Earthquake Comprehension

6 Italian scientists were convicted of manslaughter and sent to prison for failing to predict the 2009 L'Aquila earthquake in which 309 people died. They appealed their cases successfully and were not eventually sent to prison.

You could try to find out:

- How earthquakes are measured.
- How easy they are to predict.
- About other cases where prison sentences have been handed out in unusual circumstances.
- How the appeals process works.

Read the passage below carefully and then answer the questions underneath.

The Earth's crust and the top of the mantle have about 20 tectonic plates, which are like puzzle pieces covering the Earth. These plates are always moving and bumping into each other. We call the edges of the plates "plate boundaries", which are made up of faults. These faults are where most of the world's earthquakes occur. As the plates move, the edges get stuck because they are not smooth, but the rest of the plate keeps moving. When the force is too much, it breaks free and that causes an earthquake. A seismograph is a special instrument that records earthquakes. The base of the seismograph is on the ground, and over that a weight hangs from a string. When there is an earthquake the base shakes with the ground but the weight does not, and it draws a line to show how much the ground shook. Scientists use the seismograms to measure how big each earthquake is.

1. How many tectonic plates are there?

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2. What are plate boundaries?

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3. Where do earthquakes take place?

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4. Describe what causes an earthquake.

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5. What is a seismograph?

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6. How does a seismograph work?

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