



**Prova d'accés a Cicles formatius de grau superior de formació professional,
Ensenyaments d'esports i Ensenyaments d'arts plàstiques i disseny 2010**

**Segona llengua estrangera. Anglès
Sèrie 1**

Dades de la persona aspirant

Cognoms i nom

DNI

Qualificació



A. Read the text below and choose the correct answer.

[Total: 3 marks; 0.5 for each correct answer]

MIRACLE ALGAE: THE NEXT GENERATION BIOFUEL

1 The origin of petroleum is still a mystery, although scientists believe that it probably came from the fossils of plants and small marine organisms. The leading theory is that dead organic material accumulated at the bottom of oceans, riverbeds, etc. and mixed with mud and sand. Over time sediment was deposited on top of the organic material and
5 the resulting pressure transformed the organic stratum into a dark, very viscous substance called 'kerogen'. This process is thought to take hundreds of years to occur.

In contrast to petroleum, biofuels are made from 'recently-living' organisms and this means that the only limiting factor to the quantity of biofuel we can produce is the quantity of land available for production. For example, the two most common biofuels in use
10 today are ethanol and biodiesel. Ethanol is usually made from corn or sugarcane, while biodiesel is usually made from plant oils. The production of biofuels over the last decade has increased and it has caused the acceleration in the destruction of natural habitats; some environmentalists call biofuels 'deforestation diesel'.

Biofuel is not new. Both Henry Ford and Rudolf Diesel designed engines that ran on
15 biofuels; they didn't use them commercially simply because Middle Eastern petroleum was cheaper.

The consumption of biofuels to heat houses, fuel cars and provide power for cooking has increased dramatically in Europe, the United States and Asia. Carmakers Saab, Volvo, Ford and Cadillac all have popular alternative-fuel cars that can be bought in the UK.

20 Algae are increasingly seen as a future 'miracle' biofuel as they have some amazing properties. The most important of these is that they can produce over 30 times more energy per acre than other second-generation biofuel crops.¹ A controversial aspect of using corn and sugarcane as biofuels is that some of these crops were previously grown by or for poor countries for food but are now being used for biofuel production instead. This
25 is leaving the world with less food which, in turn, causes higher food prices. The world's poor are the worst affected by this process.

The great thing about algae is that they can be grown almost everywhere, including both in salt and freshwater. They can even be grown in contaminated water that would be toxic to many other living organisms. Also, while algae produce oil as part of the photo-
30 synthesis process, they are biodegradable and so, unlike traditional oil, if a ship carrying them has a spillage² there will be much less environmental harm to the ocean life.

Despite all of their many advantages, there is one economic problem with using algae as fuel. It is currently too expensive to produce and so not economical enough to replace other commercially available fuels.

Adapted from an article by
Douglas JASCH. "Miracle Algae: The Next Generation Biofuel".
Think in English, no. 119

¹ Cultius.

² Fuita, vessament.

1. The production of biofuels...
 - a)* takes hundreds of years to occur.
 - b)* depends on the amount of land.
 - c)* is very limited.
 - d)* is positive according to some environmentalists.

2. Ethanol and biodiesel...
 - a)* are produced at the bottom of oceans.
 - b)* are made from plant oils.
 - c)* are the two most used biofuels nowadays.
 - d)* are made from sugarcane.

3. Biofuels for cars weren't used before because...
 - a)* they were more expensive than petroleum.
 - b)* they are a recent invention.
 - c)* Middle Eastern countries forbid them.
 - d)* nobody designed engines that ran on biofuel.

4. The production of biofuels...
 - a)* has no consequence on poor countries.
 - b)* is very good for poor countries.
 - c)* makes poor countries become richer.
 - d)* has consequences on the food prices.

5. Algae can be grown...
 - a)* only in poor countries.
 - b)* in all types of water.
 - c)* only in contaminated water.
 - d)* in water with other living organisms.

6. The oil produced by algae...
 - a)* is exactly the same as traditional oil.
 - b)* causes pollution.
 - c)* is very dangerous for the ocean life.
 - d)* is biodegradable.

B. Choose the correct words or definitions (*a*, *b*, *c*, or *d*) for the words below as they are used in the text.

[Total: 2 marks; 0.5 for each correct answer]

1. properties (line 21)

a) possessions *b*) attributes *c*) lands *d*) ownings

2. toxic (line 29)

a) profitable *b*) frightening *c*) poisonous *d*) healthy

3. harm (line 31)

a) damage *b*) benefit *c*) badly *d*) prejudice

4. currently (line 33)

a) nowadays *b*) actually *c*) frequently *d*) running

C. Write 80-100 words about ONE of the following topics.

[Total: 5 marks]

1. Write a letter to a newspaper giving your opinion about biofuels and the possible alternatives to traditional petroleum.
2. Write a dialogue between two friends. One of them wants to buy a car that runs on biofuels and the other one tries to persuade him/her to buy a traditional car.





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Sèrie 2**

Dades de la persona aspirant

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A. Read the text below and choose the correct answer.

[Total: 3 marks; 0.5 for each correct answer]

THE ENVIRONMENTAL COST OF YOUR MOBILE PHONE

1 All of the manufactured products we buy and use have some impact on the natural world, so why should we be especially concerned about mobile phones? The answer is that, although they are small, the volume of phones being manufactured is enormous—it is estimated that up to 980 million of them will be sold this year.

5 Up to 75 kilos of natural resources are used in the manufacturing process, but their production is not the only impact on the environment. Unlike other electrical appliances, consumers frequently replace their mobiles, sometimes buying a new phone every year, either because their old mobile gets lost or broken or because they want to improve by buying a newer model. This creates the problem of what happens to the old mobiles, and
10 in particular what happens to the heavy metals and other potentially toxic substances the small machines contain.

The eco-impact of mobiles can be summarized in four categories:

Manufacture: the manufacturing process requires energy and raw materials, including certain key minerals.

15 *Electricity consumption:* unlike conventional telephones, mobiles have batteries that need frequently charging. Advances in technology have reduced their energy consumption, but the great quantity of phones means there is still a problem.

Disposal: mobile phones contain various dangerous substances that can be harmful.

20 *Radiation:* the question of how radiation from mobile phone affects our health is a complex one, and studies and opinions differ. Some experts claim that there is no evidence of harm, while others suggest that there is a reason to worry because ‘electromagnetic stress’ has been linked with disorders of the nervous system, the vascular system, the immune system and other adverse health effects.

Happily, a lot can be done to reduce the environmental impact of mobile phones.

25 In September 2006 a group was formed to improve the environmental performance of mobiles and promote recycling. Led by Nokia, the group included companies in the mobile industry as well as consumer and environmental organizations. The group agreed to reduce energy consumption and dangerous substances, to promote the recycling of mobile phones and to give consumers more environmental information about products.

30 Another initiative came from Remobilise, a company that specializes in the recovery, reuse and recycling of used mobile phones. Remobilise will give at least 50% of its profits from recycling to Rainforest Concern. In this way people who donate their old phones will be contributing to the conservation of habitats, ecosystems and wildlife.

Now mobile donation and recycling initiatives exist in many countries. For example,
35 Eurosource donates three euros to UNICEF for every mobile recycled.

Adapted from an article by
Miles PRATT. “The environmental cost of your mobile phone”.
Think in English, no. 106

1. Mobile phones have special impact on the natural world because...
 - a)* they are very small.
 - b)* a lot of them are sold every year.
 - c)* they aren't small enough.
 - d)* 980 million of them are thrown away every year.

2. The most important problem with mobile phones is...
 - a)* their manufacturing process.
 - b)* not different from other electrical appliances.
 - c)* their frequent replacement.
 - d)* the natural resources used in their manufacturing process.

3. Some experts have studied the possible effects of radiation on our health and...
 - a)* they all say radiation is not dangerous.
 - b)* they suggest there is no reason to worry.
 - c)* they all say radiation is very dangerous.
 - d)* some of them say that radiation may have adverse health effects.

4. The group created in September 2006...
 - a)* wanted to improve the old mobile phones.
 - b)* reduced the consumption of mobile phones.
 - c)* reduced the consumption of dangerous substances.
 - d)* tried to reduce the environmental impact of mobile phones.

5. Remobilise is a company that...
 - a)* manufactures mobile phones.
 - b)* recycles mobile phones and helps the environment.
 - c)* uses mobile phones.
 - d)* gives money to people who donate their old phones.

6. UNICEF...
 - a)* is a company that recycles mobile phones.
 - b)* is a recycling initiative.
 - c)* gets money from mobile recycling.
 - d)* gives three euros to Eurosource.

B. Choose the correct words or definitions (*a*, *b*, *c*, or *d*) for the words below as they are used in the text.

[Total: 2 marks; 0.5 for each correct answer]

1. concerned (line 2)

a) worried *b*) concentrated *c*) reacted *d*) questioned

2. Unlike (line 6)

a) dislike *b*) in contrast to *c*) hate *d*) related to

3. harmful (line 18)

a) beneficial *b*) good *c*) injurious *d*) profitable

4. improve (line 25)

a) increase *b*) make *c*) test *d*) make better

C. Write 80-100 words about ONE of the following topics.

[Total: 5 marks]

1. Mobile phones and the way people use them may be a problem for the environment. Write your opinion about this subject.
2. Two friends are talking about mobile phones. One of them has a mobile phone and thinks it is very useful for his/her job and for his/her private life. The other one doesn't have a mobile phone and thinks that mobile phones are not necessary. Write the dialogue.