3.4 Context

What is context?

Context, in its most broadest sense begins with the reader and his or her background and experiences, expectations and purpose for reading. Within any particular text, context can refer to the whole text, a group of paragraphs, a paragraph, sentence, or single word.

How can context help the reader understand a text?

An ability to identify the topic and main idea of a text, whether it is a paragraph or longer, is an important skill in reading (see unit 2.1 about identifying topics, topic sentences and main ideas) The distribution of logical connectors can help a reader to understand the development of ideas (see unit 2.2 on logical connectors and the development of ideas). The type and frequency of logical connectors may suggest the kind of text organization there is (see unit 2.3 for information about text organization). A knowledge of pronouns and determiners is helpful in understanding coherence (see unit 3.1 on restatements). The methods writers employ to define words is also clearly very useful (see 3.2 about definitions). Finally, a good understanding of prefixes and suffixes will help the reader to guess the meaning of a new word (see 3.3 on prefixes, roots and suffixes). All of these skills can help the reader understand a text.

How can I use context to understand the meaning of a new word?

First of all you should decide what part of speech the word is. Is it a verb, a noun, a pronoun, an adjective, an adverb, a preposition, or a conjunction or an interjection? Secondly, you should look at the context of the word. What words surround the word you want to know? Are there any hints, such as definitions, restatements, or logical connectors which may suggest what the word means? Thirdly, you should analyze the parts of the word for hints about the meaning. Next, you should guess the meaning of the word. Can you substitute your word for the new word within the sentence and the sentence still retain its meaning? Finally, if you need to, you should use your dictionary to see if your guess was a good one. You may wonder why you can’t just use your dictionary straight away, and this is a fair point. However, if you want to develop good reading skills, please consider taking the longer route first. In the end, your understanding will be richer and it may actually save time.

Examples

Read the texts below. What are the meanings of the highlighted words?
1 A solar eclipse occurs when the Moon passes between the Sun and the Earth, and the Moon fully or partially covers the Sun as viewed from some location on Earth. This can only happen during a new moon, when the Sun and Moon are in conjunction as seen from Earth. At least two, and up to five, solar eclipses occur each year; no more than two can be total eclipses. Total solar eclipses are nevertheless rare at any particular location because totality exists only along a narrow path traced by the Moon’s **umbra**.

**part of speech:** noun

**word parts:** nothing

**my definition:** a narrow path made by the moon can only mean shadow

**dictionary definition:** a region of complete shadow

2 Radioactive decay is the process in which an unstable atomic nucleus spontaneously loses energy by emitting ionizing particles and radiation. This decay, or loss of energy, results in an atom of one type, called the parent nuclide transforming to an atom of a different type, named the daughter nuclide. For example: a carbon-14 atom (the “parent”) emits radiation and transforms to a nitrogen-14 atom (the “daughter”). This is a **stochastic** process on the atomic level, in that it is impossible to predict when a given atom will decay, but given a large number of similar atoms the decay rate, on average, is predictable.

**part of speech:** adjective

**word parts:** “-ic” suggests an adjective

**my definition:** impossible to predict at an atomic level, but predictable in large numbers

**dictionary definition:** describes a process or system that is connected with random probability

3 Animals are a major group of mostly multicellular, **eukaryotic** organisms of the kingdom Animalia or Metazoa. Their body plan eventually becomes fixed as they develop, although some undergo a process of metamorphosis later on in their life. Most animals are motile, meaning they can move spontaneously and independently. All animals are also heterotrophs, meaning they must ingest other organisms for sustenance.

**part of speech:** adjective

**word parts:** “eu” means good, well, true, “-ic” means adjective

**my definition:** mostly multicellular?

**dictionary definition:** having cells with `good’ or membrane-bound nuclei
3.4 Context Exercises

Exercise

Read the texts below. What are the meanings of the highlighted words?

1 The term cloud is used as a metaphor for the Internet, based on the cloud drawing used in the past to represent the telephone network, and later to depict the Internet in computer network diagrams as an abstraction of the underlying infrastructure it represents. Typical cloud computing providers deliver common business applications online which are accessed from a web browser, while the software and data are stored on servers.

http://en.wikipedia.org/wiki/Cloud_computing

part of speech: ........................................................................................

word parts: .............................................................................................

my definition: ........................................................................................

dictionary definition: .............................................................................

2 Hypertension can be classified as either essential (primary) or secondary. Essential or primary hypertension means that no medical cause can be found to explain the raised blood pressure. It is common. About 90-95% of hypertension is essential hypertension. Secondary hypertension indicates that the high blood pressure is a result of (i.e., secondary to) another condition, such as kidney disease or tumours (adrenal adenoma or pheochromocytoma).

http://en.wikipedia.org/wiki/Hypertension

part of speech: ........................................................................................

word parts: .............................................................................................

my definition: ........................................................................................

dictionary definition: .............................................................................

3 Hypoglycemia can produce a variety of symptoms and effects but the principal problems arise from an inadequate supply of glucose as fuel to the brain, resulting in impairment of function (neuroglycopenia). Effects can range from
vaguely “feeling bad” to seizures, unconsciousness, and (rarely) permanent brain damage or death.

http://en.wikipedia.org/wiki/Hypoglycemia

**part of speech:** .................................................................

**word parts:** ...................................................................................

**my definition:** ...................................................................................

**dictionary definition:** ...................................................................................

4 The habitat of the beaver is the riparian zone, inclusive of stream bed. The actions of beavers for hundreds of thousands of years in the Northern Hemisphere have kept these watery systems healthy and in good repair, although a human observing all the downed trees might think that the beavers were doing just the opposite. The beaver works as a **keystone** species in an ecosystem by creating wetlands that are used by many other species. Next to humans, no other extant animal appears to do more to shape its landscape.

http://en.wikipedia.org/wiki/Beaver

**part of speech:** .................................................................

**word parts:** ...................................................................................

**my definition:** ...................................................................................

**dictionary definition:** ...................................................................................

5 Coral reefs cover just under one percent of the surface of the world’s ocean, yet they support over one-quarter of all marine species. This huge number of species results in complex food webs, with large predator fish eating smaller forage fish that eat yet smaller zooplankton and so on. However, all food webs eventually depend on plants, which are the primary producers. And the primary productivity on a coral reef is very high, resulting in a typical **biomass** production of 5-10g C m$^{-2}$ day$^{-1}$.

http://en.wikipedia.org/wiki/Coral_reef

**part of speech:** .................................................................

**word parts:** ...................................................................................

**my definition:** ...................................................................................

**dictionary definition:** ...................................................................................
Note: $5-10\text{g C m}^{-2}\text{ day}^{-1}$ is read "five to ten grams of carbon per square meter per day".

6 The emission spectrum can be used to determine the composition of a material, since it is different for each element of the periodic table. One example is astronomical spectroscopy: identifying the composition of stars by analysing the received light. The emission spectrum characteristics of some elements are plainly visible to the naked eye when these elements are heated. For example, when platinum wire is dipped into a strontium nitrate solution and then inserted into a flame, the strontium atoms emit a red color. Similarly, when copper is inserted into a flame, the flame becomes green. These definite characteristics allow elements to be identified by their atomic emission spectrum. Not all lights emitted by the spectrum are viewable to the naked eye, it also includes ultra violet rays and infra red lighting, an emission is formed when an excited gas is viewed directly though a spectroscope.


7 In chemistry and physics, atomic theory is a theory of the nature of matter, which states that matter is composed of discrete units called atoms, as opposed to the obsolete notion that matter could be divided into any arbitrarily small quantity. It began as a philosophical concept in ancient Greece and India and entered the scientific mainstream in the early 19th century when discoveries in the field of chemistry showed that matter did indeed behave as if it were made up of particles.


part of speech: .................................................................
Gravitation, or gravity, is one of the four fundamental interactions of nature, and is the means by which objects with mass attract one another. In everyday life, gravitation is most familiar as the agent that lends weight to objects with mass and causes them to fall to the ground when dropped. Gravitation causes dispersed matter to **coalesce**, thus accounting for the existence of the Earth, the Sun, and most of the macroscopic objects in the universe. It is responsible for keeping the Earth and the other planets in their orbits around the Sun; for keeping the Moon in its orbit around the Earth; for the formation of tides; for convection, by which fluid flow occurs under the influence of a density gradient and gravity; for heating the interiors of forming stars and planets to very high temperatures; and for various other phenomena observed on Earth.

http://en.wikipedia.org/wiki/Gravitation

The class Gastropoda or gastropods (also previously known as univalves and sometimes also spelled Gasteropoda) form a major part of the phylum Mollusca. **Gastropods** are more commonly known as snails and slugs, and include those that live in the sea, in freshwater and on land. This class of animals is second only to the insects in its number of known species. Its fossil history goes back to the Late Cambrian.

http://en.wikipedia.org/wiki/Gastropoda
Temperature control (thermoregulation) is part of a **homeostatic** mechanism that keeps the organism at optimum operating temperature, as it affects the rate of chemical reactions. In humans the average oral temperature is 36.8 °C (98.2 °F), though it varies among individuals, as well as cycling regularly through the day, as controlled by one’s circadian rhythms with the lowest temperature occurring about two hours before one normally wakes up.


**part of speech:** .................................................................

**word parts:** .......................................................................

**my definition:** ........................................................................

**dictionary definition:** ..........................................................