

Water

Chapter 16: Water · Topic 1

Key Concept

Water's chemical formula is H_2O , meaning it consists of two hydrogen atoms bonded to one oxygen atom.

Water has a high specific heat capacity, meaning it takes a lot of energy to change its temperature, helping regulate Earth's climate.

Water is often called the 'universal solvent' because it can dissolve many different substances, essential for biological and chemical processes.

Water exists in three states on Earth (solid, liquid, gas) and cycles continuously through the water cycle, essential for all life.

Quick Revision Notes

- Water's formula is H_2O .
- It has two hydrogen atoms and one oxygen atom.
- Water has high specific heat capacity.
- This helps regulate Earth's climate.
- Water is called the 'universal solvent'.
- It dissolves many substances.
- This is essential for biological processes.
- Water cycles through solid, liquid, gas states.

Practice Questions

- 1 Discuss why water has high specific heat capacity.
- 2 Research substances that dissolve well in water.
- 3 Discuss why water is called the universal solvent.
- 4 Draw water's molecular structure.
- 5 Explain how water's heat capacity affects climate.
- 6 Discuss why water is essential for life.