

1

**Question:**  
*How old is the Earth?*

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**Answer:** *4.54 billion years!*

2

**Question:**

***What is the Earth's interior made of?***

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***Answer:*** *The Earth is made up of different layers of metals and solid or liquid rocks (like magma).*

*The Earth is structured like an onion, with several layers from the centre of the planet to the outer edge of the core, then through the mantle and the crust on which we live.*

3

**Question:**

***What is the temperature  
at the centre of the Earth?  
40°C? 100°C? 1,000°C? 6,000°C?***

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***Answer: About 6,000°C.***

*At the heart of the Earth's core, 6,370 km below our feet!  
This is slightly less than the distance from Paris to Chicago.*

4

**Question:**

***Do you know what can wear away  
the rocks?***

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***Answer: The rain, wind, rivers, sun, freezing, etc.***

*Rocks weather and erode over time.*

5



***You bought a new phone when your old one was still working: you are depleting the planet's resources, so you miss a turn.***

**7**

**Question:**

***Where does tap water come from?  
(2 possible answers)***

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**Answers:**

- ***It is estimated that almost 2/3 of drinking water comes from groundwater.***
  - ***Rivers and lakes.***

8

**Question:**

***Are all mines underground?***

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***Answer: No.***

*Many mines are open-pit mines. There are also quarries where rocks and industrial minerals are mined, which can be either underground or open-pit.*

9

**Question:**

***Where does sand come from?***

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***Answer: Sand is the product of rock erosion.***

*It is transported by rivers and can be deposited on the continents (river beds) or on the coastline and near the coast. This is called detrital rock.*

10

**Question:**

***What are Lego bricks made of?***

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***Answer: Plastic.***

*Plastic is a product derived from oil. Recently, plant-based plastics are being used to make some Lego bricks.*

11

**Question:**

***Is gold only used for jewellery?***

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***Answer: No.***

*As gold is a very good conductor, it is also used in electronics.*

12

**Question:**

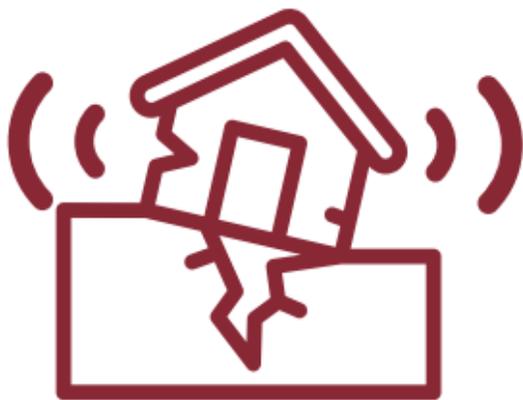
***Can a metal such as iron be recycled?***

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***Answer: Yes.***

*Some metals are efficiently recycled in France: copper, aluminium, iron.  
Silica (glass) is also widely recycled in France.*

13



***You suffer an earthquake,  
move back 5 squares.***

14

**Question:**

*What can come out of a volcano  
when it erupts?*

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*Answer: Lava and gas.*

15



*You have found a gold nugget,  
play again.*

16

**Question:**

***What does lava become  
when it cools down?***

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***Answer: Rock.***

*Once the lava has cooled, it turns into rock.  
The most common example is basalt, a very dark volcanic rock.*

17

**Question:**

***How old is the oldest rock on Earth?  
1 million years? 100 million years?  
4 billion years? 10 billion years?***

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***Answer: About 4.28 billion years.***

*Gneiss found in the Acasta region in Canada.*

*The oldest mineral is a 4.4-billion-year-old zircon found at Jack Hills in Australia.*

18

**Question:**

***How are mountains born?***

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***Answer:*** Mountains are created by the collision of tectonic plates.

*These gigantic panels of rock form an actual puzzle on the surface of the globe. Today there are 53 of them (7 large plates covering 95% of the earth's surface and 46 smaller ones).*

19

**Question:**

***What do dinosaurs and the Château de Chambord have in common?***

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***Answer: Their age! The stone used to build the Château de Chambord dates back to the time of the dinosaurs.***

*Yes, the stone in the château, called tufa, dates from the Turonian period, about 90 million years ago, when dinosaurs roamed the Earth. Although the château dates from 1519, the material used was formed much earlier!*

20

**Question:**

***Is a mountain with a pointed top, like Mont Blanc, young or old?***

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***Answer: Young!***

*Mont Blanc (4,810 m) is a young mountain formed at the same time as the Alps (between 30 and 5 million years ago). Note: the rock that makes up its summit (granite) is much older (about 300 million years).*

21

**Question:**

***Where do the colours in paintings come from?***

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***Answer:*** Among other things, pigments of mineral origin.

*Other pigments of animal or vegetable origin are also used.*

22

**Question:**  
***What is a fossil?***

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***Answer:*** *It is a remnant, trace or cast of an ancient living being or its past activity.*

*Fossils of ancient living beings (plants, fish, dinosaurs, mammals, molluscs, etc.) are traces of the ancient biodiversity that existed during geological time. The oldest fossil ever found is in Western Australia (Strelley Pool, Pilbara). It is thought to be about 3.4 billion years old and is a concretion formed by bacteria (stromatolites).*

23

**Question:**

***What do a diamond and a pencil have in common?***

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***Answer: Carbon (C).***

*They are formed from the same chemical element but they do not have the same crystal structure.*

25

**Question:**

***Which metal is essential for a nuclear power plant?***

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***Answer: Uranium (U).***

*It is extracted from the subsurface in open-pit or underground mines.*

26

**Question:**

***Where does cooking salt come from?  
(2 possible answers)***

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**Answers:**

- **Salt pans**
- **Salt mines.**

*Cooking salt is a mineral, sodium chloride (NaCl).*

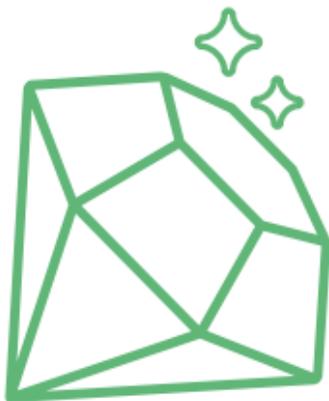
**Question:**  
***What is an earthquake?***

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***Answer: The clashing of tectonic plates.***

*The surface of the earth is made up of several large pieces, called tectonic plates. They fit together like pieces of a jigsaw puzzle and form the surface of the Earth. These plates move a few centimetres per year. The movement of the plates in relation to each other creates local friction that forces them to deform. They thus accumulate energy until they break. This is how earthquakes occur.*

28



***You have found a diamond,  
move forward 5 spaces.***

29

**Question:**

***What is the purpose of the geologist's work?***

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**Answers:**

- Finding mineral resources*
- Finding water*
- Investigating subsurface risks*
- Studying the pyramids*

30

**Question:**

***Which food contains a lot of sulphur?  
Egg, salt or carrots?***

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**Answer: Eggs!**

*They are one of the best foods for providing the sulphur the body needs.  
Sulphur is an excellent nutrient, as are potassium and magnesium.  
Hence the rotten egg smell.*

31

**Question:**

***What is an Olympic gold medal made of?***

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***Answer: Silver and gold.***

- *Gold of course, but very little! In fact, the medal is mostly made of silver and the gold is only used for the plating. For a medal weighing about 530 grams, the gold represents only 6 grams or 1%!*
- *A silver medal, on the other hand, is more than 92% silver. A bronze medal is made of copper with some tin and zinc.*

32

**Question:**

***Is amber fossilised resin or glass?***

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***Answer: Fossilised resin.***

*Resinous trees such as pines can secrete resin. This resin can undergo a phenomenon called amberisation which will fossilise it in the form of amber. Fossils of insects that have stuck to the resin are also sometimes found in amber.*

33

**Question:**

***What are drinks cans made of?***

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***Answer: Aluminium.***

34

**Question:**

***What is the difference between  
a sapphire and a ruby?***

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***Answer: Its colour!***

*Otherwise, none. Both are the same mineral, corundum.  
Blue for sapphire and red for ruby.*

35



***You have landed on lava,  
move back 5 spaces.***

**Question:**

***Can metal fall from the sky?***

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***Answer: Yes, by Jupiter!***

*Meteorites. Among the many types of meteorites, iron meteorites (or siderites) are mainly composed of iron and nickel. Other examples include lithosiderites, which contain iron, nickel and minerals such as olivine. The most beautiful are the 'pallasites', in which green olivine crystals are bonded in an iron-nickel alloy.*