

**core** – ядро

**innermost** – самый дальний, самый глубокий

**inner** – внутренний

**outer** – внешний

**similar to** – похожий на

**shell** – раковина

**yolk** – желток

**mountain ranges** – горные цепи, горные хребты

**molten rock** – расплавленная порода

**seeps through** – просачивается через

**pours out of** – выливается из

**iron** – железо

**solid** – твердый

**liquid** – жидкий

**state** – состояние

**upper** – верхний

**layer** – слой

**plate** – плита

**collide** – врезаться, сталкиваться

**pull apart** – разделяться, расходиться

**grind against each other** – тереться друг о друга

**measure** – измерять

**record** – записывать, регистрировать

**reach** – достигать

**convection current** – подкорковое течение

**Exercises**

**Ex. 1 Make sure that you know the meaning of the following words.**

Solid, measure, collide, tectonic plate, iron, crust, molten rock, mountain ranges, core, mantle.

**Ex. 2 Finish the sentences.**

1. The Earth consists of 3 parts: … .

2. The crust can be as thick as … .

3. The mantle is made up of … .

4. The core has two parts: … .

5. The lithosphere is … .

**Ex. 3 Say if the statements are true or false.**

1. The Earth’s core is mainly made of gold.

2. Tectonic plates are always on the move.

3. Mountains form as a result of tectonic activity.

4. The lithosphere is about 50 kilometres thick.

5. Tectonic plates move as a result of convection currents in the mantle.

**Ex. 4 Translate into English.**

Расплавленная порода, конвекционный поток, сейсмические волны, земная кора, сталкиваться друг с другом, горные хребты, жидкое состояние, тектоническая плита, мантия.

**Ex. 5 Answer the following questions.**

1. What is the structure of the Earth?

2. What are the two parts of the core?

3. Why is the structure of the Earth similar to the egg?

4. What is the composition of the mantle?

5. How are mountains formed?

6. How thick is the mantle?

7. What is the temperature of the core?