

Water Quiz Questions

Round 1: to get you thinking

PROGRESSIO

1. How much water on Earth is fresh to the nearest 1%?	3%. In fact, only 2.63% of the Earth's water is fresh, and much of that 2.63% is locked in snow and ice. Despite this, there's no global water scarcity, instead, there are areas of the world which are water scarce.
2. Is there more fresh water under the ground or above the ground?	There's much more fresh water stored under the ground in aquifers than on the earth's surface.
3. The World Health Organisation says that everyone should have access to 20 litres of fresh water a day within 1km of where they live, but how many people don't have this? Is it 2% of the world's people, 8% of the world's people, or 15% of the world's people?	It's 15%, or 1.1 billion who don't have this. That's one in 7 globally.
4. Lots of the water for everyday use like cooking, cleaning and small-scale agriculture has to be physically carried by people, especially women and children. How many days a year of education are lost to carrying water and water-related illness?	443 million school days.
5. What proportion of the world's people lack access to adequate sanitation facilities? Is it 15% of the world's people, 25% of the world's people, or 37% of the world's people?	It's 37% of the world's people, or 2.6 billion without adequate sanitation facilities, a figure that's due to nearly double to 5 billion by 2030.
6. How many lives are lost to unsafe or inadequate water every year? Is it as many as live in Birmingham (1 million), Leeds (700,000) or Birmingham and Leeds together?	It's Birmingham and Leeds together. Unsafe or inadequate water claims 1.7 million deaths annually; it's also more than all forms of violence including war.
7. How much of the water existing today existed when the dinosaurs roamed the Earth?	The same amount of water (and the very same water!) that existed on the Earth millions of years ago is still present today! The Earth's hydrological cycle is a 'closed system' meaning nothing is added or taken away.
8. Since 1950 the number of people in the world has doubled but by how much has water use increased?	Six times – it's a result of changing consumption and production, often caused by the rise of the middle class in newly-developed countries.
9. People use very different amounts of water for eating, drinking and washing, as well as 'locked in' water – the water that is used to produce the things we buy. How much more water can someone in the developed world consume in these ways than someone in the developing world? 20 times? 50 times? 70 times?	70 times: in arid parts of the world individuals consume 10 litres of water per day (about a washing up bowl full of water), whilst the average US citizen consumes over 700 litres per day.
10. Water scarcity, lack of access to water, is a big problem for the 80% of poor people who rely on small-scale farming (using less than two football pitches' worth of land) for their food and livelihoods. That's important since small-scale farming feeds how many of the world's population? A fifth, a quarter or a third?	A third.

Round 2: with some fun questions

11. How many people live in areas facing water scarcity to the nearest 100 million? (100 million is 0.1 billion)	2.8 billion people live in areas facing water scarcity: 1.2 billion due to physical scarcity (there's not enough), and 1.6 billion due to economic scarcity (there's enough but it's not getting to the people).
12. There are lots of reasons for areas becoming water scarce. How many reasons can you name? A point for each general area.	• population growth • changes in consumption and production • food production since agriculture uses 70% of freshwater withdrawals (and up to 95% in some developing countries), and this is likely to grow by 11% by 2050 • land and water 'grabs' • energy generation (for example through biofuels and hydro power) • industry which requires (and often pollutes) high quality water or impacts ecosystems through deforestation • infrastructure which is aging or inadequate • pollution and ecosystem degradation • management and governance which is unsustainable and inequitable • climate change
13. The largest lake by volume is Lake Baikal. But where on Earth is it?	It's in Russia. There's 5,700 cubic miles of water. The second biggest is Lake Tanganyika in Africa and the third biggest is Lake Superior in North America.
14. What's the pH of pure water?	It's pH7. Pure water, solely hydrogen and oxygen atoms, has a neutral pH of 7, which is neither acidic nor alkali.
15. How many tonnes of water does the sun evaporate each day? A hundred million, a hundred billion or a trillion?	The sun evaporates a trillion tonnes of water each day.
16. Where in the world is the hottest sea water and (for a bonus point) how hot is it to the nearest 5°C?	The Persian Gulf. It's 35°C!
17. Which animal can last the longest without water, a rat or a camel?	A rat can last longer without water than a camel.
18. How many baths full of water do you need to produce a single cup of coffee?	1 bath full of water, that's 140 litres!
19. How many baths full of water do you need to produce one hamburger?	17 baths full of water!
20. What is the lowest temperature water will boil at on the Earth's surface? (to the nearest 5 degrees)	68°C (so take 70 degrees) on the top of Mount Everest. Water boils at a lower temperature when the air pressure is lower.