

UNIT 8: Energy Exercise 1: Working out meaning from context

Read the text. Choose the correct responses.

- 1 The writer of the report works for Fosdrilla Ltd. ✓
☐ True
☒ False
- 2 According to the report, the public aren't safe from the risks of fracking. ✓
☒ True
☐ False
- 3 Pure, fresh water is used for fracking. ✓
☐ True
☒ False
- 4 Flowback can cause disease if it gets into drinking water. ✓
☒ True
☐ False
- 5 The biggest risk of using disposal wells is that it will poison the environment. ✓
☐ True
☒ False
- 6 Waste water treatment has been banned in some countries. ✓
☐ True
☒ False
- 7 The chemical bromide can be used to clean the roads. ✓
☐ True
☒ False
- 8 The writer suggests that fracking should not be allowed. ✓
☐ True
☒ False

Executive summary



This report is a thorough review compiled by an independent scientist for the Natural Resources Preservation Trust (hereafter NRPC). It

considers the health and environmental risks posed by the industrial process of hydraulic fracking and the currently available treatment and disposal methods of the resulting waste. The report has been commissioned in order to evaluate the proposal submitted by Fosdrilla Ltd to establish a fracking installation at Biscombe, UK.

Read the text again. Match the highlighted words with their definitions. You do not need all the words.



1 the keeping of goods in a particular place **storage** ✓

2 the process of using chemicals to clean or change

something **treatment** ✓

3 qualities or circumstances which prevent something bad

from happening **safeguards** ✓

4 Underground **subterranean** ✓

5 a material which makes the environment dirty and/or

dangerous (2 possibilities)

pollutants ✓

contaminants ✓

6 The act of getting rid of or throwing away rubbish or waste

disposal ✓

7 not satisfactory or good enough for a purpose

inadequate ✓

8 a long vertical tunnel drilled deep into the ground, often to

get access to underground water or gas **well** ✓

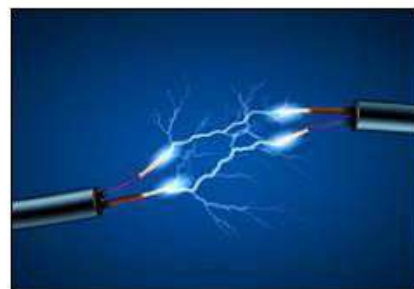
fragments the rocks and release
which can be **utilized** for electrical
creation of fissures in the rock
are added to the water. During
absorbs potentially harmful pol
hydrocarbons, and naturally oc
contaminants are potentially di
people if they are exposed to t
is released into the environmen
corrosive. It threatens to deple
ecosystems or it can interact
treatment plants to create can

The seriousness of these risks
carefully managed. Direct disp
wells into bodies of clean water

Read the text. Choose the correct issue(s) for each process.

		Expensive	Causes earth- quakes	Threat to water quality or the environment	Allows waste water to be reused
Discharging flowback underground	✓	☐	☒	☐	☐
Water treatment	✓	☒	☐	☒	☒
Storage and transportation of waste water	✓	☒	☐	☒	☐
Creating brine to clean the roads	✓	☐	☐	☒	☐

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UNIT 8: Energy Exercise 4 : Collocations

Complete the chart. Use the words in the box.

collocates with 'energy'	collocates with 'problem'	collocates with 'source'	collocates with 'pollution'	collocates with 'fuel'
nuclear ✓	major ✓	water ✓	water ✓	diesel ✓
green	environmental ✓	energy ✓	industrial ✓	fossil ✓
renewable ✓	health ✓	power ✓	air ✓	alternative
solar ✓	serious ✓	fuel ✓	environmental ✓	geothermal ✓
renewable ✓	medical	renewable	radioactive	clean ✓

Choose the correct word to complete the sentences.

- 1 High safety standards ensure that nuclear power plants produce very little  pollution.
- 2 California and Utah are perfect places for  energy plants as they both get a great deal of sun.
- 3 Flat areas of land are the most suitable for  production as they allow large fields of crops to be planted and farmed.
- 4 Please wear a mask when handling this chemical. Inhaling toxic fumes can cause severe  problems.
- 5 Critics argue that the money being invested in finding more gas and oil reserves would be better spent investigating  energy sources.
- 6 Approximately 7 billion people worldwide have access to a  source such as a well or are supplied directly through pipes into the house.
- 7  energy is created by heat trapped under ground. Unlike many other types of energy, it doesn't cause pollution.
- 8  pollution is caused when carbon monoxide fumes from factories, cars etc. rise up into the atmosphere.

Read the clues and then complete the crossword puzzle.



Match the sentence halves.

1 Please consult

the test instructions carefully before you begin.



2 Plans to contest

the wind farm are being formulated.



3 Power stations commonly utilize

the movement of water to produce hydroelectricity.



4 As oil sources diminish,

the price of petrol increases.



5 These days, environmental activists instigate

protests against big energy companies on social networking sites.



6 A Swedish company has recently promised to deliver

25% more energy from solar panels by using tiny wires made with gallium arsenide.



7 In his inaugural speech, the prime minister decided against

mentioning controversial world issues, concentrating instead on praising his predecessor.



8 In order to secure

the future of agriculture, young people need to be attracted to the profession.

Complete the sentences with the words in the box. You do not need all the words.

- 1 The CEO of the gas company, **whose**  controversial plans to raise the price of gas have caused a national outcry, was criticized on tonight's documentary.

when
which
whose

- 2 I have two brothers. The one **who**  works as an engineer on an oil rig only comes home every six months.

- 3 Erin Brockovich, **who**  fought against the US West Coast energy corporation Pacific Gas and Electric Company (PG&E), is played by Julia Roberts in the film *Erin Brockovich*.

- 4 The proposed extension to the existing wind farm, **which**  is planned for 2015, will make it the biggest offshore wind farm in Britain.

- 5 The Gansu Wind Farm Project is one of six national wind power megaprojects **which**  have been approved by the Chinese government.

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- 6 Houses are built on the site **where**  the coal mine once was.

- 7 The nuclear power plant in Fukushima, Japan, **where**  there was a major explosion in 2011, is still a danger to local residents. Experts think it will take over 40 years to be made safe.

- 8 Hydropower first started in 100 B.C., **when**  the Greeks and Romans used a waterwheel for grinding corn.

- 9 I remember the moment **when**  the electricity went off. I was in the bath

UNIT 8: Energy Exercise 10: Sentence formation

Unscramble the words to make correct sentences.

- 1 The most obvious advantage of solar power is that it doesn't pollute the environment.
- 2 One other apparent advantage of solar power is that it is completely renewable.
- 3 A further possible advantage of solar power is that the panels are easy to install, requiring no wires or power sources.
- 4 The most serious disadvantage of solar panels is that they are very expensive to buy. ✓
- 5 A distinct disadvantage of solar power is that it can't be harnessed during a storm, cloudy day or at night. ✓
- 6 One major advantage of electric cars is that they are quiet. ✓
- 7 One other inherent disadvantage of electric cars is that they need to be regularly charged. ✓
- 8 Another potential disadvantage of electric cars is that they have maximum speeds of 70 miles per hour. ✓