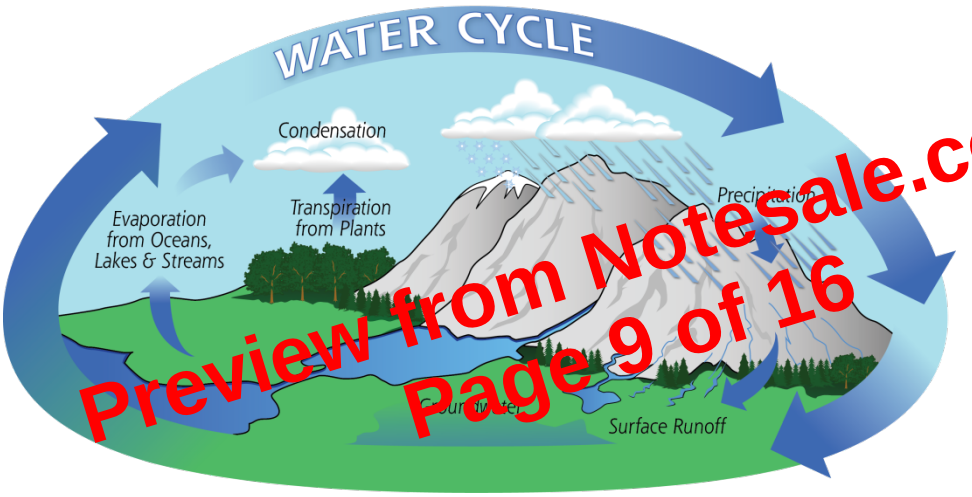
The geosphere is the Earth's outer layer crust or surface. Made up of minerals, rocks and landforms. A hydrosphere is the total amount of water on a planet. The hydrosphere includes water that is on the surface of the planet, underground, and in the air. The cryosphere is the frozen water part of the Earth system. There are places on Earth that are so cold that water is frozen solid. The atmosphere is the huge blanket of gas that circles the entire Earth. Without it, life as we know it could not exist. Last of all, the biosphere is the regions of the surface, atmosphere, and hydrosphere of the earth (or analogous parts of other planets) occupied by living organisms.

19. Explain the water cycle. Pg 59



20. Describe how the jet stream and ocean current can impact the local weather. Pg 59

Jet streams are fast flowing 'rivers' of air. They are found between the cold polar air and the warm tropical air. They play a key role in the weather by steering storms and also helping determine where storms form. Ocean currents do affect the weather. When warm water meets cold water, that's how hurricanes are said to be made. They greatly impact the weather by bringing rain, wind, storms and destruction to coastal areas.

21. How does the atmosphere protect and insulate the planet? Pg 59

Besides providing oxygen to breathe, the atmosphere protects us from ultraviolet radiation (thanks to the ozone layer), meteors and meteorites (which burn up from the friction), and excesses of heat and cold (by spreading the sun's heat more or less equally around the Earth, and insulating us from the worst of it). Also, the atmosphere insulates the earth by securing the sun's warmth around the earth with gases.

22. Differentiate between radiation, conduction, and convection. Pg 61

	Definition
Convection	Currents are created when there are differences in temperature and density within a fluid
Conduction	The transfer of heat by direct contact between two materials with different temperatures
Radiation	The movement of heat waves

23. Identify how energy fro bal air and water patterns. Pg 61

The heat from the S r near the equator. Ocean currents then distribute the heat arc an water also affects the world's climate. Additionally, the sun's heat drives the water cycle, and when plants use the Suns energy to carry out photosynthesis which produces oxygen.

Physical Science

1. Define density, thermal and electrical conductivity, solubility, magnetism, melting and boiling point. Pg 63

Density	Density is the Measure of how much matter occupies a given amount of space. The formula for density is d=m/v.
Thermal Conductivity	Thermal conductivity is basically a principle that is generally defined as the property of a given material to conduct heat.
Electrical Conductivity	The ability or power to conduct or transmit heat, electricity, or sound.
Solubility	The amount of a substance that will dissolve in a given amount of another substance.
Magnetism	The property of attracting certain metals,