

## IMPORTANT GEOGRAPHIC IDEAS

These important ideas may be used at any level, but development of the students' understanding of these is expected at the form levels specified.

### 5. SYSTEMS

The total environment may be viewed as a dynamic, interacting system composed of natural and cultural features and processes, capable of change and adjustment.

		Levels
5.1	SYSTEMS. A system is a set of natural and/or cultural phenomena which are linked together and interact with one another to form a whole.	11, 12, 13
5.2	The major components of a system are: <ul style="list-style-type: none"> <li>• Sources of energy, e.g. sun, oil, horse;</li> <li>• Natural and/or cultural elements, e.g. plants, soil, water, people, farms, town;</li> <li>• Linkages, e.g. roads, rivers, radios;</li> <li>• Flows, e.g. precipitation, messages, migration;</li> <li>• Processes e.g. manufacturing, farming, frost shattering;</li> <li>• Dimensions, e.g. time, space</li> </ul>	11, 12, 13
5.3	A system may be broken down into sub-systems, e.g. a farm unit in an economy, or a stream in a river basin.	11, 12, 13
5.4	The inputs, throughputs, and outputs of energy, materials and ideas through a system make it dynamic.	11, 12, 13
5.5	A system tends towards a balanced condition known as dynamic equilibrium or steady state.	13
5.6	Change in one part of a system may lead to change in other parts.	12, 13
5.7	These changes frequently occur from human impact and may vary the working of a system, or lead to its disruption.	13
5.8	According to human values, changes in a system may be perceived as benefits or costs.	13
5.9	Change in one system may lead to change in related systems.	12, 13
5.10	A system which has flows of energy and matter across its' boundaries is known as an open system, e.g. a river basin or a village.	13
5.11	A system which has no flows across its boundaries, except for the import and export of energy, is known as a closed system, e.g. the hydrological cycle.	11, 12, 13

**Reference: *Syllabus for Schools Geography Forms 5 – 7 (1990)*  
*Learning Media, Ministry of Education, Wellington pp. 22 – 25.***