Student Answer Sheet

Student: Alex Johnson Class: Grade 8 Science

Q1 (Max 5): Describe the water cycle.

The water cycle includes evaporation, condensation, precipitation, and collection.

Water from oceans, lakes, and rivers evaporates due to the sun's heat, becomes water vapor, then cools and condenses into clouds.

When droplets get heavy, they fall as rain or snow (precipitation). Finally, water collects back in bodies of water or infiltrates soil, continuing the cycle.

Q2 (Max 10): Explain photosynthesis and why it is important.

Photosynthesis is a process in which plants use sunlight, water, and carbon dioxide to make glucose and oxygen.

Chlorophyll in leaves captures light energy to convert CO2 and H2O into sugars.

It is important because it produces oxygen we breathe and is the base of most food chains, storing energy from the sun in chemical form.

Q3 (Max 10): Compare and contrast solid, liquid, and gas states of matter.

Solids have a fixed shape and volume with tightly packed particles.

Liquids have a fixed volume but take the shape of their container; particles can move around each other.

Gases have neither fixed shape nor volume; particles move freely and spread out. Temperature and pressure changes can cause transitions between these states.