

A. Writing (12.5 points)

Consider the following cartoon.



Source: https://forthewind.wordpress.com

Write 1 paragraph (200-250 words) in answer to the prompt:

Analyse the cartoon. (Describe and interpret the cartoon. What issue does it raise? What message does it convey?

Your text will be marked on content, discourse organisation, genre, range and appropriacy of vocabulary and structures, and grammatical accuracy.

#### **B. Reading** (5.5 points)

Read the text and answer the questions that follow it.

#### How petrol chemicals are fuelling oil demand

Demand for the sector is surging, but it has a significant environmental impact. by: Nick Butler

- 1. The International Energy Agency's report on the future of petrochemicals, which was published last week, provides salutary reading for those who imagine that oil demand is about to peak and then collapse. Demand for petrochemicals has nearly doubled since 2000 and the sector now
- 5. consumes 14 per cent of daily global oil use (13m barrels a day) and 8 per cent of gas (300bn cubic metres). In addition, China uses coal as the feedstock\* of a chemicals sector that has grown from a minimal base over the last two decades.

The environmental impact of the petrochemical sector is substantial. 10. Emissions from **their** production may not be as substantial as **those** from steel and cement (both of which rely predominantly on coal) but **they** still account for 18 per cent of the global total of industrial carbon dioxide emissions. The sector is also a major user of water, adding to the stresses and shortages in some parts of the world, and significantly adds to waste. The sector produces

15. some 10m tonnes of waste each year — islands of discarded plastic pollute the Pacific Ocean and the Gulf of Mexico, with **one** in the Pacific now three times the size of France, the IEA says.

This week, the UN's Intergovernmental Panel on Climate Change highlighted in a report the dangers from global warming even if the rise in

 temperature could be kept to the original target of "well below" 2C by 2100. It warned that emissions had started to rise again after being flat in 2015 and 2016.

Petrochemicals are described by the IEA as one of the "blind spots" in the standard analysis of the energy market, and **it** is right. There is no sign of the growth trend being reversed. Petrochemicals run through our daily lives

- and are pervasive in key industries from automobiles to telecommunications. As the agency points out: "combinations of plastics in electronic equipment are increasingly displacing paper as the medium for conveying information in a digitised world". Without petrochemicals we would not have wind turbines or
- *30.* solar panels for renewable energy, of course. Demand growth is driven by the economy, an increasing population and technical advances.

•••

25.

*Financial Times,* 15 October 2018 \* feedstock= the main raw material Name: .....

Number:.....

# **B. Reading** (cont.)

Based on the information in the text, say whether each statement is true (T) or false (F). (0.5 points each)

- There has been a significant growth in the petrochemicals sector in 1. China since 2000.
- 2. The petrochemical sector produces more carbon emissions than cement and steel.
- 3. It is likely that global temperatures will increase less than 2C by 2100.
- 4. By the end of 2014 global carbon emissions had levelled off.
- The petrochemical sector has grown slightly because there are more 5. people on earth and digital technology relies on plastics.
- 6. The demand for petrochemicals is growing because the demand for hydrocarbons is growing.
- 7. Reports on the energy markets often highlight the importance of the petrochemicals sector.

#### **Reference, substitution and ellipsis**

Say what each reference expression or expression of substitution or ellipsis (highlighted in the text) refers to. (0.4 points each)

- 8. their (line 10)
- 9. those (line 10)
- 10. they (line 11)
- 11. one (line 16)
- 12. it (line 24)

### **C. Vocabulary** (2 points)

The following sentences were taken from The Financial Times. Complete each sentence with the appropriate term. You may need to add a preposition or conjugate a verb. The first letter of the term and a paraphrase of its meaning are given to help you. Write the answers below. (0.4 points each)

- 1. Equinor, formerly known as Statoil, said however that it was cutting capex guidance to around \$10bn for the year from \$11bn previously, in a move that is likely to soothe investor fears that costs will start to head substantially higher following the oil price r\_\_\_\_\_ to above \$75 a barrel. (a period of increasing prices after they had been performing poorly)
- 2. At its half-year results, the company forecast a d\_\_\_\_\_ of 0.4 percentage points. (drop, decrease)
- 3. After currency f\_\_\_\_\_, revenue was up 1.2 percent compared with the same period last year because of the strengthening pound. (period of instability with oscillations in value)
- 4. The energy industry is grappling with how to invest in cleaner and more flexible production amid uncertainty about future oil demand growth, when returns cannot match those from traditional **f f** . (energy sources – a hydrocarbon – created from the remains of living organisms)
- 5. ONS figures show that most age groups are now living in bigger h\_\_\_\_\_. (a social unit of people living in a house or home)

1.	
2.	
3.	
4.	
5.	

### Answers

### A. Writing

A good answer will describe the cartoon, interpret the elements in it and use these as the basis for the deduction about its message. The paragraph will be clearly organised with each stage using appropriate language. For example the descriptive phase will use the verbs *depict* or *show* while the interpretative phase will use relational verbs such as *imply, represent, symbolise,* or *suggest,* or other expressions such as *bring to mind.* The register will be impersonal. It will avoid explicit authorial intervention (e.g. we can see, we can conclude), and instead use more complex nominal groups as Theme (e.g. The use of these colours). Content could include:

Description	Interpretation	Issue & message
Oil platform	Crude oil production	Issue = the impact of non-
Smoke/clouds	pollution	renewable and renewable
Oil on sea, oil	pollution	energy sources on the
slick		environment
Dead/dying	Destruction of wildlife/ environment	
bird covered		Message = Even though the
in black oil on		oil industry is highly
beach		pollutant and destroys our
Dirty energy	The crude oil industry/fossil fuels	environment, renewable
Wind turbine	Renewable energies	energies are not entirely
Clear sky	Pollution free air/clean air	innocent because they also
Bird with its	Destruction of wildlife/environment	have a negative impact on
head		the environment
chopped off		
Clean energy	Renewable energies	

## B. Reading

- 1. False
- 2. True
- 3. False
- 4. True
- 5. True
- 6. True
- 7. False
- 8. their (line 10) » petrochemicals.
- 9. those (line 10)» emissions
- 10. they (line 11) » emissions from petrochemical production
- 11. one (line 16) » an island
- 12. it (line 24) » the IEA

# C. Vocabulary

- 1. Equinor, formerly known as Statoil, said however that it was cutting capex guidance to around \$10bn for the year from \$11bn previously, in a move that is likely to soothe investor fears that costs will start to head substantially higher following the oil price **recovery** to above \$75 a barrel. (a period of increasing prices)
- 2. At its half-year results, the company forecast a **decline** of 0.4 percentage points. (drop)
- 3. After currency **fluctuations**, revenue was up 1.2 percent compared with the same period last year because of the strengthening pound. (period of instability with oscillations in value)
- The energy industry is grappling with how to invest in cleaner and more flexible production amid uncertainty about future oil demand growth, when returns cannot match those from traditional **fossil fuels**. (energy sources – a hydrocarbon – created from the remains of living organisms)
- 5. ONS figures show that most age groups are now living in bigger **households**. (a social unit of people living in a house or home)