Reading Comprehension 4

What is cooking ? it is 'the application of heat to food in order to change its state; not merely to make hot what before was cold, but to change its very form, colour, texture, and flavour'.

The final object of cooking is to do this to food in such a way as to create agreeable palate sensations, so that eating becomes a matter of aesthetic enjoyment, not merely a nutritional necessity.

Of course cooking also affects the digestibility of food. It affects it in two ways. Directly - that is to say chemically and medically - good cooking renders some foods more digestible (and other foods less so). Indirectly cooking affects food this way: the more the meal is enjoyed, the better it is assimilated and digested. Food *presentation* comes into picture here. For the way in which the food is presented, it's actual visual appearance and aroma, strongly affect the degree to which it is enjoyed.

Therefore food presentation, although it is outside my original definition, must be reckoned a part of cooking.

1. Cooking is –

(1) utilizing heat to change its state.
(2) using heat just to make cold food hot.
(3) applying heat not only to make food hot.
(4) merely to change the food's form, colour, texture and taste.

2. The chief aim of cooking is –

(1) to heat food in order to make it edible.
(2) heating food so that it becomes eatable.
(3) to make food tastier.
(4) to make food healthier.

3. The secondary aim of cooking is –

(1) to make it easier for the stomach and bowels to assimilate the food.
(2) to make food healthier.
(3) to make food tastier.
(4) to make it easier to eat food that has been too tough to eat before.

4. The digestibility of food –

(1) comes into the picture here.
(2) is affected by the way it looks and smells.
(3) is effected by the way it is represented.
(4) has little to do with cooking.

5. The presentation of food –

(1) cannot be defined.
(2) must be included in our reckoning.
(3) is completely unimportant.
(4) is important not only for our enjoyment

Reading Comprehension 5

A German tourist was rescued by police helicopter yesterday, two days after she and her husband got lost while hiking near Ein Gedi.

Udo Flinkeh, 71, managed to draw a map for rescuers showing where he had left his wife, Wiltrude, 74, after she had injured her leg as they attempted to find their way.

The couple, pensioners from Neustadt, near Hamburg, were staying at the guest house at Kibbutz Ein Gedi and set out Tuesday morning for a two-hour hike in Nahal Arugot. They only took along a bottle of mineral water, and they were dressed in lightweight clothing. After an hour's walk, they decided to return, but problems with Wiltrude's knee made them seek a route that didn't entail such a steep descent.

A wrong turn sent them south, and at 5 p.m. they decided to rest. Darkness fell and they decided not to continue, rubbing their arms and legs to stay warm and drinking their water. The two started out anew at first light, after first wetting their lips with Udo's urine so as not to dehydrate. They were heading towards Nahal Mishmar when Wiltrude slipped and fell, and could only get up with difficulty. leaving her in a clearing, Udo told her not to move and set off for help. He reached the Ein Gedi-Sdom road on Wednesday afternoon, hitchhiked back to the kibbutz and told the guest house staff what had happened, begging them to send a helicopter to find his wife. Three search parties stayed out until 2 AM, using megaphones and dropping flares from the air, but failed to find her. It was 6:15 A.M. when a police helicopter located her with the help of Udo's map.

1. Udo and Wiltrude Flinkeh -

(1) were hitchhiking near Ein Gedi.
(2) were well-equipped for a long walk.
(3) had intended to walk for a couple of hours only.
(4) were both still quite fit after one hour's walk.

2. The two German tourists turned south -
(1) by mistake.
(2) in order to seek a route that did not entail a steep descent.
(3) after they had taken a rest.
(4) a short time before darkness fell.

3. During the night the couple –
(1) slept under a tree.
(2) headed towards Nahal Mishar.
(3) tried to keep warm as best as they could.
(4) rubbed their arms and legs with their water.

4. The next day –
(1) they drank Udo's urine in order not to lose too much water.
(2) Udo left his wife and walked to Ein Gedi.
(3) the couple split up: she stayed under a tree while he went to seek help.
(4) Wiltrude had an accident.

5. The search for Wiltrude –
(1) started at 2 A.M.
(2) was successfully concluded in the early morning of the third day.
(3) ended when one of the three search parties found her with the help of Udo's map.
(4) could have ended earlier if they had used helicopters at the same time as the search parties.

Reading Comprehension 6

Geographers call the outer crust of the earth Sial, because it contains large proportions of silicon and aluminium. Aluminium (aluminum in American English) is not only the third most common element after oxygen and silicon found in the surface crust of the earth, but also by far the most common metal there. It is found in the soil in the form of aluminium silicates, i.e. compound of aluminium, silicon and oxygen mixed with other elements. The most common rock on the surface of the earth is granite, which consists of three substances: quartz, feldspar and mica. Quartz is silicon dioxide, feldspar and mica are aluminium silicates. When granite is broken up by erosion, quarts becomes sand and feldspar turns into clay. The plates you eat from and the cups you drink from contain aluminium. Aluminium metal is soft and is therefore chiefly used in alloys, i.e. mixed with relatively small amounts of other substances to increase its strength and hardness etc. It is light, does not rust, readily conducts both heat and electricity, is non-magnetic and easily workable. Some of its alloys are as strong as steel.

You would think that, because aluminium compounds are so common, aluminium metal would be common and therefore cheap. But when first produced, it was more costly than silver and almost as costly as gold. The Emperor Napoleon III used aluminium cutlery, while ordinary gold or silver was used by his guests. Manufacturing aluminium was so expensive because its atoms cling so strongly to other atoms that it is very difficult to separate them.

Then, in 1886, a young American scientist named Charles Martin Hall discovered how to purify aluminium more cheaply and became a rich man. The method he used is called electrolysis, a method to decompose a substance by the application of an electric current, thereby separating one constituent - here aluminium.

However, this method is still relatively costly and slow. Do you want to become a dollar millionaire, win the Nobel prize, and greatly help your country at the same time? All you have to do is to invent a method to mass-produce pure aluminium much more quickly and cheaply than that of Charles Martin Hall. Go ahead. Good luck.

1. Geographers call the outer crust of the earth Sial because -

(1) that is its name.
(2) the name mirrors the two chief elements in it.
(3) it would be difficult to write the name in both American English and English English.
(4) the name is made up of the universally accepted abbreviations of the two main elements of which it is composed.

2. Aluminium (aluminum) is –
(1) commonly
(2) the most common element in the crust of the earth.
(3) the most prevalent metal on the surface of the earth.
(4) a large proportion of silicon.

3. Which of the following substances does **not** contain aluminium?
(1) granite (2) quartz (3) feldspar (4) mica

4. Charles Martin Hall became rich because he –
(1) was an American.
(2) was a scientist.
(3) discovered aluminium.
(4) none of the above.

5. The inventor of a method to produce aluminium cheaply and quickly would gain riches and honour (and this is **not** stated in the text but only implied) because cheap aluminium would-

(1) revolutionize industry.
(2) save fuel.
(3) save money on all things.
(4) all of the above.

Reading Comprehension 7

Within the last century such a lot of new discoveries and inventions have been and are being made, that no one can possibly know everything and most scientists must become specialists, i.e. they must choose one very limited field if they wish to contribute something new to science. Today in most cases many people, each an expert in a narrow field, will often work together to bring new understanding. But even so, there is a danger.

The danger of this over specialization is to overlook the basic interconnection between various branches of science. Because each branch of science is connected with many others, every new discovery is important to other branches: the artificial division of subjects into watertight departments is a mistake. In fact, the most brilliant discoveries have been made by those, like Isaac Newton and Albert Einstein, who were able to see the relationship between apparently unrelated fields.

Both Newton and Einstein worked in pure science. The average man in the street, however, is much more interested in the useful applications of science that will be of immediate benefit to himself than in pure science. Yet what he does not consider is that discoveries in pure science lead to applications in applied science: In the case of electricity, Michael Faraday's research in pure science led to further discoveries that changed the face of the earth and the daily lives of all of us.

1. So many discoveries and inventions have been made during the twentieth century that -

(1) nobody can know anything.
(2) not everything can be known by a single individual.
(3) anyone can learn something.
(4) everything is now known.

2. The danger of overspecialization is -

(1) one does not see the wood for the trees.
(2) the interconnection among various branches of science.
(3) that scientists must choose a very limited field.
(4) that scientists wish to contribute something new to science.

3. Sir Isaac Newton and Albert Einstein are mentioned here because they -
(1) were great scientists.
(2) worked in pure science.
(3) made brilliant discoveries.
(4) understood the interconnection among different sciences.

4. The average man in the street is -
(1) not interested in pure science.
(2) someone crossing the street.
(3) interested in pure science.
(4) somebody who does not understand anything at all about science.

5. Michael Faraday -
(1) directly changed our daily lives.
(2) invented electricity.
(3) became very famous thanks to his work.
(4) led to further discoveries and inventions.

Reading Comprehension 8

"When the well's dry, we know the worth of water." Nearly two and a half centuries ago, when Benjamin Franklin, the great American statesman, scientist and inventor, quoted these prophetic words, America's wells overflowed with water.

Today those same wells are in danger of running dry, and along with the rest of the world we face a critical shortage of clean, fresh water.

The problem is not the *supply* of water; earth has virtually the same amount today as it did when dinosaurs roamed the planet. Ninety-seven percent of that supply is in the form of salt water. Only 3 percent is fresh, and two-thirds of that is ice.

Do you know where your water was last night? Last month? Last year? Or where it's headed as it swishes across the slick surface of the sink and vanishes through the pipe? And what you've done to it while washing clothes, watering the garden, taking a bath?

As more people reach for the tap, these become pressing questions.
A growing population requires more food, more houses, more shopping centers, more roads, more cars - all of which increase demands for clean, fresh water.

The problem is simply people - our increasing numbers and our flagrant abuse of one of our most precious, and limited, resources.

1. The first sentence above -
(1) was written by Benjamin Franklin.
(2) was written almost 250 years ago.
(3) means that only when we have no water, do we appreciate its value.
(4) means that water is only worth something when we know the well's dry.

2. "America's wells overflowed with water" means that Americans had -
(1) just enough water.
(2) more water than they needed.
(3) just as much water as they needed.
(4) a country that was completely flooded.

3. Readily drinkable fresh water -

(1) are still plentiful as they were at the time when dinosaurs roamed the earth.
(2) makes up 97% of the earth's water supply.
(3) is three percent of the earth's water supply.
(4) is only one percent of the earth's water supply.

4. The five questions asked in Paragraph 4 are -

(1) impossible to answer.
(2) unnecessary.
(3) meant to make you think about the way you use water.
(4) simply rhetorical.

5. Which of the following facts does **not** contribute to our critical and growing fresh water shortage?

(1) A growing population.
(2) The used water vanishing through a pipe.
(3) The growing demands for water for domestic, agricultural and industrial uses.
(4) The wasteful use of water.

Reading Comprehension 9

"Sonar" is the name put together from "SOund NAvigation and Ranging". It uses high-frequency sound waves to measure ocean depths. An instrument on shipboard called a *fathometer*, using an electrical vibrator, sends a short blast of sound into the water. The waves produced, traveling at about 4,800 feet a second, hit the ocean bottom and bounce back to a microphone on the ship. The time between the sending of the blast and the return of the echo is marked automatically on a moving strip of paper. With this information the distance to the bottom can be determined easily.

Besides measuring ocean depths and locating underwater objects such as sunken ships, schools of fish, and enemy submarines, sonar helps in ocean navigation. Radar uses short radio waves to locate objects in air or in space in much the same way. But radio waves do not pass through sea water, while sound waves can do this easily.

Sonar is just one of the uses that engineers and scientists have found for *ultrasonic sound*, which is often called *ultrasound*. These are names found for sound that is too high in frequency to be heard. The average person can hear sound waves that range in frequency from about 20 to 18,000 vibrations per second. A dog can hear vibrations as high as 40,000, and the hearing range of other animals goes even higher. The waves used in sonar have a frequency of around 25,000.

Today, ultrasonic waves are being put to work in laboratories and factories. If an ultrasound generator is placed in a liquid, the waves move the liquid back and forth hundreds of thousands of times each second. This causes materials to mix quickly or to dissolve in liquids. Paint manufacturers use ultrasound to do a better job blending colors. The companies that make film for your camera find that mixing chemicals by the use of sound waves will produce a more sensitive film. If you look at some raw milk with a microscope, you find that it is made up of little drops of butter fat floating around in a watery liquid. In order to make milk easier to digest, these fat droplets may be broken up by forcing the milk through very small openings. The result is called homogenized milk. When the ultrasonic method is used, the sound waves not only break up the droplets but also kill the germs in the milk by pounding them to pieces.

A new lightweight type of washing machine using special ultrasound generators is put into a pail of soapy water containing the soiled clothes. Within seconds these are clean.

פסיכומאסטר – הגורו של הפסיכומטרי

1. Ultrasound –

(1) cannot be heard by any living being.
(2) is sound you cannot hear.
(3) cannot be heard and is therefore useless.
(4) can be used only by scientists.

2. The sound waves used in sonar have a frequency of -

(1) more than 40,000 vibrations per second.
(2) around 25,000 vibrations per second.
(3) between 18 and 20,000 vibrations per second.
(4) less than 15,000 vibrations per second.

3. Radar cannot be used to locate underwater objects because radio waves -

(1) do not pass through sea water.
(2) are too long.
(3) spread out in all directions.
(4) are not long enough.

4. Homogenized milk -

(1) means the same as sterilized milk.
(2) contains few germs.
(3) contains no butter fat.
(4) is easier to digest than raw milk.

5. Practical uses of ultrasound -

(1) do not yet exist.
(2) are limited to liquids.
(3) are combined to factories and laboratories.
(4) can now be found in peoples' home.

Reading Comprehension 10

How far can you see? Five miles? A thousand miles? Less than four miles, if you are looking down a straight railroad track or if you're standing on the shore of the ocean looking to the horizon (where the sky and the water seem to meet). And only about two miles if you are sitting down at the water's edge. But on a clear, dark night, you can see, just with your eyes alone, as far as 9,000,000,000,000,000,000 (nine billion billion) miles all the way to the Andromeda galaxy.

In order for an object to be visible, light must travel from the object to your eyes. Aristotle and other philosophers of the ancient world believed that something went out from the eyes and then returned, much as radar picks up a distant object.

The limit of three or four miles we can see when standing on the shores of an ocean is set by the curvature of the Earth. However, the only limit to the distance we can see is the intense brightness of the object in our field of vision. Yet for any object to be given absolute magnitude, the apparent intensity of light, varies inversely at the square of the distance from us: If one light is twice as far from us as another, the farther one will appear only ¼ as bright, not ½ as bright, as the closer one.

1. How far can one see when seated near the sea shore and looking at the horizon?

(1) 2 miles
(2) Less than 4 miles
(3) 5 miles
(4) 1,000 miles

2. We can see much further when looking at a distant mountain than at the horizon at the sea because?

(1) The horizon is probably further away.
(2) The air is much less polluted near the mountain.
(3) The Earth is round.
(4) The sea may be covered by mist.

3. "with your eyes alone...billions of miles" (line 5-6) billions of miles -

(1) means that only you can see that far.
(2) means that you must be alone to see that far so that no one will distract you.
(3) is just a figure of speech.
(4) means without using any instruments such as a telescope.

4. The second sentence in paragraph II (lines 8-9) -

(1) agrees with the first one.
(2) continues the argument of the first one.
(3) has little to do with the first one.
(4) conflicts with the first one.

5. The limit to the distance we can see is -

(1) the brightest star in the Andromeda galaxy.
(2) only the intrinsic brightness of the object we look at.
(3) only the distance of the object we observe.
(4) a combination of the brightness of the object we look at and its distance from Earth.