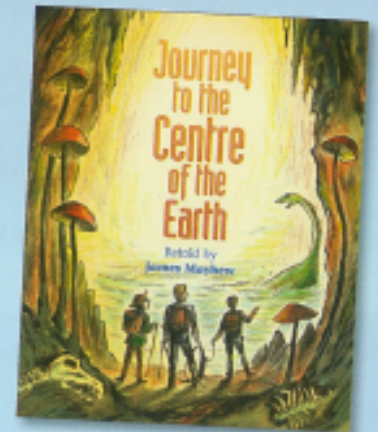


INSIDE OUR PLANET



John Townsend

Journey to the Centre of the Earth



A French writer called Jules Verne had a wild idea long ago in the 1860s. He made up a story about going down to the centre of our planet. It was a great adventure, and readers wondered if it would really be possible to explore so deep underground.

The plot: A professor, his nephew and a guide go down a volcano crater in Iceland. As they get deeper into the Earth, they meet living creatures from long ago. As the layers of rocks get older and deeper, dinosaurs come out to attack ...



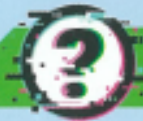
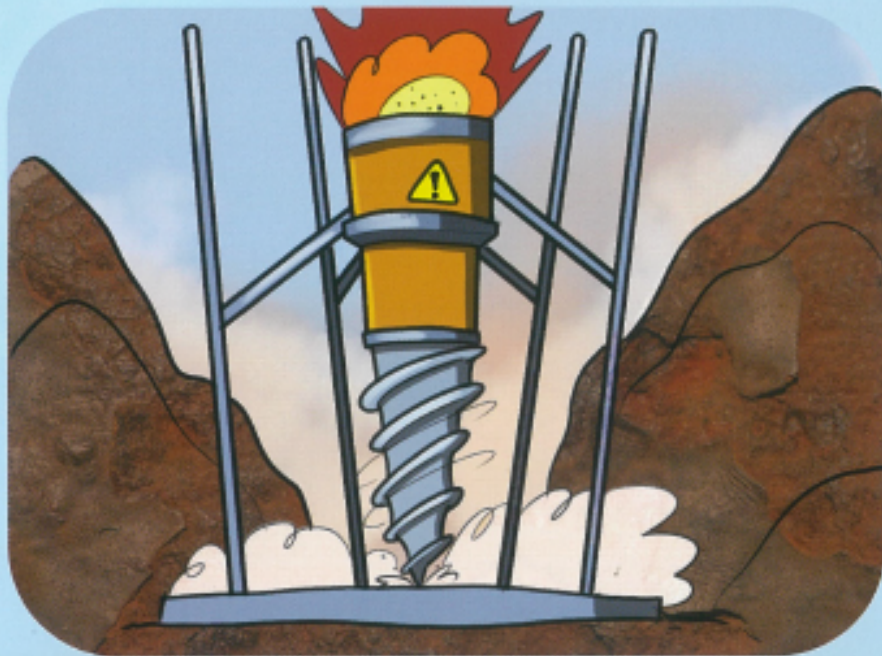
Bonjour! I am Jules Verne. I wrote my book about 160 years ago. We didn't know much about the inside of our planet then. What do you know in the 21st century?



Science today

Scientists who study rocks are called geologists. They have discovered a lot about the Earth's crust since the time of Jules Verne. They can also use new technology to find out what is going on deep inside our planet. We now know we can't really travel to the centre of the Earth. Not yet.

This rocket drill is going to take us down into the core of our planet. Hold on tight!

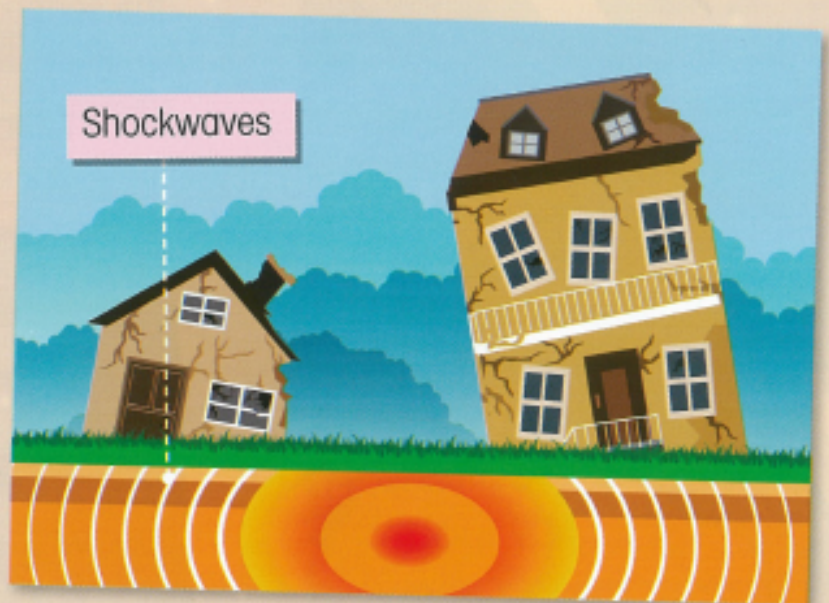
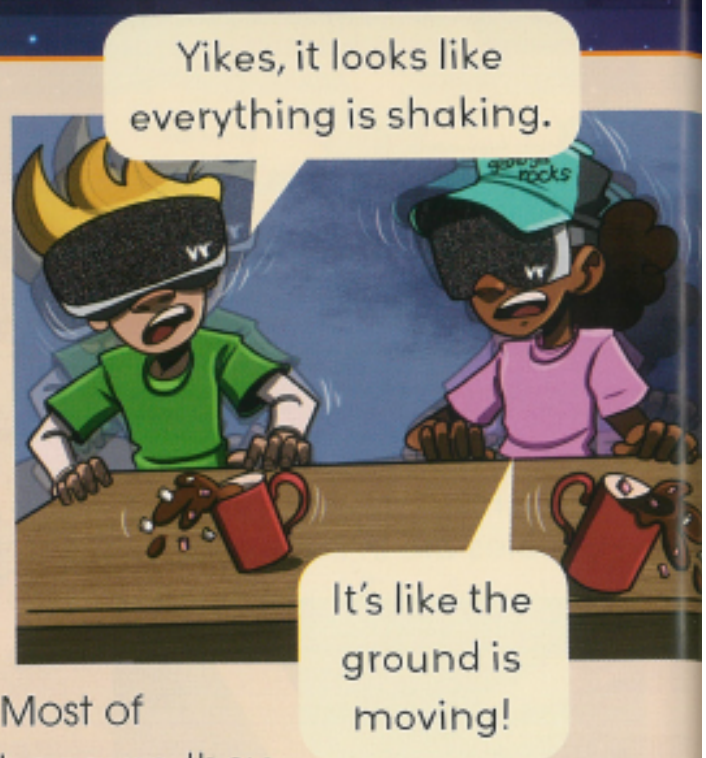


DID YOU KNOW?

Scientists have already drilled a few kilometres into the Earth's crust to find out what is down there. So far, they haven't been able to drill below the crust. Some hope that will be possible in the future.

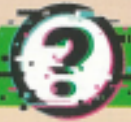
Earthquakes

In an earthquake, huge areas of rock move beneath the surface of the Earth. Like ripples across a pond, shockwaves spread through rock layers and make the ground shake. Earthquakes happen all the time around the world. Maybe thousands of tremors shake the Earth every day. Most of them are too small for us to notice because they happen far below the surface or deep in the sea.



An earthquake begins inside the Earth and sends shockwaves up through the crust. They reach the surface and spread out across the ground.






The earthquake scale



DID YOU KNOW?



Scientists use a scale from 1 to 10 to measure the strength of earthquakes. Any quakes under 3 are usually too gentle for us to feel. Science centres around the world are always measuring shockwaves coming from inside the Earth. These tell us a lot about what is happening deep in our planet and can show the point where a quake starts. The science can't yet tell us where or when the next quake will strike.

Strength	Effects	
4.0	May rumble houses, just as if a large truck is passing.	
5.0	Very slight damage to buildings.	
6.0	Things fall off shelves. Walls may crack and windows break. People near the quake's centre will feel the tremors.	
7.0	Weaker buildings may fall and bridges are likely to crack.	
8.0	Many buildings and bridges fall down. Large cracks open up in the ground.	
9.0+	Whole cities are flattened. Massive damage over thousands of kilometres.	