CONTENTS

READING COMPREHENSION	2
Agricultural Sciences	2
Environment protection	
WRITING SKILLS	
Task 1: table description	42
Task 2: letter writing	52
ANSWER KEY	

READING COMPREHENSION

Agricultural Sciences

1. To feed the world, talk to the farmers

TO FIGHT hunger, the world needs a second "green revolution" to boost food output by per cent over the next 30 years. But will this revolution be forged in the laboratory or out in the fields? While most national delegations in Rome seemed simply to trust the scientists to come up with the goods, several prominent researchers argued that the revolution will only happen if farmers are recruited as its equal partners.

Science made some impressive claims at the summit. The Mexico-based International Maize and Wheat Improvement Centre repeated its promise to transform wheat yields. The International Rice Research Institute (IRRI) in the Philippines announced that a \$2.5 million research programme was on the verge of offering a "super-rice" with 25 per cent higher yield. And the International Potato Centre in Peru said that, for \$25 million, it could engineer a potato resistant to a new virulent form of potato blight that has reached every continent where food is grown except Australia.

But environmental pressure groups denounced these promises. "Super-rice is an agricultural horror story, not a panacea," said Janet Bell of Genetic Resources Action International. "IRRI should be finding out why yields of existing rice varieties are falling." She also claimed that the super-rice will need treating with large amounts of chemicals, further marginalising poor farmers in the developing world. Greenpeace opposed all field trials with genetically manipulated crops.

In the past, agricultural scientists would have found little common ground with the environmentalists. But times are changing. "We have come a long way in their direction," said FAO research director Stein Bie. Monkombu Swaminathan, a pioneer of the last generation of high-yield rice varieties, warned that the days of easy pickings from research could be over. He argued that further progress will come only if scientists work directly with farmers to "blend traditional and frontier technologies".

Geoffrey Hawtin, director-general of the International Plant Genetic Resources Institute in Rome, said that the super-rice would perform well on the best farmland with plenty of water for irrigation. But most of the world is not like that. "Now we are looking for ways to increase the effects of our work in the marginal areas – places that are very dry or mountainous." In the Indian state of Rajasthan, Hawtin said plant geneticists are working directly with farmers to improve local varieties of the staple crop, pearl millet. "The project introduces new genes to the local varieties that retain their ability to resist drought while adding new characteristics, such as resistance to disease and pests."

Hans Herren, head of the International Centre of Insect Physiology and Ecology in Nairobi, told a session on pest control in Africa that pesticides and genetic engineering should only be used as a "last resort". Herren favours biological control methods, but he also argued that more work should be done to predict how vulnerable new crop varieties would be to pests before their release into the field. This means new partnerships between "the scientist in the lab coat and the scientist in the boots", meaning the farmer. "Biotechnology is not the answer for everything," Herren said.

FAO scientist Peter Kenmore told the same session that scientists often only had to ask farmers about local pests to devise strategies against them. "There is a tradition of serious, local innovation that is too often overlooked," he said.

Task 1Read the text and provide short answers to the questions according to the example (0), in no more than 7-8 words.

QUESTIONS	ANSWERS
Which international event has inspired	0. The Rome World Food Summit.
the article?	
What did scientist claim about wheat and	1.
rice yields?	
What plant disease could the Peruvian	2.
centre fight against?	
How can super-rice damage farmers?	3.
What is Greenpeace's main argument	4.
against super-rice field trials?	
Where does Geoffrey Hawtin work?	5.
What new characteristics of pearl millet	6.
can be introduced by Indian researchers?	
What pest control method does Hans	7.
Herren support?	
What is the final message of the article?	8.

Task 2
Read the text again and mark which scientist voiced his or her opinion about the listed topics, according to the example (0).

	J. Bell	S. Bie	M. Swami- nathan	G. Hawtin	H. Herren	P. Kenmore
Against super-rice	(0) X					
For co-operation between scientists and farmers						
For dry areas to be researched						
For biological control						
Environmentalists and scientists come closer						
For research into effects of pest control						
For local varieties to be improved						

2. Let Them Eat Organic

Baron Wolfgang Von Münchhausen gets a premium price for his premium crops. Ten years ago, after getting ill from some of the 125 different pesticides he was spraying on his 300 acres of wheat, rye and other grains, he converted his farm in the German state of Schleswig-Holstein to organic agriculture, avoiding chemical fertilizers and toxic pesticides in favour of traditional measures. Today he delivers his produce to "bio" bakeries, where wealthy Germans pay extra for the privilege of eating organic bread. So what if Münchhausen's yields are 50% lower than those of chemical-happy colleagues?

At least that's how critics of organic farming see it. Organic farmers are just skimming the cream. Agrochemicals, the argument goes, were an essential part of the "green revolution" of the 1950s and 1960s that made it possible for Third World countries like India to feed their fast-growing populations. But is this really true? No, say scientists at two Swiss agricultural research institutes. Their study published recently in the journal Science shows that organic farming may make more economic sense than conventional farming for medium and small farms.

For the past 21 years, the researchers closely monitored four different cultivation methods, from organic to full-blown chemically fertilized to mixtures of the two. Organic methods, they say, turned out to be more "efficient and more sustainable" than conventional farming. Crop yields were lower, but by less than anticipated – about 20 percent. The organically grown plants needed disproportionately fewer resources: 40 percent fewer nutrients and 97 percent fewer pesticides (a limited use of chemicals was allowed). Since fewer chemicals were needed, the organic crops required 56 percent less energy. Microbes present in the soil helped plants take in nutrients more efficiently, which meant about half the nutrients were needed to produce the same amount of crop. Soils appeared to be healthier – they contained more fungi that help plants take in water, and earthworms and spiders were more prevalent. "In the end, organic farming is more economical," says Andreas Fliesbach of the Research Institute of Organic Agriculture, an author of the report.

But can organic farming feed the world? Critics have argued that the lower yields would require a proportionate increase in land under cultivation, which would cause an environmental nightmare. But the Swiss study undermines that argument. So does the experience of the world's largest organic cooperative, in the Indian state of Madhya Pradesh, where 1,100 farmers in 77 villages have stopped using expensive chemicals and reverted to traditional methods and Western organic techniques. Planting a larger variety of crops has increased the diversity of natural predators such as wasps and spiders, which feed on pests. And after years of losing topsoil to erosion, the increased use of compost and manure has built it back up.

Farmers say they actually harvest more now than they did before. "When the farmers stopped fertilizing, the yields dropped the first three years," says Rajeev Baruah, who heads the project and trains farmers. "Then they stabilized and started going up." Baruah says yields of cotton, the main crash crop, are about 20 percent higher now than at neighbouring conventional farms. "It's a matter of looking after the land and making sure the soil is healthy instead of just buying instant fertilizer and pesticides," he says. That's a luxury the Third World can afford.

Task 1Read the text and provide short answers to the questions according to the example (0), in no more than 7 words.

QUESTIONS		ANSWERS
Why did W. Münchhausen convert his	0.	he got ill from pesticides
farm to an organic one?		
What is the critics' main argument	1.	
against organic farming?		
How was the Swiss research carried out?	2.	
What findings of the research showed that organic farming is more	3.	
economical?	4.	
	5.	
	6.	
What environmental benefits did the change to organic farming bring in the	7.	
Indian cooperative?	8.	
How did yields change in the Indian project after using organic methods?	9.	
	10.	
	11.	

Task 2
Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE OR FALSE
0. Today W. Münchhausen produces organic bread.	F
12. The yield of the organic farm monitored in the Swiss research was higher than expected.	
13. The Swiss study shows that it is possible to get higher yields without causing environmental problems.	
14. In the Indian cooperative farmers could harvest more because they increased the land for cultivation.	
15. Rajeev Baruah thinks organic farming is a luxury for Third World countries.	

3. Brazil's crop

Brazil has become a major player in world soybean markets, second only to the U.S. A huge undeveloped land area holds great potential for future Brazil expansion in soybean and other agricultural product production.

Brazil is the largest country in South America, only slightly smaller than the U.S. Unlike the U.S., though, only a small amount of Brazil's land mass consists of mountains and deserts. Almost all of its land area, including rain forests, can be used for some kind of economic activity. Brazil currently has only about 50% as much land under cultivation as the U.S., but it has 56% more potential crop acres than the U.S. currently has under production

Most of the income in Brazil is generated in urban areas, while a large portion of the rural residents in Brazil live in poverty. This income disparity has caused major migration from rural to urban centers. Today, Sao Paulo is the world's third-largest city: about 80% of its residents live in poverty. One reason behind Brazil's efforts to increase soybean production and exports is to increase employment and income in rural areas to slow the migration into poverty-stricken urban areas.

Brazil's soybean production is occurring in two main regions. The traditional region is the south and south-central part of Brazil, including the states of Sao Paulo, Paraná. Santa Catarina and Rio Grande do Sul. Most of the land in these states is under cultivation. Increased soybean production in these areas will come largely from increased yields and shifts from other crops to soybeans on acres already in production.

Most of Brazil's expansion in soybean production is in the Cerrados. The Cerrados includes land in several states, but much of the current development is in Mato Grosso. The long-term potential for additional soybean acres and production in the Cerrados is staggering. Most of the soils in the Cerrados are classified as tropical soils or oxisoils. The two largest areas in the world with these soils are in the Amazon Basin of South America and the Congo Basin of Africa. Natural vegetation in the Cerrados ranges from open, treeless grasslands to dense, scrubby forests.

The forest areas can be divided as "light" and "heavy" cerrados. The light cerrados, with relatively few and small trees, can easily be cleared with two crawler tractors dragging a heavy chain with them. The heavy cerrados consists of denser forest that requires cutting out the heavier bush and trees before it can be dragged. The cleared trees can be used for firewood, manufacturing charcoal or drying grain. In a typical progression of converting heavy cerrados land into grazing, rice production and then to soybean production, producers are increasingly skipping the grazing step. After the land is cleared, it typically receives a heavy application of lime and is planted with rice. Soybeans are planted after the lime raises the pH of the soil.

Task 1
Read the text and provide short answers to the questions according to the example (0), in no more than 3 words.

QUESTIONS	ANSWERS
Which country is the largest soybean producer in the world?	0. US
Why is Brazil's land more suitable for cultivation than that of the US.	1.
Why do people leave rural areas in Brazil?	2.
What are the reasons for increasing Brazilian soybean production?	3.
soyocan production:	4.
How can Brazil increase soybean production in the traditional regions?	5.
the traditional regions:	6.
What favourable feature do the Cerrados have in terms of cultivation?	7.
How can heavy cerrados be cleared?	8.
What step should ideally follow clearing the land?	9.
What is the aim of using lime before planting soybean?	10.

Task 2
Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers

answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE OR FALSE
0. At the moment Brazil is producing less soybean than the US.	T
11. The U.S. has better chances for agricultural expansion than Brazil.	
12. Social and economic factors make it necessary to increase soybean production.	
13. The only way of increasing agricultural production in Brazil is to cultivate undeveloped land.	
14. Brazil's increased soybean production would lead to development of rural	
areas.	
15. The Cerrados can be converted into land suitable for agricultural production.	

4. Tips for planting bulbs

Everything you ever wanted to know about planting now for early spring colour. By John Hoyland

0.
1 Garden centres sell bulbs for autumn planting from the end of July and want them out of the way by September to make room for Christmas-tree baubles. August is far too early to plant spring-flowering bulbs. October is the best time for daffodils; November for tulips.
2 If you are not sure, plant the bulb on its side: its stem will find its own way to the surface.
3
4.
5
6.
7
8. Left in the ground, tulips degenerate each year until they die; lifted, stored and replanted the following November they re-flower well. After flowering, remove the seed head and wait for the foliage to yellow and die back, then lift the bulbs, clean off any soil and store in boxes or net bags in a cool, dry place.

Read the article and match the subtitles with the correct paragraphs. Write your answers in the table according to the example (0). There is one extra subtitle you don't need to use.

Subtitles:

- A. Prepare well
- B. Enemy tactics
- C. Time it right
- D. Lift and repeat
- E. Mark the spot
- F. Lawn games
- G. Which way up?
- H. Water well
- I. More please
- J. Damp lovers

0	1	2	3	4	5	6	7	8
A								

Task 2
Read the text again and provide short answers to the questions according to the example (0), in no more than 6 words.

QUESTIONS	ANSWERS
How should you improve the soil before planting bulbs?	0. Add organic matter
What should pots include for bulbs?	9.
	10.
What soil condition is unsuitable for miniature irises?	11.
How do bulbous flowers look their best?	12.
How can you get tulips to flower again next year?	13.
How can gardeners protect freshly planted bulbs from squirrels?	14.
A	15.

5. Technology offers whole new world for livestock farmers

Scottish red meat producers and processors may seem to be in one of the more traditional sectors of Scottish farming but the range of research and development now taking place is producing big challenges to their production systems.

And if they do not take up these opportunities they have been warned their industry could decline. On the other hand, Alistair Stott, of the Scottish Agricultural College, stated that the adoption of new techniques and technology would improve production efficiency and profitability.

Stott, who was speaking at a seminar in Perth organised by Quality Meat Scotland, highlighted a number of areas of research including where better diagnostic work on animal diseases can identify infected livestock and allow the farmer to take the necessary remedial action.

Some recent research had highlighted that some sheep breeders were, in the traditional way, spending more than half their time just looking at or walking through their flocks.

"This could be seen as non-productive time with no output coming directly from this activity but it could also be seen positively by the public, who would see it as farmers being prepared to spend time in checking the welfare of their stock."

One of the benefits of adopting new technology, he suggested, would be that sheep farmers might have time to manage three or four times their present numbers of sheep, but still with time to observe their stock, through having superior information on diseases and husbandry coming through computer information.

An example for "managing sheep rather than working with sheep" is Fenwick Jackson, who along with his father farms near Jedburgh, where they keep 2,500 sheep and a 150-strong beef herd. The family have spent a number of years working towards reducing the labour required to look after a large number of sheep including moving to wool shedding sheep that do not require an annual clip.

But he was most enthusiastic over an imported electronic reader of ear tags, containing information ranging from breeding background through to levels of worm resistance. The data and the use of special sheep pens where 450 sheep per hour can be handled allows him to "stand and watch" while any operation is being carried out without the use of any labour, with the help of the sheep dogs only.

In another example of how technology is moving into the livestock sector, Ivan Andonovic, from Embedded Technology Solutions thought that the use of livestock collars could transmit a massive amount of information. He has been working on a project to help dairy farmers detect when cattle are ready to be inseminated but he believed the same collar could inform on whether any particular cow was lame or carrying a disease.

Task 1
Read the text and provide short answers to the questions according to the example (0), in no more than 6 words.

NOTES
0. a seminar in Perth
1.
2
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

Task 2
Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE OR FALSE
0. Alistair Stott works for Quality Meat Scotland	F
12. According to research, farmers should spend more time observing their livestock.	
13. The use of special sheep pens reduces the number of workers required.	
14. The Jacksons are interested in using technological innovations in the farm.	
15. Embedded Technology Solutions have been involved in trying out collars for gathering information about infectious diseases.	

6. How turkey farms work

0.
Day-old chicks or poults supplied by hatcheries are transferred to the windowless rearing sheds, where they will spend their lives. Some smaller units use pole barns, where the top half of the wall is made of fencing to allow in extra light and air, but keep out wild birds. A litter of wood shavings and straw, which covers the floor to absorb spilled water and faeces, will not be changed during their lives, but may be added to or dried out if necessary. Lighting is kept dim - in some cases four times lower than a street lamp - which is said to avoid aggression. Some birds are debeaked to stop them pecking each other.
2
3
Stocking density can vary according to the age and weight of the birds. Industry and

turkeys, for example, are stocked up to a maximum of 25kg per sq m.

The birds are checked by stockmen two to three times a day. If birds are found to be injured they can be isolated or put down depending on the seriousness of the injury.

government standards use a formula based on the weight of the birds. They recommend a minimum floor area per bird, in enclosed housing, of 0.026 square metres per kilogram - a maximum stocking density of 40kg per square metre. The RSPCA Freedom Food scheme

These measures are taken to control anything entering the sheds - including staff, feed and litter. Staff must wear protective clothing that is adaptable to such measures. This is usually a process of scrubbing with disinfectant and foot dips on entering and leaving each shed, and between different sheds.

The feed is heat-treated and stored in secure bins and checked and change between flocks. The litter is also removed and the sheds are cleaned and tested for pathogens such as salmonella and E-coli after the turkeys are removed for slaughter.

6														
U	 	 	 	•				 	٠	•				

Turkeys can live up to 10 years in the wild. Indoor-farmed turkeys are usually slaughtered between 12 and 21 weeks. Many free-range operations insist on a minimum of about 20 weeks.

Teams of "catchers" are used to collect the birds from the sheds for slaughter. The birds are put into crates for transfer to the abattoir - which may be on the same site.

If not, the crates - or modules - are loaded onto lorries. Each module has a roof and there must be side curtains on the lorry to protect them from the elements. Out of the 850 million birds transported each year, the mortality rate is less than 0.19%, according to the British Poultry Council. Lorries must be sprayed down after each operation.

The birds are inspected by a government vet before being killed.

Task 1

Read the article and match the subtitles with the correct paragraphs. Write your answers in the table according to the example (0). There is one extra subtitle you don't need to use.

Subtitles:

- A. Introduction
- B. Veterinary care
- C. Biosecurity
- D. Space
- E. Stockmanship
- F. Conditions
- G. Feed
- H. Abattoir

0	1	2	3	4	5	6
A						

Task 2
Read the text and complete the table with your short notes (based on the text) with no more than 6 words, according to the example (0).

	NOTES
Maximum weight of male turkeys at 20 weeks	0. 25kgs
Measures to prevent aggression in turkeys	7.
	8.
Type of accommodation for turkeys	9.
	10.
Maximum stocking density in intensive rearing	11.
Disinfection methods for staff in and around sheds	12.
around should	13.
Disinfection methods for feed	14.
Forbidden feed for turkeys	15.

7. Drugs in poultry farming

- 0. A range of drugs mainly antibiotics and anti-parasitic treatments are used routinely in intensive poultry farming. They are given to the birds in their feed or water.
 - The Soil Association says it is most concerned about drugs used to control intestinal parasites in poultry and game birds. These include nicarbazin, lasalocid and dimetridazole. Nicarbazin and lasalocid, both used to treat a parasitic infection known as coccidiosis, are given in feed. Dimetridazole is another anti-parasitic drug, given to birds in their water.
- 1. The drugs are given to poultry in the first three weeks of life but must be withdrawn before the birds are sent to slaughter or before they lay eggs.
 - Most drugs must be stopped for eight days before the animal's meat or eggs enter the human food chain. This should stop any traces of medicine, which might remain in the animal's body, from getting into human food.
- 2. The latest Soil Association investigation focuses specifically on the antibiotic lasalocid. The chemical is too toxic to ever be used in medicine and has been shown to have strong effects on animals at low levels.
 - Rabbit hearts contract when exposed to the drug a discovery which prompted an experiment using human heart muscle. Rapid contractions were observed even an hour after the drug had been given.
 - Alison Craig, of the Soil Association, said "Even low levels of lasalocid are dangerous to mammals and this raises concerns about how toxic the drug is to humans.
 - "We know that this drug hangs around in the body, so we could be accumulating it every time we eat eggs or chicken."
- 3. The Veterinary Medicines Directorate (VMD), an executive agency of Maff, is responsible for monitoring for the presence of residues in meat and eggs.
 - According to the VMD, in 1999, 8,063 poultry samples were tested for all likely contaminants. Of these 99.3% were "free of detectable residues".
 - But the Soil Association disputes these figures. "Government regulators have routinely provided misleading information in their public statements about the incidence of drug residues in chicken meat and eggs," says a new Soil Association report.
 - "They maintain that 99% of poultry meat and 97% of eggs are free of detectable residues. However, detailed analysis of the data on which their summaries are based suggests the actual levels could be up to 2,000% higher."
 - But Alastair Johnston of the British Veterinary Poultry Association (BVPA) says the UK is doing its best to minimise the use of anti-parasitic and antibiotic drugs. He told BBC News Online: "As long as we aim to obey the withdrawal periods and maintain the standard of regulation concerning poultry drugs and antibiotics in the UK, then I think the poultry and eggs in the UK are the safest in the world."
- 4. The Soil Association says that the use of such drugs "has its roots in intensive farming methods". The report continues: "In this case, the specific problems are the unnatural feeding practices and unsanitary, overcrowded, moist, dark, confined conditions in which large numbers of chickens are kept conditions under which most would undoubtedly perish without drugs to keep them alive until slaughter."
 - But Alastair Johnston, of the BVPA, says the health and welfare of birds would deteriorate if anti-parasitic and antibiotic products were not used, even in free-range conditions.
 - "You would use less of these products with free range chickens," he told BBC News Online. "But you would still need to use them to control disease."
 - "And would the public accept the consequence in terms of cost in the supermarket?" he adds.

Read the article and match the questions with the correct paragraphs, where you can find the answers. Write your answers in the table according to the example (0). There is one extra question you don't need to use.

Questions:

- A. How much of the poultry is free of contamination?
- B. Why are the drugs needed?
- C. What are the rules of feeding drugs to the birds?
- D. Why is lasalocid a potential problem?
- E. Who opposes the use of these drugs?
- F. What drugs are used in poultry farming?

0	1	2	3	4.
E				

Task 2
Read the text and complete the table with your short notes (based on the text) with no more than 3 words, according to the example (0).

	NOTES
main types of medicine given to poultry	0. antibiotics
	5.
the way they are given to poultry	6.
	7.
the time when giving drugs to poultry must be stopped before human consumption	8.
name of organization, saying British poultry is healthy to eat	9.
reasons why antibiotics and anti-parasitic drugs are necessary	10.
	11.
the amount of drugs used in free range poultry farming	12.
lasalocid was tested on	13.
	14.
effect of lasalocid in the tests	15.

8. Sheep is sold for £230,000

It is hoped Deveronvale Perfection, an eight-month-old Texel tup, will be able to father generations of healthy offspring after being sold for a record-breaking sum.

A Banff-based sheep farmer has paid almost quarter of a million pounds for one tup, and in doing so set a world record for the most money paid for a sheep. The sale of eight-month-old Texel tup – the farming term for an uncastrated male – called Deveronvale Perfection went through the Lawrie & Symington livestock auction house for a record-breaking price of £231,000.

A packed auction ring at Lanark Mart fell silent as auctioneer David Lowry took 10,000-guinea bids before dropping his gavel on the £231,000. It eclipsed the previous record of £205,000 paid in 1989 in Australia for a Merino tup. It also smashed the UK and the Texel breed record which had stood at £128,000 paid for Tophill Joe in 2004 – also set at the Lanark auction.

Not surprisingly, Jimmy Douglas described his purchase as the best lamb he had ever seen, with "a great body and a strong back".Mr Douglas is known within the sheep-farming world for his pedigree flocks, and was also responsible for paying a record amount for a Suffolk ram in Edinburgh earlier this year, when he bought a tup for £66,150.

Meanwhile, Graham Morrison, of Banff, who sold the sheep, said of the sale: "He's the best lamb I've ever bred and the price surpassed my wildest dreams."

Andrew Arbuckle, The Scotsman's agricultural writer and former farmer – who was present at the sale – said that while to outsiders it may seem an absurd amount to pay for a single animal, sheep farmers will look upon it as a canny investment. "Before artificial insemination came along, a good tup would serve 80 to 100 ewes, but with the use of semen and modern technology, this number can be multiplied. This particular tup is going to be one of the top sheep in the country."

Mr Arbuckle said the money paid for Tophill Joe was recouped by his buyer to the tune of £1 million, as it fathered lambs both by artificial and normal insemination. He added that, in selecting Deveronvale Perfection, Mr Douglas would have been looking for specific attributes of the sheep. "I saw Deveronvale - it's an incredibly chunky animal with a tremendous back end on it and that's where the valuable cuts of lamb are. If he can transfer those to its progeny, the farmer will get his money back."

Texel sheep are used in cross-breeding to add meat to flocks. However, the astronomical price paid by the farmer far outstrips the average price of a Texel tup, which is in the region of £1,700.

Texel Sheep Society chief executive John Yates said the ram would be a long-term investment. "It comes down to genetics," he said. "These farmers are looking at the decades of sheep that this blood line can produce. It went to a phenomenal level today, it surprised even us, but when people have that much enthusiasm for a breed, they will stop at nothing."

Mr Arbuckle cautioned, however, that the breeder was taking a risk: "There is no guarantee in this job. He will have to breed some of the sheep first, see how they look.

It wouldn't be the first time a record-breaker failed to perform -40 years ago, a huge sum was paid for a sheep and it was found to be infertile."

Task 1 Read the text and provide short answers to the questions according to the example (0), in no more than 2 words.

QUESTIONS	ANSWERS
How much was the Texel tup sold for at	0. £231,000
the auction?	
Where was the auction held?	1.
Who was the original owner of the record	2.
breaking sheep?	
What insemination technologies are to be used with the tup?	3.
	4.
What are the positive attributes of the tup sold?	5.
	6.
What is the average price of Texel	7.
breeding tups?	0
What example does the article give for a past breeding failure?	8.

Task 2
Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE OR FALSE
0. The record breaking tup is 8 months old.	T
9. The tup sold is of a Deveronvale Perfection breed.	
10. The previous record price for a Texel ram was £66,150.	
11. Mr. Douglas tends to invest large sums in improving his pedigree flocks.	
12. Both farmers and outsiders think it is an absurd price for an investment.	
13. This tup would serve a lot more than 100 ewes with the help of modern technology.	
14. By introducing this Texel tup, Mr. Douglas' flock could produce more meat.	
15. The Texel Sheep Society warned that this investment might turn out to be risky.	

9. Farmers' markets

A. Introduction

0. Farmers' markets, with their emphasis on fresh, seasonal produce and their hands-on approach to shopping, are a magnet for food-lovers, therefore, have become incredibly successful. The first British farmers' market opened in Bath in 1997 (farmers' markets as we know them were pioneered in the United States) and there are now more than 500 operating throughout the country. So, how are they different from other forms of shopping?

1. Actually, there is no legal definition of a farmers' market in Britain. There is, however, a common spirit that all farmers' markets ought to share. In general terms, the stalls should be run by the farmers and food-producers of the local area, who are selling their own high-quality produce. Customers should be able to ask the stallholder about the goods, increasing the buyer's level of information and, therefore, adding to the sense of trust between buyer and seller.

Such direct selling has wider implications. It helps make small-scale, environmentally aware methods of farming and food production, such as organic, more viable, because the producer gets more than they would by selling through a shop.

The benefits of buying at farmers' markets are clear: you can find just-picked, seasonal vegetables, juices made from specific varieties of fruit, free-range and organic meat and eggs, and specialities such as regional cheeses - things you can't always expect to find in supermarkets. You can also taste many of the goods on offer before you buy.

••••••

2. These are not always clear, however. Around half of the UK's markets are members of FARMA, the National Farmers' Retail and Markets Association, which aims to maintain the true spirit of the movement. Markets that are FARMA members will display a sign with the official logo. FARMA insists on particular criteria: goods must come from a defined local area; and they must be grown, reared, processed or caught by the stallholder. The organisation is shortly to introduce a scheme of producer inspection to ensure that goods are what they claim to be.

Some markets go even further. The organisers of the ten markets run by London Farmers' Markets have always visited every stallholder and insist, for example, that cheeses are made using milk from the producer's own farm. Organiser Mark Handley believes it's important to offer shoppers a different choice from the more conventional markets and shops or risk losing customers. "There's a pattern across the county where farmers' markets don't enforce the rules and they gradually neglect the principles," he warns. "The customers come but they don't come back."

•••••

3. Even though farmers sell direct to the consumer, farmers' markets are not necessarily cheaper than shops if the produce is of a higher quality. A slow-reared chicken on natural foodstuffs for 20 weeks will cost more than one forced through quickly in six weeks in a shed and fed an unnatural diet. But you can get bargains, especially if you are shopping seasonally. And you can ask the farmers themselves about their goods to see if they are worth the money or not. Many proudly display production details on their stalls.

•••••

4. The prospects look bright. In fact, Gareth Jones of FARMA says that making regular farmers' markets more frequent is 'vital'. 'We can't maintain our momentum without making sure the offer is there every week. Otherwise people won't be able to buy their fresh fruit and veg and change their shopping habits.'

One of the limitations on farmers' markets, however, is the number of producers and the amount of time they can spare to run their stalls rather than actually farming. This is one

reason for the increasing popularity of farm shops and the recent small start of a new style of shop, the permanent farmers' market, with regular opening hours.

.....

5. The FARMA website lists markets that are members of their organisation or have been independently certified. Most markets run monthly or fortnightly, or even weekly in places such as London, Bristol, Exeter and Cardiff.

Task 1

Read the article and match the subtitles with the correct paragraphs. Write your answers in the table according to the example (0). There is one extra subtitle you don't need to use.

Subtitles:

- A. Introduction
- B. How to find farmers' markets
- C. What are farmers' markets?
- D. What about price?
- E. The future of farmers' markets
- F. What about quality?
- G. Are there standards?

0	1	2	3	4	5
A					

Task 2
Read the text and complete the table with your short notes (based on the text) with no more than 6 words, according to the example (0).

	NOTES
The opening date of the first farmers' market	0. 1997
Description of farmers' market	6.
Way of selling produce in farmers' markets	7.
Type of agriculture they especially promote	8.
Advantages of farmers' markets for customers	9.
	10.
	11.
	12.
Organization behind farmers' markets	13.
Condition for expanding farmers' markets	14.
Future plan to check origin of produce	15.

10. Will Supermarkets Be Super for Small Farmers?

Multinational supermarket chains are revolutionizing food retailing in developing countries, and while consumers are flocking to the new stores, developing-country farmers can have a hard time getting into the supply chain.

All over the developing world, from Accra to Rio de Janeiro to Ho Chi Minh City, a typical shopping day used to include stops at an outdoor market for fruits, vegetables, and meat, at a "mom-and-pop" store for rice and cooking oil, and perhaps at another street vendor selling some spices. Now supermarkets in cities throughout Africa, Asia, and especially Latin America offer all these items and thousands more under one roof, and new stores are opening fast in country after country.

Consumers are happy, and the market share of supermarkets in food retailing is rising dramatically. According to Tom Reardon, professor of international development and agribusiness/food industry at Michigan State University, "People are voting lightning-fast with their feet, pesos, or bahts for supermarkets." But this retail revolution means serious risks for the developing-country farmers who have traditionally supplied the local street markets.

"Supermarkets require large quantities of goods of consistent quality and quantity," says David Hughes, professor of agribusiness and food marketing at the Centre for Food Chain Research of Imperial College London. "The growth of supermarkets is good news for big farmers and efficient, well-organized farmers. For others it can be troublesome."

Creating an Opportunity for Small Farmers

For small farmers, getting into a supermarket's procurement system may mean investing in irrigation, greenhouses, trucks, cooling sheds, and packing technologies, among other things. Farmers need to be able to sort and grade their produce, meet timing and delivery requirements, and document their farming practices. In many cases farmers simply do not have the knowledge or the money to meet these requirements on their own. "There is a serious need to assist small farmers to take advantage of these opportunities posed by the supermarket chains," says Jacques de Graaf, a consultant at FAO who has studied a partnership program between Shoprite and a group of small farmers in Zambia.

Some innovative programs are bringing farmers and supermarkets together, for the benefit of both. Dave Weatherspoon of Michigan State University's Partnership for Food Industry Development Project, funded by the U.S. Agency for International Development, is helping connect small producers in South Africa's Eastern Cape Province with Pick 'N Pay, the country's second largest supermarket chain. The farmers have agreed to a three-year growing project in which they supply squash products and sweet corn to the chain. Pick 'N Pay specifies what varieties the farmers must plant, the farming practices and processing methods they must use, and exactly when they must deliver the produce. In return for participating in this rigorous program, the farmers gain access to a profitable and reliable market.

"You have to do what it takes to have a first-quality product," says Weatherspoon. "It requires heavy investment and tight management. The supermarket consumer doesn't understand that the irrigation equipment broke down, for example. She just wants the squash."

Although the relationship between the small Eastern Cape farmers and the supermarket chain, which is used to dealing with large commercial farmers, takes time to develop, the technical and organizational assistance offered by programs like Weatherspoon's can make success possible. "When the Pick 'N Pay people first saw the high quality of the squash our farmers produced, they were surprised," he says.

In some cases, however, supermarkets may need incentives to engage in these partnerships with farmers, and government can play a role here. "The policy environment of liberalization allowed for foreign investments in supermarkets," says de Graaf. "Now countries need to say to the supermarkets, we want to stimulate development of the local population."

Task 1
Read the text and provide short answers to the questions according to the example (0), in no more than 3 words.

QUESTIONS	ANSWERS
Example: In which parts of the world are supermarkets gaining huge popularity?	0. In the developing world.
What kinds of shops were used according to the previous shopping habits?	1.
	2.
	3.
In what way can small farmers fail as suppliers for supermarkets?	4.
	5.
What changes do farmers need to carry out in their administrative practices?	6.
What kind of partners did the Witherspoon project connect?	7.
	8.
What type of help did the Witherspoon project provide?	9.
	10.

Task 2
Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE OR FALSE
0. To be supermarket suppliers, small farmers need to invest in new technologies as well.	T
11. The FAO has organized projects to bring farmers and supermarkets together.	
12. Supermarkets gain more from the Weatherspoon project than the small farmers involved.	
13. The leaders of the supermarket chain in the Weatherspoon project were greatly surprised by the positive results.	
14. Governments should motivate supermarkets to work with small farmers.	
15. Liberalisation needs to be balanced with the protection of the local producers in the developing countries.	

Environment protection

1. Under the Hole in the Sky

- **0** Maria Alvarado can tell whether it's a green-light day or an orange-light day or, as happens more frequently these days in the Chilean town of Punta Arenas , the world's most southerly city, a red-light day. Alvarado, 35, works 12-hour shifts in the streets of Punta Arenas keeping track of parked cars. She knows what it means when the sky turns white and the windows and the sea becomes blinding. It means the hole in the Earth's ozone layer is right overhead: it's a red-light day.
- 1 To the rest of the world, the ominously expanding Antarctic ozone hole was dispatched with the worldwide ban on the use of ozone-depleting substances in 1987. To the 120,000 residents of Punta Arenas, the ozone-hole is a local nightmare. Each spring it still swells to about the size of North America. As variable as the weather, the hole makes sudden visits to the city. For days at a time, the sun's harsh ultraviolet rays, with no ozone shield to stop them, beat directly down on residents.
- 2 A few decades ago sunburns and skin cancer were virtually non-existent in this cloudy, windy region. The expanding ozone hole changed all that. Skin cancer has soared 66 percent in the past seven years. Since UV-related disorders take decades to surface, the true impact may not be known for decades. "It's like being placed on top of a high mountain without any time to acclimatize." says the city's only dermatologist.
- 3 In 1998 health department officials devised the "solar stoplight" to give residents warning of intense periods of UV radiation. From September to December they activate actual stoplights in schools and businesses and issue updates to newspapers, television and radio stations. The solar stoplight has four colors: green (normal), yellow (wear a hat and sunglasses), orange (apply sunscreen) and red (stay in the shade "as much as possible"). But the vast majority of residents ignore the color-coded warnings. A recent survey revealed that more than 60 percent of residents have never used sunscreen and only 42 percent even own sunglasses.
- **4** To raise awareness, local authorities have organized workshops for people who work outdoors. The health department's ozone education program tells citizens that they should learn to live with the ozone hole as if "it's our friend." "There is nothing else they can do, " says director Lidia Amarales. More stoplights and education projects are planned, but resources are limited.
- 5 Chilean government officials and environmental groups are calling on the international community to dole out funds for monitoring of and research on the ozone's impact on the region's people and the ecosystems. "The world definitely owes some of these countries economic relief," says Marco Pinzon, coordinator of the UN's Latin America ozone program. Industrial nations, after all, caused the ozone loss in the first place with their use of refrigerants, aerosol sprays made with CFCs and other ozone-depleting substances. Although worldwide consumption of CFCs has fallen by 80 or 90 percent, the ozone hole won't begin shrinking for at least another five years and won't recover fully until 2050, scientists say. It may take longer still, say environmentalists, if the protocol isn't modified to include new ozone-depleting substances not covered in the treaty, or if the worst-case predictions of global warming are true.

Read the article and match the subtitles with the correct paragraphs. Write your answers in the table according to the example (0). There is one extra heading you don't need to use.

SUBTITLES

- A. Training for the locals
- B. A car park attendant's observations
- C. The responsibility of the developed world
- D. The establishment of a warning system
- E. Chile's special geographical situation
- F. The health impacts of the ozone hole
- G. Consumption of CFCs in Chile

0	1	2	3	4	5
В					

Task 2
Read the text again and provide short answers to the questions according to the example (0), in no more than 7 words.

QUESTIONS	ANSWERS
Why is it dangerous to go out in Punta	0. the ozone hole is over the city
Arenas on a red-light day?	
What harmful health effect of the radiation	6.
can be seen today in Chile?	
What measures has the health department	7.
taken to make residents better-informed?	
	8.
How does the population react to the advice	9.
issued by the authorities?	
What should the developed countries do to	10.
help Chile and countries in a similar	
position?	

2. The Rain Farm

- 0) Northern Queensland, Australia, is known for its beautiful ocean reefs, man-eating crocodiles, and virgin rain forests. This East-Coast area receives Australia's highest amounts of rainfall. The region has also been making headlines as home to the world's first rain farm. Close to Innisfail, Queensland, where the rain forest areas remain untouched and protected by the World Heritage Authority, a group of private investors run a rain farm on 580 acres of mountainous terrain.
- 1) "Simply put, we collect rainwater at our farm and bottle it to sell to customers, mainly in Australia," says Perry Grewar, managing director of Rainfarms Australia Ltd. "However we are very particular about the kind of rainwater we gather. We only collect downpours from tropical showers that come in off the ocean along our East Coast." Moisture-laden clouds travel over thousands of miles of ocean until they collide with Queensland's highest mountain range and unload their bounty over the rain forest. "We don't collect water from rain clouds that come in from the west because the rain might have dust contaminants from traveling over the land," Grewar explains. "We also don't collect rain that results from cyclones, because it might have a high sodium content that would be undesirable".
- 2) To gather the rain, the company has installed more than 5,000 specially designed collectors up the side of a mountain. Made from food-grade plastic, each collector panel is about six feet long. The collectors, which are all connected, are turned upside down when not in use. This keeps foreign material such as leaves, bird droppings and dust impurities from settling in the collection bins and contaminating rainwater. When the right kind of rain comes along, the collectors are turned over, either manually or automatically, to catch rain. Each panel collects two pints of rainwater for each millimetre of rainfall. The water is passed through an initial filter to remove any foreign matter before entering the collection system.
- 3) This water then enters foodgrade polypipe and flows by gravity down to a pre-storage filtration system that removes particles more than 10 microns in size. Water is held in a 660,000-gallon storage system. Next, 5- micron particles are filtered out of the water. Upon entering the bottling factory of Rainfarms Australia, filters remove foreign material sized to 0.2 microns. "This is actually a high level of filtration that removes virus and bacteria contamination," Grewar explains. "It's quite an incredible process. In addition, we use ultraviolet light to ozonise the water to absolutely guarantee that nothing foreign gets through. Consumers get 100-percent natural rainwater".
- 4) "From the time rain falls from the sky in north Queensland, we can collect, bottle, package and place the water in the back of a truck in 20 minutes," Grewar adds. "Then we begin the job of distributing it to our fast-growing list of customers".

Read the article and match the subtitles with the correct paragraphs. Write your answers in the table according to the example (0). There is one extra heading you don't need to use.

SUBTITLES

- A. To produce drinking water is a fast process
- B. The procedure to guarantee good quality water.
- C. The technology to collect the right kind of rain.
- D. Northern Queensland boasts a privately run rain farm.
- E. The health benefits of rain water.
- F. The collected rain is carefully controlled.

0.	1.	2.	3.	4.
D				

Task 2

Read the text again and provide short answers to the questions according to the example (0).

QUESTIONS	ANSWERS
Who runs the farm?	0. A group of private investors
Why have they chosen Queensland to house the rain farm?	5.
	6.
What sort of rainwater do they collect?	7.
What sort of rainwater is not collected?	8.
	9.
Why are the collectors kept upside down when not in use?	10.

3. Deluge of criticism greets irrigation plan

EGYPT plans to divert up to the tenth of the flow of the Nile to irrigate its Western Desert. But hydrologists say that this mammoth engineering project, which will cost some £1.2 billion and take twenty years to complete, is a waste of water and money.

Currently, Egypt controls the flow of the Nile at the Aswan High Dam. The dam can hold back the rains that come with the summer flood – around 85 cubic kilometres of water – and release it gradually. This allows farmers in the Nile valley and its delta to grow crops all year round.

The new scheme aims to repeat that success in the Western Desert's New Valley. Between 2 and 9 cubic kilometres of water a year would be pumped out of the reservoir, through a 5-kilometre tunnel, into a canal. The water would have to be raised 55 metres, requiring the world's largest pumping station. The scheme was unveiled last week by President Hosni Mubarak at Toshka, which lies on the banks of the reservoir behind the Aswan Dam.

Hydrologists familiar with the area cannot understand Mubarak's decision." This scheme is unfounded, a national fantasy", says Tony Allan of the University of London's School of Oriental and African Studies. "The reservoir is now full for the first time since 1980. So they feel they have to use every drop of water." But he points out that in 1987, 20 years ago, a drought meant that a quarter of the farmers in the Nile valley came within a few weeks of being denied water for irrigation. "Both Sudan and Ethiopia are planning to build more dams upstream, so Egypt is going to have less water, rather than more," adds Declan Conway, a hydrologist at the University of East Anglia in Norwich.

Farouk El-Baz, an Egyptian hydrologist now at Boston University in the US, says it makes sense to irrigate good soils close to the reservoir. But he does not believe that the canal is justified. The plan is to build an 800-kilometre canal running north to the oasis at El Kharga and then northwest to Farafra. "The canal would suffer big evaporation losses. Even worse, this is an area of very large moving dunes. You would need an enormous programme to stop the canal filling with sand," says El-Baz.

Egypt has made repeated attempts to irrigate its deserts since the 1960s. But the results have been a disappointment. A major problem is that irrigated areas tend to become waterlogged. One scheme was tried in the 1960s, in an area called Liberation Province, west of the Nile delta, brought water to 350,000 hectares of desert. But only a third of this area was still producing crops by the end of the 1970s.

El-Baz warns that the new scheme is likely to face similar problems because most of the New Valley oases are in depressions with poor drainage. Fields would become waterlogged and pools would become breeding grounds for mosquitoes," he says.

Allan and other experts consulted by *New Scientist* say that Egypt would be better advised to invest in efforts aimed at using water more efficiently in the existing irrigated areas in the Nile delta, where soils and drainage are better.

Read the text and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

	STATEMENTS	TRUE or FALSE
0.	The article is against the new Nile irrigation plan.	T
1.	The interviewed hydrologists agree in their criticism of the plan.	
2.	The biggest problem is the huge cost of the scheme.	
3.	The solution is to manage irrigation more efficiently.	

Task 2
Read the text again and complete the table with your short notes (based on the text) with no more than 5 words, according to the example (0).

PARAMETERS OF THE PROJECT			
location of the new dam	0. New Valley, Western Desert, Egypt		
expected volume of water / year	4.		
height of water elevation	5.		
PROBLEMS TO BE EXPECTED			
regarding the Nile	6.		
regarding the canals	7.		
	8.		
regarding the soil	9.		
regarding the remaining pools	10.		

4. Protection needed for 'marine Serengetis'

Efforts to conserve threatened marine creatures such as sharks and turtles should concentrate on so-called hotspots of biodiversity, according to a new scientific study.

Researchers from Germany and Canada discovered that certain areas of the ocean seem to teem with many different species and that these locations should be developed as marine reserves.

The scientists' modelling shows that preventing fishing in these "parks" would be the most efficient way of enhancing the survival prospects of those fish and other marine animals now threatened with extinction.

The team, led by Dr Boris Worm from the Institute for Marine Science in Kiel, publishes its findings in the journal Proceedings Of The National Academy Of Sciences (PNAS).

Plundered seas

It is well known that on land, some places are far richer in species than others; a couple of examples are tropical rainforests and savannah watering-holes. Many of these areas have now been turned into protected parks.

But Dr Worm and colleagues have shown this concentration of life to be true also of the oceans. Although scientists have long suspected this to be the case, the new study is said to be one of the first to put some hard data to the idea.

"This is like the watering-holes in the Serengeti, where you have lions and leopards and gazelles and wildebeest and all species congregating at a relatively small spot," Dr Worm said.

"We've looked for these spots in the open ocean," he told BBC News Online.

And they found them. By using records compiled over many years by scientific observers on long-line fishing boats, Dr Worm's team discovered that there are places in the ocean that really are the marine equivalents of the Serengeti, rich in species like tuna, swordfish, shark and billfishes.

Many of these organisms are under threat of extinction - some of the large predatory species have seen their numbers decline by 90% in living memory.

Wasted effort

The hotspots tend to lie in regions where the tropical and temperate oceans meet, and coincide with features like reefs and underwater mounts where there is also a diversity of plankton and smaller fish.

"We see the ocean as a seemingly uniform, monotonous landscape which is just plain water," Dr Worm said.

"We find out more and more that this is not true. The ocean has structure; this structure is imposed by differences in temperature, in salinity, in different hydrographic features."

Dr Worm's team has run computer models showing that locating marine reserves in hotspots would be a highly efficient way of preserving the spectacular predators of the open ocean.

"If you preserve the wrong area, if you close it off from fishing - fishermen go elsewhere and then they may go to an area which has high diversity and where they cause increased harm.

"If you protect the right areas, you do conservation most efficiently."

Read the text and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE or FALSE
0. A lot of people thought that the fauna of the ocean is the same everywhere.	T
1. Some species of ocean predators are nearly	
extinct.	
2. The best way to protect the oceans' wildlife if	
the same protection is given to all the territories.	
3. Computer models help to locate hotspots in the	
ocean.	

Task 2

Read the text again and provide short answers to the questions according to the example (0).

QUESTIONS	ANSWERS
What territories are mentioned as areas especially rich in wildlife?	0. Ocean hotspots
	4.
	5.
Where can we find areas of high biodiversity in the ocean?	6.
	7.
	8.
	9.
What do differences in water	10.
salinity, temperature and in	
hydrological features determine?	

5. Red alert over rare species

The well-known "Red List" that details which species are threatened with extinction is inaccurate, according to a new assessment. It concludes the list fails to reflect the true threat to species, by not taking full account of the threat posed by people.

The Red List, which is compiled by the World Conservation Union (IUCN), estimates a species' risk of extinction mainly on the basis of its population size, rate of decline and geographic range.

But Alexander Harcourt and Sean Parks at the University of California, Davis, argue that this is not enough. They compare an endangered species to a house that has been left unlocked. The house is vulnerable to burglary, but it only becomes threatened when there is a burglar nearby. In the same way, a small population of animals susceptible to extinction only becomes actively threatened when it is being poached or its habitat is destroyed. Harcourt and Parks advocate modifying the Red List criteria to include local human population density.

Although a large number of people nearby may not in itself be a threat, they argue that hunting, pollution and habitat destruction, for example, are all likely to increase as people encroach on wildlife. What is more, data on human density is readily available. "We have the numbers, why not use them?" says Harcourt.

Low to high

To illustrate their point, the researchers reassessed 200 primate species from the 1996 Red List. They found that 17 species designated as being at relatively low risk by the Red List should now be reassigned as high priority. Two such species are Wied's tufted-ear marmoset (Callithrix kuhlii) and the golden lion tamarin (Leontopithecus rosalia) from South America. Contrary to the expectations of many, the researchers also found that two high-profile species, the gorilla and the pygmy chimpanzee, or bonobo, should be downgraded to a lower level of threat.

But Craig Hilton-Taylor, Red List Programme Officer based in Cambridge, England, says that the IUCN has already introduced a specific classification system for threats such as human density. The system runs in parallel to the main Red List classification. Besides, part of the Red List's value is that you can make comparisons with past assessments, he says, and modifying the criteria would make this impossible. "We've been asked by everyone, please don't change the system again," says Hilton-Taylor.

Harcourt maintains that making explicit threats part of the criteria is not only more accurate, it may also help highlight future problems. Matt Walpole, a conservation researcher at the University of Kent at Canterbury, England, agrees: "Where [population] data is lacking, it might be a useful way of flagging up potentially threatened species."

Read the text and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE or FALSE
0. According to American researchers, the Red List needs to be re-assessed.	T
1. Harcourt and Davies would like to add one more risk factor to the Red List.	
2. Researchers in Cambridge, UK, oppose the changes only because they claim it unnecessary.	
3. As a result of the new classification, all endangered species had to be put into a higher risk category.	

Task 2
Read the text again and complete the table with your short notes (based on the text) with no more than 4 words, according to the example (0).

	NOTES
Previous criteria for assessing the risk of a species' extinction	0. its population size
1	4.
	5.
New criterion to be included	6.
Advantages of new criterion	more exact
	7.
Forms of danger humans can cause to wildlife	8.
	9.
	10.

6. What are eco-plastics?

Every year, U.S. landfills handle tens of billions of tons of plastic. And in this case "handle" means "do nothing with" -- plastic just sits there undisturbed for hundreds of years. The microbes that degrade other trash don't want to do anything with plastic, the environmental danger, which is fuel based, requires lots of energy to produce and it clogs up landfills for what might as well be forever.

The danger of plastic-laden landfills has sparked the move from plastic to paper grocery bags, cardboard instead of plastic for prepared foods and products like the exclusive-to-Japan Toyota Raum -- a car whose interior boasts some "eco-plastic" components.

Eco-plastics seem to be the next step in greening our lives. They come in all different forms. Some are simply plastics made all or partially from recycled traditional plastics. Traditional petroleum-based plastics are the kind that sits in landfills for centuries. These "eco-plastics" aren't any more biodegradable than the non-recycled kind, but they have the environmental benefit of keeping a lot of that non-biodegradable stuff out of landfills in the first place.

But when people talk about environmentally friendly plastic, they're more often talking about "bioplastics," a very different group of materials. Bioplastics are made from biological material instead of from fossil fuels, and they're supposed to have very different properties from traditional plastics. There's also a pretty new subgroup of miscellaneous plastics made with synthetic materials that might react differently in landfills from the regular stuff.

Green features of different types of eco-plastics

Recycled traditional plastic is composed of varying percentages of "virgin" (non-recycled), traditional plastic. The eco feature here is that all that virgin plastic is reused to make your lawn furniture instead of being thrown into a landfill. This type is no more biodegradable than the original, though.

Bioplastic is made from plant material and it should degrade relatively quickly in landfills and, in some cases, compost bins. The most common forms are starch-based (often corn starch), like polyactide (PLA) plastic, which is the most common form. You'll find PLA in things like biodegradable food-service trays and disposable cups. Polyhydroxyalkanoate (PHA) plastic uses starch also, typically from corn or sugarcane or beetroot, and it shows up in things like cosmetics bottles. Cellulose-based plastics are made of cellulose, the main component in plant tissues. You'll also find bioplastics made from soy protein or lactic acid.

Finally, there are several recent plastics innovations that make up the "miscellaneous" category. ECM Biofilms has come up with a way to add microbe-attracting pellets during the manufacturing process for traditional plastics, causing the end product to degrade faster in landfills.

While all of these eco-plastics offer some type of environmental benefit over traditional plastics, the issue ultimately comes down to theory versus practice. In theory, these plastics are biodegradable. But since they're quite new, at least in industrial terms, the long-term research is still lacking.

Task 1
Read the text and complete the table with your short notes (based on the text) with no more than 7 words, according to the example (0).

	NOTES
Yearly amount of plastics in US landfills	0. billions of tons
Environmental danger of plastic production	1.
	2.
Alternative wrapping materials used instead of plastic	3.
Disadvantage of recycled plastic	4.
Characteristics of bioplastic	5.
	6.

Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE or FALSE
0. Japan has come up with a car made of eco-plastic elements.	T
7. Corn and sugarcane are typically used for polyactide plastic. (PLA).	
8. Bioplastic is produced by extracting microbes from traditional plastics.	
9. Several new groups of ecoplastics are under development.	
10. The long-term behavior of eco-plastic needs to be monitored.	

7. Future of Sellafield plant in doubt

British Nuclear Fuels (BNFL) has acknowledged that the Sellafield nuclear plant in Cumbria is to shift focus from reprocessing spent nuclear fuels to managing radioactive waste. Its statement comes in response to a newspaper report which suggested that Sellafield's Thorp reprocessing plant — which converts spent fuel rods into uranium and plutonium - would close by 2010. Closure would have both symbolic and practical implications for the future of the nuclear industry in Britain.

Nuclear reprocessing was once seen as the key to almost unlimited power generation. Britain has built its nuclear industry largely on reprocessing waste for other countries - countries which may now have to reconsider the future of their own nuclear industries, as they cannot deliver their waste to Britain.

Hopes dashed

In its statement, the BNFL said its current order book of contracts extends to 2010 - but refused to confirm that was the date envisaged for the closure of Thorp's reprocessing activities. "Although the focus of the Sellafield Site is shifting from commercial reprocessing to clean up and managing the historic legacy, BNFL has made it absolutely clear that all existing reprocessing contracts will be honoured and fulfilled," it said.

Any future role for Thorp, it said, will depend "upon the wishes of our customers, the Nuclear Decommissioning Authority (NDA) which will take over the ownership of the site in 2005 and ultimately the sanction of government". David Bonsor, acting chief executive of British Nuclear Fuels, told BBC News 24 that 2010 was "our current planning assumption limit". He said: "If customers want business beyond 2010, then that's a decision for them to come to us and ask us for that business and we'll talk to the NDA."

The great hopes once invested in nuclear power generation from reprocessing have foundered on high relative costs, public fears about safety and proliferation, and difficulties in disposing of highly radioactive waste. BNFL itself has liabilities now estimated at £41bn - forcing it to hand over ownership to the NDA.

Anger

Currently there are two reprocessing plants at Sellafield - the Magnox reprocessing plant, for fuel from the first generation of British reactors, and Thorp, which opened as a nuclear reprocessing plant in 1994, used mainly for reprocessing waste delivered from abroad.

Martin Forward, spokesman for Cumbrians Opposed to a Radioactive Environment (Core), said the Thorpe plant was hailed as having a lifespan of at least 25-30 years. He said: "We would be pleased if reprocessing stopped sooner than BNFL wanted it to and moved towards a clean-up, which is desperately needed.

"We are angry as well. When the plant was in the planning stage, BNFL said there was a massive amount of business out there, but the reality is that they have never managed to pick up more business for the plant."

Task 1
Read the text and provide short answers to the questions according to the example (0), in no more than 7 words.

QUESTIONS	S ANSWERS	
0. How many nuclear plants are there in Sellafield?	Two	
1. Which plant is going to be closed down?		
2. How are foreign countries affected by the closure?		
3. How profitable is nuclear industry in Britain?		

Task 2
Read the text and decide which organisations the statements refer to. Write your answers in the table according to the example (0). There are 7 correct answers (excluding the example).

STATEMENTS	BNFL	NDA	CORE	GOVERNMENT
0. Opposes nuclear power stations			X	
Wants to stop nuclear reprocessing				
Seller of the nuclear plant				
Buyer of the nuclear plant				
Made false business promises about benefits of nuclear power station				
Decision about the plant will be in their hands				

8. Britons 'in favour of wind farms'

Three-quarters of Britons believe wind farms are necessary to help meet demand for energy, a survey by the British Wind Energy Association suggests. The body claims the vast majority of the public feels the need for clean sources of renewable energy. The study also suggests 70% of those polled would support the creation of a wind farm in their area. But opponents of wind farms say they are unsightly and point out that wind is an unreliable source of power.

Two surveys have been merged into the study: one by World survey on behalf of BWEA, and one by ICM Research on behalf of Greenpeace. Both polls were carried out in the month of August, each involving 1,000 adults.

Chief executive, Marcus Rand, said: "Time is running out on climate change and wind power is essential to averting its potential impacts. Britain has the best wind resource in Europe - it's everlasting, on our doorstep and ready to use now. By embracing wind, we will increase our nation's energy security and create thousands of new jobs in Britain, but we need to act now."

The chair of campaign group Country Guardian, Angela Kelly, told BBC News Online: "Most of the public have not studied the facts. But the more the public discover the truth about wind farms, the less they want them. The Achilles' heel of wind power is you cannot predict it even 10 minutes in advance, so it has to be backed up at all times by a secure supply of electricity and you cannot afford to shut down any existing power plants.

"We already have more than 1,100 wind turbines in this country and they do not even produce enough juice to run one factory. The power generated is at such a high cost that it is only economically viable by virtue of a package of subsidies that, according to official figures, will be worth £1bn in 10 years' time. This must be found from the consumer to boost the profits of a few multinational corporations and shrewd investors."

Ms Kelly added: "I am not prepared to see inappropriate and unnecessary industrialisation reduce the UK's unique and varying landscape to a common denominator of cloned mechanical monsters."

Members of the public sympathetic to wind power stations will be able to sign a petition at the Embrace The Revolution website, and the names of every supporter will go on four new turbines to be set up.

The architects behind the London Eye, David Marks and Julia Barfield, said they believed the current wind turbine technology represented the best environmentally sustainable and economically viable source of renewable energy.

"That is why we are actively exploring ways to incorporate wind turbines within landmark buildings that we are designing today," they added.

TV botanist David Bellamy recently led a march in south Wales to oppose plans to build wind turbines on a mountain. The protest was led by campaigning group Save Our Common Mountain Environment (Socme), which claims that wind farms will push up energy prices and that they ruin landscapes and kill birds and bats.

They also say that wind is an unpredictable and therefore unreliable source of power, and the turbines can be damaged or even knocked down by storms.

But some local communities have reacted positively to the introduction of the turbines. Margaret Munn, a councillor in Ardrossan, Ayrshire, said her community had "overwhelmingly accepted" a new wind farm, contrary to her expectations and wishes.

"Instead of spoiling the landscape, locals believe it has been enhanced," she said, "simply by being impressive-looking. They also bring a calming effect to the town and, contrary to the belief that they would be noisy, several people find them to be silent workhorses."

Task 1
Read the text and decide if the persons listed support or subject wind farms. Write your answers in the table according to the example (0).

	NAMES	SUPPORT	OBJECT
0.	Marcus Rand	X	
1.	David Bellamy		
2.	David Marks		
3.	Julia Barfield		
4.	Margaret Munn		
5.	Angela Kelly		

Task 2
Read the text again and provide short answers to the questions according to the example (0), in no more than 6 words.

QUESTIONS	ANSWERS		
Who took part in the study?	0. BWEA and Greenpeace		
What is the most serious technical argument against wind power stations?	6.		
How do architects plan to design new landmark buildings?	7.		
What will happen if somebody signs the petition in favour of wind power stations?	8.		
Why can wind turbines improve the landscape?	9.		
Why does Ms Kelly say that multinational companies will benefit from generating wind power?			

9. Replant trees you chopped down, council tells builders

A DEVELOPER is to be told to replant a "millennium woodland" after chopping down more than 100 trees without permission.

The city council is to take action after investigating the destruction of the community woodland in Craigmillar.

The authority was called in by residents who watched in horror as builders began hacking down the trees last month. But by the time officials intervened only around ten per cent of the trees remained standing.

The developer has said it believed it had permission to chop down the trees on what it described as "horrible scrubby wasteland".

They had been planted on the council-owned park - which lies directly next to the Aspect housing development - in 2000 as part of a UK-wide initiative.

Thistle Developments, the firm transforming the former Craigmillar Brewery site at Peffermill Road, not only faces having to replant the entire woodland, but also a claim for up to £50,000 in compensation from the council.

The developer today continued to insist it did not believe it had done anything wrong, saying it had struck an agreement with the local authority to create a new "landscaped parkland" next to the new homes.

Some of the homes in the new Aspect development, which will feature more than 230 new homes in three blocks of flats with an average price of around £150,000, are expected to boast views of Arthur's Seat and the Pentland Hills.

A report for councillors states: "No permission has been granted by the council for Aspect to carry out any work on council-owned land within Cairntows Park. Planning permission has been granted to Aspect for work on their own land adjacent to Cairntows Park. They have been instructed to stop work on council-owned land in Cairntows Park and further action is being taken to pursue the question of the restoration of the site."

City environment leader Robert Aldridge added: "Discussions between the developers and the council are due to take place in the near future. It is hoped that an agreement will be reached regarding compensation."

Local Labour councillor Maureen Child added: "It would seem perfectly appropriate for the council to ask for compensation bearing in mind the amount of inconvenience this has caused."

However, Derek Stephen, managing director of Aspect Scotland Limited, a subsidiary of Thistle Developments, said: "If we have to reinstate this area we will do so, but we have been under the clear impression that we had approval to carry out work on this land.

"This was pretty horrible scrubby wasteland and we were going to carry out major landscaping improvements to the area.

"We've still to meet the council but as far as I'm concerned we've done nothing wrong and I don't see why we should have to pay the council compensation."

Task 1

Read the text and decide if the persons or organisations listed argue for or against paying council compensation. Write your answers in the table according to the example (0).

ORGANISATION OR	FOR	AGAINST
PERSON	COMPENSATION	COMPENSATION
0. Councillor Maureen Child	X	
1. Local people		
2. City council		
3. Thistle Development		
4. Aspect Scotland Limited		

Task 2
Read the text again and provide short answers to the questions according to the example (0), in no more than 4 words.

QUESTIONS	ANSWERS
How many trees did the builders	0. more than 100
cut down?	
How much of the trees did people	5.
save?	
When were the trees planted?	6.
What did the developers think	7.
about the area they cleared?	
What did the developers believe	8.
about the permission to cut the	
trees?	
What did the developers want to do	9.
with the cleared area?	
What does the council want the	10.
developers do to the area?	

10. Sustainable Growth - Interface, Inc.

Ray Anderson has spent most of his life as an environmental vandal. He has devoted his career - the better part of four decades - to mastering the black magic of the 20th century: He takes huge lakes of petroleum and spins them into elegant brocades.

The petroleum, which took millions of years to make, is irreplaceable. The brocades - beautiful woven fabrics that carpet offices and corridors from the U.S. Capitol to MTV headquarters - will last forever. After just 10 years, most of that fabric will end up in the dump.

Indeed, Anderson's success has been marked by a kind of galloping environmental appetite. He is the 63-year-old founder and CEO of Interface Inc., an Atlanta-based company with 7,300 employees. Its business: turning petrochemicals into textiles. In 26 factories on four continents, Anderson's looms produce a million pounds of synthetic carpet and fabric every day - along with more than seven tons of air pollutants every year.

Ray Anderson is a certified captain of industrial capitalism. He is also becoming one of the nation's leading environmentalists, a radical who makes the folks from Greenpeace look timid.

Four years ago, Anderson made a decision that changed the course of his carpet company, and that could transform the nation's economy. He decided that Interface would become, as he put it, "the first fully sustainable industrial enterprise, anywhere." Anderson decided that his petrochemical conglomerate would become 100% environmentally friendly.

His vision for the 21st century: Interface would no longer use virgin nylon yarn to stitch its fabrics. Interface's factories and offices would use power from renewable sources only. Interface would produce zero waste; indeed, it would reclaim its own products and use them as raw material for new textiles. And Interface would pull its suppliers and customers into its sustainability orbit, insisting that the products it bought be recyclable and nontoxic, pushing clients to think differently about carpeting - and about their own businesses. "I want to pioneer the company of the next industrial revolution," says Ray Anderson.

Anderson wants to turn the entire U.S. economy inside out. Companies would consume their own waste. Landfills, after all, are best seen as a yardstick of the failure of human ingenuity. In nature, there is no garbage; everyone's waste becomes someone else's food.

Anderson's thinking is so advanced, and the efforts at Interface are so far along, that Interface ranks as the most highly evolved big company in the country today. In terms of combining social responsibility and economic growth, no one comes close. At Interface, social responsibility and growth have become the same thing.

From 1995 to 1996, sales at the publicly traded company grew from \$800 million to \$1 billion. During that same period, the amount of raw materials used by the company dropped almost 20% per dollar of sales. Which means, says Anderson, "The world just saw the first \$200 million of sustainable business."

Of course, you can't fully transform a modern industrial enterprise in just a year or two. However, a dramatic change has already taken hold at the company. From the factory floor to the R&D lab, sustainability has become as important a consideration in every business decision as profitability. Interface, for instance, has developed a new idea about carpeting and customers: It wants to lease carpet instead of selling it. The company would make, install, and maintain the carpet, take it back from customers, and then turn the old carpet into new carpet. Ray Anderson is going to be one of those people you look back on and say, 'He changed the world.'

Task 1
Read the text and complete the summary with no more than 3 words each based on the text, according to the example (0).

SUMMARY SENTENCES	COMPLETIONS
Ray Anderson has worked with petroleum for	0. 40 years
The fabric of carpets is made of	1.
According to his plans, Anderson intends to turn his company	2.
Future companies wouldn't produce	3.
In Anderson's company the two most important issues are	4.
important issues are	5.

Task 2

Read the text again and use it to decide if the statements are true (T) or false (F). Write your answers in the table below according to the example (0). Please note that if all your answers are marked as true or as false, your answers will be disqualified.

STATEMENTS	TRUE or FALSE
0. Black magic is petroleum.	T
6. Brocade carpets made with virgin nylon are harmful for the environment.	
7. Anderson's company is absolutely green.	
8. The company is going to reuse its own products.	
9. Enterprises can become economically sustainable in 1-2 years.	
10. Interface Inc. has started leasing carpets to their customers.	

WRITING SKILLS

Task 1: table description

1. Study the table, and describe it in about 120-160 words, using the 10 given words or expressions in their right forms. You may include numerical data as well to support your description, which should refer to tendencies and contain comparisons.

Agricultural Production Expenses, 2007 and 2012

	2007	2012	%
	(\$ bill	ions)	change
Total	241.1	328.9	36.4*
Feed	49.1	75.7	54.2*
Livestock and poultry purchases	38.0	41.6	9.4
Fertilizer	18.1	28.5	57.6*
Hired labor	21.9	27.0	23.4*
Cash rent	13.3	21.0	58.2*
Seeds	11.7	19.5	66.0*
Supplies and repairs	15.9	18.9	18.7*
Gasoline, fuels, and oils	12.9	16.6	28.4*
Chemicals	10.1	16.5	63.4*
0ther	50.1	63.7	27.1*

Source: USDA NASS, 2012 Census of Agriculture.

The words to use:

by	high	such as
column	increase	total
compare	over	trend
express	source	

Example: The **source** of the table is USDA NASS, 2012 Census of Agriculture.

^{*}Statistically significant change.

Production of fruit and vegetables, 2015 (1 000 tonnes)

T	Tomatoes	Carrots	Onions	Apples	Peaches	Oranges
EU-28	17 562.2	5 087.3	6 109.4	12 698.1	2 540.0	5 961.2
Belgium	253.1	245.4	108.3	284.2	0.0	0.0
Bulgaria	121.7	7.9	8.9	58.4	34.4	0.0
Czech Republic	5.6	23.5	27.2	155.4	1.6	0.0
Denmark	10.6	89.2	53.4	35.7	0.0	0.0
Germany	80.9	526.9	553.3	973.5	0.0	0.0
Estonia	0.9	18.1	0.2	1.6	0.0	0.0
Ireland	4.4	40.2	4.6	18.8	0.0	0.0
Greece	995.1	32.5	211.0	278.5	626.6	909.7
Spain	4 832.7	410.9	1 247.6	598.2	720.9	3 098.3
France	787.9	560.0	368.7	1 967.1	114.7	3.7
Croatia	36.3	10.9	29.4	96.2	3.7	0.2
Italy	6 410.3	533.0	378.3	2 441.6	921.2	1 668.7
Cyprus	16.1	2.3	7.0	4.9	2.3	32.8
Latvia	6.1	8.8	5.7	7.8	0.0	
Lithuania	7.7	38.0	22.2	65.0	0.0	0.0
Luxembourg	0.1	1.0	0.1	2.4	0.0	0.0
Hungary	200.4	78.2	60.3	511.5	37.4	0.0
Malta	12.0	1.3	8.1	0.0	0.7	1.2
Netherlands	890.0	563.4	1 504.1	335.9	0.0	0.0
Austria	55.7	66.8	168.1	287.6	2.9	0.0
Poland	789.6	677.7	548.4	3 168.8	9.9	0.0
Portugal	1 407.0	97.5	59.4	325.0	35.6	246.6
Romania	464.8	122.1	218.2	459.1	20.5	0.0
Slovenia	5.7	3.4	7.2	83.9	5.6	0.0
Slovakia	19.5	10.1	16.9	46.3	2.1	
Finland	36.5	72.0	20.2	6.0	0.0	0.0
Sweden	14.8	115.6	64.6	25.4	0.0	0.0
United Kingdom	97.2	731.0	408.1	459.6	0.0	0.0

Source: Eurostat

The words to use:

account for approximately	give large	show table
column due to	over relatively	vast majority

Example: (0): This is a table.

Area under vines 1999, 2009 and 2015

		Area (ha)	
	1999	2009	2015
Belgium	(7)	97	-
Bulgaria		56 200	59 991
Czech Republic		16 189	17 689
Denmark	_	42	_
Germany	104 312	102 306	102 581
Estonia	-		_
Ireland	-	-	-
Greece	87 156	81 542	103 298
Spain	1 438 489	1 030 742	941 154
France (1)	866 965	782 428	802 896
Croatia	1		20 393
Italy (1)	642 261	610 291	
Сургия	100000000000000000000000000000000000000	8 653	7 781
Latvia			
Lithuania		-	_
Luxembourg	1 348	1 302	1 295
Hungary	1	83 361	65 049
Malta		618	
Netherlands			_
Austria	48 558	45 586	45 574
Poland			
Portugal (2)	210 603	175 933	198 586
Romania		171 090	183 717
Slovenia	1	16 480	15 806
Slovakia		12 678	12 054
Finland	_	-	_
Sweden		-	_
United Kingdom	874	1 198	1 687

Source: Eurostat

The words to use:

approximately	increase	table
downward	represent	trend
express	significant	while
fall	strong	

Example (0): I can see a table.

Livestock population, 2015 (million head)

	Bovine animals	Pigs	Sheep	Goats	
EU-28	89.2	148.7	85.5	12.5	
Belgium	2.5	6.4		:	
Bulgaria	0.6	0.6	1.3	0.3	
Czech Republic	1.4	1.6			
Denmark	1.6	12.7			
Germany	12.6	27.7	1.6	0.1	
Estonia	0.3	0.3			
Ireland	6.4	1.5	3.3		
Greece	0.6	0.9	8.9	4.0	
Spain	6.2	28.4	16.5	3.0	
France	19.4	13.3	7.1	1.2	
Croatia	0.5	1.2	0.6	0.1	
Italy	6.2	8.7	7.1	1.0	
Cyprus	0.1	0.3	0.3	0.2	
Latvia	0.4	0.3	0.1	0.0	
Lithuania	0.7	0.7	0.1	0.0	
Luxembourg	0.2	0.1			
Hungary	0.8	3.1	1.2	0.1	
Malta	0.0	0.0	0.0	0.0	
Netherlands	4.3	12.5	1.0	0.5	
Austria	2.0	2.8	0.4	0.1	
Poland	5.8	10.6	:		
Portugal	1.6	2.2	2.0	0.4	
Romania	2.1	4.9	9.8	1.4	
Slovenia	0.5	0.3			
Slovakia	0.5	0.6	0.4	0.0	
Finland	0.9	1.2			
Sweden	1.4	1.4	0.6		
United Kingdom	9.8	4.4	23.1	0.1	

Source: Eurostat

The words to use:

column	observe	such as
give	record	table
large	significant	topic
number	stand	

Example (0): I can see a table.

Production of selected fruits, 2016, thousand tonnes

	Apples	Bananas	Grapes	Oranges	Peaches	Watermelons
			-	_	& nectarines	;
EU-28	12 122	640	25 331	6 479	569	2 801
World	80 823	105 957	77 181	71 306	20 804	108 961
Argentina	1 245	180	2 881	900	292	127
Australia	289	330	1 763	401	92	160
Brazil	1 231	6 893	1 440	17 550	218	2 164
Canada	382	0	102	:	25	23
China	39 684	12 370	11 650	7 470	11 954	73 189
India	1 915	27 575	2 483	6 426	250	400
Indonesia	:	5 359	:	1 411	0	447
Japan	742	0.1	190	48	125	356
Mexico	859	2 128	350	4 410	161	953
Russia	1 572	:	439	0.1	33	1 420
Saudi Arabia	:	:	150	:	:	371
South Africa	812	390	1 850	1 672	174	65
South Korea	494	:	260	:	193	673
Turkey	3 128	215	4 011	1 781	638	3 887
United States	4 082	7	7 745	7 574	965	1 772

Source: Eurostat

The words to use:

amount	missing data	such as	
column	record	table	
hardly any	significant	topic	
list	surprisingly		

Example (0): I can see a <u>table</u> about the production of certain fruits in 2016.

Expenses in the Australian budget, 2016-2017

Sub-function		Estimates		Projec	tions
	2015-16	2016-17	2017-18	2018-19	2019-20
	\$m	\$m	\$m	\$m	\$m
Woolindustry	69	69	69	69	69
Grains industry	224	221	214	214	214
Dairy industry	58	58	59	59	59
Cattle, sheep and pig industry	212	184	183	187	189
Fishing, horticulture and other agriculture	322	314	327	327	329
General assistance not allocated to					
specific industries	26	31	32	31	35
Rural assistance	170	200	153	161	148
Natural resources development	976	1,295	1,295	850	540
General administration	712	750	752	729	686
Total agriculture, forestry and fishing	2,768	3,122	3,084	2,626	2,269

http://www.budget.gov.au/2016-17/content/bp1/html/bp1_bs5-01.htm

The words to use:

by	gradual	such as	
column	high	total	
compare	increase	trend	
express	source		

Example: The <u>source</u> of this table is: http://www.budget.gov.au/2016-17/content/bp1/html/bp1_bs5-01.htm

Wheat production (thousand tonnes)

	2010	2012	2014	2022
BRICS	245 095	261 296	276 468	313 429
Developed countries	335 746	333 937	368 376	396 282
Least Developed countries (LDC)	11 360	12 694	12 983	16 631
Developing countries	320 193	337 237	343 391	388 211
Sub-Saharan Africa	4 483	4 750	4 794	6 392
World	655 939	671 174	711 766	784 493

Agriculture and food: Key tables from OECD - ISSN 2075-5104 - © OECD 2013

The words to use:

compare	huge	table
difference	increase	total
due to	nearly	trend
gradual	row	

Example (0): This <u>table</u> shows wheat production in different regions of the world, in different groups of countries.

Fish catches and aquaculture production

(in thousand tonnes)

	Total catches		Aquaculture	production
	2004	2014	2004	2014
EU-28 (1)	5,711	4,829	1,325	1,183
Argentina	945	830	2	4
Australia	243	154	44	75
Brazil	746	767	270	563
Canada	1,214	877	145	134
China	421	17,352	35,939	58,797
India	3,391	4,719	2,804	4,884
Indonesia	4,740	6,508	1,469	14,375
Japan	4,453	3,753	1,261	1,020
Mexico	1,289	1,528	104	194
Russia	2,953	4,233	110	164
Saudi Arabia	55	69	11	24
South Africa	910	610	6	6
South Korea	1,662	1,602	840	1,533
Turkey	550	302	94	234
United States	4,995	4,984	608	426

⁽¹⁾ Aquaculture (2013 data): Ireland, France and Romania are estimated; Malta and Portugal are provisional; the Netherlands are forecasted.

http://ec.europa.eu/eurostat/statistics-explained

The words to use:

amount	insignificant	source
compare	nearly double	table
dramatic	period	the same as
huge growth	record	

Example (0): This <u>table</u> shows total fish catches from seas and rivers as well as aquaculture production in the EU countries and in some other, selected countries.

National ewe flocks and dairy share, by location of main breeding countries, 2016

	Number of ewes (1 000 heads)			% of dairy
	Ewes	Dairy	Non-dairy	ewes
Northern group of counrtries (1)	15 679.3	35.0	15 373.7	0.2
Germany	1 126.5	11.0	1 115.5	1.0
Ireland	2 430.2	0.0	2 430.2	0.0
Hungary	855.0	18.0	838.0	2.1
Netherlands	600.0	6.0	594.0	1.0
Sweden	271.5	0.0	0.0	0.0
United Kingdom	10 396.0	0.0	10 396.0	0.0
Southern group of countries (1)	41 084.7	24 525.0	16 559.7	59.7
Bulgaria	1 157.9	1 078.0	80.0	93.1
Spain	6 697.0	6 400.0	297.0	95.6
Greece	11 281.2	2 463.3	8 818.0	21.8
France	5 479.0	1 575.0	3 904.0	28.7
Croatia	498.0	143.0	355.0	28.7
Italy	6 203.2	5 142.0	1 061.1	82.9
Portugal	1 607.4	331.2	1 276.1	20.6
Romania	8 161.0	7 392.5	768.5	90.6

⁽¹⁾ Countries in the northern group do not have territories to the south of parallel 45 North, while countries in the southern group do.

http://ec.europa.eu/eurostat

The words to use:

data	majority	source
give	more	table
include	reach	twice as many
largest	significant	

Example (0): This is a <u>table</u> showing ewe flocks and their dairy shares in the Northern and southern group of countries of Europe.

Wheat production (thousand tonnes)

	2010	2012	2014	2022
OECD	274 316	274 214	280 971	288 795
Australia	27 410	22 035	24 894	24 956
Canada	23 300	27 205	28 643	29 024
Chile	1 575	1 350	1 336	1 391
Israel	100	112	105	81
Japan	571	855	884	996
Korea	39	32	28	28
Mexico	3 677	3 300	3 885	4 223
New Zealand	383	430	452	439
Turkey	19 674	20 100	20 480	21 380
United States	60 066	61 753	57 477	56 722
EU27	136 599	136 109	141 852	148 593

Agriculture and food: Key tables from OECD - ISSN 2075-5104 - © OECD 2013

The words to use:

by	gradual	such as
column	high	total
compare	increase	trend
express	source	

Example: The source of the table is USDA NASS, 2012 Census of Agriculture.

Task 2: letter writing

1. You are a sales representative working for a Hungarian tinned food company. Write a letter in 140-160 words to Colouyt, a Belgian transport company (21-23 Bodenstraat, Antwerp 2130, Belgium), which has the third largest warehouse on the market and enquire about their services. Your name and address in this role is: Szabó Gábor/Gabriella, Tanmed Fruit Company, Nagykőrös, Béke u. 7.

In your letter

• introduce your firm.

Enquire about:

- their prices
- terms of payment
- modes of transport.
- 2. You are a sales manager who has been working for a Polish subsidiary of a multinational company based in Amsterdam. Write a letter of complaint in 140-160 words to the General Manager of the company (Mars Inc. 25, Pacificatstraat, Amsterdam 3318, The Netherlands) including the points given below. Your name and address in this role is: Gábor/Gabriella Szabó, Mars Inc, u. Solidarnosc, Krakow 6200, Poland.

In your letter complain about

- the long working hours/weekends
- the lack of a proper holiday
- no professional development courses
- no promotion, though it was promised
- 3. You are a sales manager who has been working for a company dealing with agrochemicals for three years. Write a letter of complaint in 140-160 words to the General Manager of the company (Dutchchem Inc, 25, Pacificatstraat, Amsterdam 3318, The Netherlands) including the points given below. Your name and address in this role is: Gábor/Gabriella Szabó, Dutchchem Hungary, Fehérvári u.6, 9023 Győr, Hungary.

In your letter you should complain about the

- lack of proper information about new products
- lack of visits to international exhibitions
- no professional development courses
- no promotion, though it was promised

4. You are a farmer. You ordered pesticides and fertilizers from a British company (Agrochem Trade Co., Adam Street, Bristol B2N 6EZ). Write a letter in 140-160 words to the Manager of Customer Services, in which you complain about their services. Your name and address in this role is: Petra/Péter Kovács, 36 Rosebank Drive, Reading R66 1JY.

In your letter of complaint, include the following:

- delayed delivery
- damaged goods
- missing items
- the action you would like them to take
- **5.** You saw the following job advertisement in New Scientist and decided to apply for the post. Write a letter of application in 140-160 words. Your name and address in this role is: Andrea /András Kovács, 2100 Gödöllő, Szabadság u. 148.

An **entomologist** is required, for three years, to study aspects of the biological control of pests of edible and ornamental protected crops.

Qualifications: Applicants should have a suitable degree and ideally knowledge of biological control theory and practice.

For further details please write to the Personnel Office, Horticulture Research International, Wellsbourne, Warwick CV35 9EF.

(New Scientist)

In your letter, include the following points and add your own ideas as well.

- Where you saw the advert
- Your qualifications
- Your experience
- Why you are suitable for the job
- 6. You are a manager of a company dealing with dried organic fruit. You are planning to make new business contacts with foreign partners. Write a letter in 140-160 words to the Dutch Chamber of Commerce (Rivierstaete, Amsteldijk 166, Amsterdam, AM6 7NQ). Your name and address in this role is Gábor/Gabriella Gárdonyi, Biofruit Kft, 8900 Sopron, Győri út 36.

In your letter, you should:

- describe
 - o the profile of your company
 - o the experience/expertise of the company
 - o your product range
- ask for contacts with possible partners

7. You are a manager of a company based in England. The company produces and sells agricultural machinery. Write a letter in 140-160 words in response to a letter of enquiry. Your name and address in this role is: Izabella/ Imre Bernát, Bernát Dairy, Spring Cottage, Winchester, SO21 2NF.

In your letter,

- describe
 - o the advantages of the new milking machine (improved hygiene and efficiency)
 - o the favourable price
- offer a demonstration on site
- ask about a possible time for the demonstration
- 8. You are the representative of Pick Ltd. You are travelling to London in the near future to negotiate the sales of the Hungarian meat products. Write a letter in 140-160 words to your business partner John Winters (Winters Foods, 21 Old Compton Street, London W1 6H1) to inform him about the time of your visit and the agenda.

Your name and address in this role is: Lóránt / Lilla Pálfy, 3200, Szeged, Petőfi u. 14.

In your letter,

- suggest
 - o a date for the meeting
 - o an agenda (issues to discuss)
- ask the host to arrange
 - o accommodation
 - o visits to supermarket chains and specialist shops
- 9. You are a professor teaching at the Plant Protection Department of Szent István University. Write a letter in 140-160 words to your English colleague (Susan Cartwright, Faculty of Agricultural Studies, University of Manchester, 51 Oxford Road, Manchester, M13 9PL), who is coming to Hungary to attend a conference, and invite her to your university to give a lecture on the current issues of her field of research. Your name and address in this role is: Dr. László / Lívia Mécs, SZIE, Közgazdasági Intézet, 2103, Gödöllő, Páter K. u. 1.

In your letter,

- write about
 - o the date of the lecture
 - o the fee you can pay for the lecture
 - o the students' language knowledge
- ask about the equipment she needs

10. You are a pepper grower in Hungary. You have heard about the organisation "Global Seed Network", which helps creating diversity by organising the free exchange of seeds. Write a letter in 140-160 words to the organiser (Asea Brown, Hoge Wei 27, B-1930 Zaventem, BELGIUM) to offer and ask for certain seeds.

Your name and address in this role is: Ildikó/ István Huszár, H-6750 Algyő, Kastélykert u. 12.

In your letter,

- describe the seeds you can offer from the point of view of
 - o crop traits
 - o location/climate
- ask for the seeds you would like in exchange, inquiring about
 - variety
 - o resistance to pests

ANSWER KEY

Reading comprehension - agriculture

To feed the world

Task 1: 1. They can raise/transform them, 2. potato blight 3. they can't afford chemicals. 4. they use GM crops 5. International Plant Genetic Resource Institute 6. resistance to desease and pests 7. biological control methods 8. Local innovation of farmers must be relied on / cooperation between farmers and researchers is important,

Task 2

Task 2						
	J. Bell	S. Bie	M. Swami- nathan	G. Hawtin	H. Herren	P. Kenmore
Against super-rice	(0) X					
For co-operation between scientists and farmers			X			X
For dry areas to be researched				X		
For biological control					X	
Environmentalists and scientists come closer		X				
For research into effects of pest control					X	
For local varieties to be improved				X		

Let Them Eat Organic

Task 1: 1. not economical (lower yields), 2. monitored organic and conventional methods for 21 years, 3. needs fewer nutrients, 4. fewer pesticides, 5. less energy, 6. better water intake, 7. increasing the diversity of predators, 8. stopping soil erosion / buliding up top soil, 9. yields dropped in the first three years, 10. they stabilized, 11. they started going up,

Task 2: 12. T., 13. T, 14. F, 15. F

3.. Brazil's crop

Task 1: 1.Few mountains and deserts, 2. live in poverty / income disparity 3-4. to increase employment and income / to slow the migration, 5-6. by increasing yields, shifts from other crops to soybeans, 7. tropical soil, 8. by cutting out the bush and trees, 9. grazing, 10. to raise the pH of the soil

Task 2: 11. F, 12. T, 13. F, 14. T, 15. T

4. Tips for planting bulbs

Task 1: 1C, 2G, 3E, 4J, 5B, 6F, 7I, 8D.

Task 2: 9. crocks in the bottom, 10. well drained compost, 11. waterlogged lawn, 12. when there are several planted together, 13. lift them (+store), 14. plant deeper, 15. place chicken-wire over the pot/soil

5. Technology offers whole new world for livestock farmers

Task 1: 1 improve efficiency, 2. improve profitability, 3. looking at/walking through flocks, 4. 3 or 4 times more sheep, 5. ear tag, 6. livestock collar, 7. background, 8. period for insemination, 9. worm resistance, 10. diseases, 11. conditions (eg. being lame)

Task 2: 12F, 13T, 14T, 15F

6. How turkey farms work

Task 1: 1F, 2G, 3D, 4E, 5C, 6H

Task 2: 7. low lighting, 8. debeaking, 9. rearing sheds, 10. pole barns, 11. 40 kgs per square metre, 12. scrubbing with disinfectants, 13. foot dips, 14. heat treatment, 15. animal meal / meat or bone meal

7. Drugs in poultry farming

Task 1: 1-C, 2-D, 3-A, 4-B,

Task 2: 5 . anti-parasitic treatment, 6. in feed, 7. in water, 8. 8 days, 9. BVPA, 10. unnatural feeding practices, 11. overcrowded conditions, 12. less than in intensive farming, 13. rabbit (heart), 14. human heart muscle, 15. strong contractions of the heart muscle

8. Sheep is sold for £230,000

Task 1: 1. Lanark Mart, 2. Graham Morrison, 3. normal, 4. artificial, 5. great body / chunky, 6. strong back, 7. £1,700, 8. infertile sheep (for record price)

Task 2: 9F, 10F, 11T, 12F, 13T, 14T, 15F.

9. Farmers' markets

Task 1: 1C, 2G, 3D, 4E, 5B

Task 2: 6. producers sell their own product, 7. producers sells directly to customer, 8. organic / small scale production, 9. fresh products, 10. bigger range / what you can't buy in supermarkets / regional, special, 11. possibility to taste, 12. more information on the produce, 13. FARMA, 14. holding more regular markets, 15. to introduce inspection (FARMA)

10. Will supermarkets be super for small farmers?

Task 1: 1. outdoor street markets, 2. small shops, 3. street vendors, 4. they cannot produce large quantities (or: they do not have the knowledge), 5. they cannot produce consistent quality (or: they do not have the money), 6. they need to document their production / farming practices, 7. farmers, 8. supermarkets, 9. technical, 10. organisational,

Task 2: 11. F, 12. F, 13. T, 14. T, 15. T

Reading comprehension -environment protection

1. Under the Hole in the Sky

Task 1: 0-B, 1-E, 2-F, 3-D, 4-A, 5-C

Task 2: 6. skin cancer has risen 66%, 7. solar stoplights, 8. education programs, 9. most of them ignore it, 10. provide money for monitoring and research

2. The rain farm

Task 1:1-F, 2-C, 3-B, 4-A

Task 2: 5. Australia's highest amounts of rainfall, 6. the rain forest areas are untouched, 7. downpour from topical showers from their East Coast, 8. rain from rain clouds that come in from the west, 9. rain from cyclones, 10. This keeps pollution from contaminating rainwater.

3. Deluge of criticism greets irrigation plan

Task 1: 1. T, 2. F, 3. T

Task 2: 4. 2-9 cubic kilometers, 5. 55 meters, 6. less water is expected, 7. evaporation, 8. filling with sand/costly maintenance/moving dunes, 9. becomes waterlogged/poor drainage, 10. breeding ground for mosquitoes

4. Protection needed for 'marine Serengetis'

Task 1: 1. T, 2. F, 3. F

Task 2: 4. tropical rainforests, 5. savannah watering holes, 6. where tropical and temperate oceans meet, 7. near reefs, 8. near underwater mounds, 9. where there is a diversity of plankton and smaller fish, 10. (ocean) structure

5. Red Alert

Task 1: 1. T, 2. F, 3. F

Task 2: 4. its rate of decline, 5. its geographic range, 6. local human population density, 7. helps highlight future problems, 8. hunting, 9. pollution, 10. habitat disruption

6. What are eco-plastics?

Task 1: 1. it is fuels based, 2. it requires a lot of energy, 3. paper / cardboard, 4. it isn't more biodegradable than the original / doesn't degrade, 5. it is made of plant material, 6. it degrades relatively quickly

Task 2: 7-F, 8-F, 9-T, 10-T

7. Future of Sellafield plant in doubt

Task 1: 1. Sellafield Thorp, 2. They can't deliver their waste to Britain, 3. Loss-making (41bn ponds) (or: not profitable)

Task 2: 4. BNFL, CORE, 5. BNFL, 6. NDA, 7. BNFL, 8. NDA, GOVERNMENT

8. Britons 'in favour of wind farms'

Task 1: 1. opposes, 2. supports, 3. supports, 4. .opposes, 5. opposes

Task 2: 6. unstable, unpredictable, 7. they try to incorporate turbines, 8. names will go on new turbines, 9. they are impressive-looking, 10. because of a package of (state) subsidies

9. Replant trees you chopped down, council tells builders

Task 1

ORGANISATION OR PERSON	FOR COMPENSATION	AGAINST COMPENSATION
0. Councillor Maureen Child	X	
1. Local people	X	
2. City council	X	
3. Thistle Development		X
4. Aspect Scotland Limited		X

Task 2

5. 10 %, 6. in 2000, 6. horrible / scrubby woodland, 8. that they have it, 9. landscaped parkland, 10. Reinstate / replant

10. Sustainable Growth - Interface

Task 1: 1. petroleum, 2. green / environmentally friendly, 3. garbage / waste, 4. social responsibility / sustainability, 5. economic growth / profitability

Task 2: 6-T, 7-F,8-T, 9-F, 10-F

Sample table descriptions

Agricultural production expenses

It shows agricultural production expenses in 2007 and 2012. The first **column** lists the types of expenses, **such as** feed, labor or chemicals. The second and the third columns **compare** the figures in the given years, **expressed** in billion US dollars. The last column presents the change of the values in per cent. In the first row we can also see the **total** values of expenses.

We can see that the **highest** expenses are on feed, livestock and poultry purchases and hired labor. Comparing the two years, an increasing **trend** can be seen in all categories. Expenses on feed, seeds, cash rent and chemicals **increase** especially significantly. As the fourth column shows, the change is over 50% in all these four categories. Expenses on seeds show the highest growth, with 66%, the lowest rise can be seen in the case of livestock and poultry purchases, with 9.4%.

Regarding the total values, agricultural expenses rose from 241.1 billion US dollars to 328.9 US dollars, which means a sharp rise **by** 36.4%.

Production of fruit and vegetables, 2015

0: This is a table.

The table **shows** the production of fruit and vegetables in 2015.

The numbers are **given** in thousand tonnes.

There are seven columns, in the first **column** the countries are listed and in the other columns statistics on the production of the most important vegetables and fruit can be seen.

The EU-28 produced **approximately** 17.6 million tonnes of tomatoes in 2015, of which about two thirds came from Italy and Spain (11.2 million tonnes).

Carrot production was **relatively** high in Poland and in the UK. Together these two countries **accounted for over** a quarter of EU-28 output in 2015.

The Netherlands and Spain were the EU's main onion producing countries.

Apples are produced in almost all EU countries, although Poland, Italy and France are, by far, the **largest** producers.

The **vast majority** of oranges (80%) are produced in Spain and in Italy **due to** climatic conditions.

Area under vines 1999, 2009 and 2015

I can see a table.

The table **represents** the area under vines **expressed** in hectares in three years in 1999, 2009 and in 2015.

There are four columns, in the first column the countries are listed.

Spain, France and Italy were the main wine-growing EU member countries.

There was a general **downward trend** in the area under vines in the EU from 1999 to 2009.

From 1999 to 2009, among the 9 EU member states with available data, the UK was the only member state where the area under vines **increased**, **while** in all other member countries it decreased.

In Spain alone, the area under vines in 2009 was 0.4 million ha less than in 1999, which represented a decrease of 28% of the Spanish wine-growing area.

The decrease was not so **strong in** Portugal and France.

Between 2009 and 2015, the wine-growing area in Hungary **fell** by **approximately** 18,000 ha. It is a **significant** drop.

Livestock population

I can see a table.

The **topic** of the table is livestock population in the EU in 2015.

The numbers are **given** in millions of head.

There are 5 columns. In the first **column** we can see the countries and in the others the types of animals **such as** bovine animals, pigs, sheep and goats.

In 2015 Spain, Germany, France, the UK and Italy held the **largest** populations of livestock in the EU-28.

Highest **numbers** of pigs were **recorded** in Spain and Germany, bovines in France and sheep in the UK.

We can **observe** that the most important animal in Hungary is the pig in 2015. The number of pigs **stood** at 3.1 million. Pig population was almost 3 times larger than that of the bovines and sheep. The goat population was not so **significant.**

Task 2: sample letter

1.

Colouyt 21-23 Bodenstraat, Antwerp 2130, Belgium, Tanmed Fruit Company Nagykőrös, Béke u. 7. Hungary

3 March 2017

Dear Sir/Madam,

I am writing on behalf of Tanmed Co., a Hungarian tinned food company to enquire about your services.

We have read your advertisement on the home page of the Hungarian Chamber of Agriculture, which drew our attention.

First of all, let me introduce our company. We buy excellent Hungarian fruit, such as peaches, and apricots directly from the producers and we tin them in our plant in the south of Hungary. As we have no large storage spaces, we are especially interested in your warehouse facilities as well as in your vehicles to transport them to the rest of Europe. I would also like to ask you what modes of transport you typically use.

Furthermore, I would like to enquire about your prices. Can we ask for a current price list to be able to compare with those of other carriers.

Can you also inform us about your terms of payment. Are they the usual ones, namely, payment 30 days after the invoice date?

We look forward to doing business with you.

Yours faithfully, Gábor Szabó Sales assistant