

Exam Paper 1: Answer sheet

Total marks: 15

Question 1: What is the difference between a physical change and a chemical change? Provide one example of each. **Marks: 5**

Answer 1: A physical change involves a change in the state or appearance of a substance without altering its chemical composition. For example, melting ice is a physical change. On the other hand, a chemical change results in a new substance with different properties. Burning wood is an example of a chemical change.

Question 2: Explain the water cycle and its key stages. Include the processes involved and how they contribute to the continuous circulation of water on Earth. **Marks: 5**

Answer 2: The water cycle is the continuous movement of water on, above, and below the surface of the Earth. It involves processes such as evaporation, condensation, precipitation, and runoff. Water evaporates from bodies of water, condenses into clouds, precipitates as rain or snow, and returns to bodies of water through runoff, completing the cycle.

Question 3: Describe the structure of an atom. Include the names and charges of its subatomic particles. **Marks: 5**

Answer 3: An atom consists of three subatomic particles: protons, neutrons, and electrons. Protons have a positive charge, neutrons are neutral, and electrons have a negative charge. Protons and neutrons are located in the nucleus at the center of the atom, while electrons orbit the nucleus in energy levels or shells.