

# Past-paper walk-through

Fuel Types and Uses ■ 6.3

eXercise

## Questions in this set

- 2015 Q3

## Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- **//** separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = “or words to that effect” – the wording need not match.

## Question 3

2015 ■ Q3

[Bar graph titled “VOLUME OF OIL RELEASED IN SELECTED INCIDENTS”; y-axis “Oil Spilled (millions of gallons)” from 0 to 500 in increments of 100; x-axis lists five incidents, each with a “Low estimate” (light gray) bar and a “High estimate” (dark gray) bar except where only one estimate is shown:

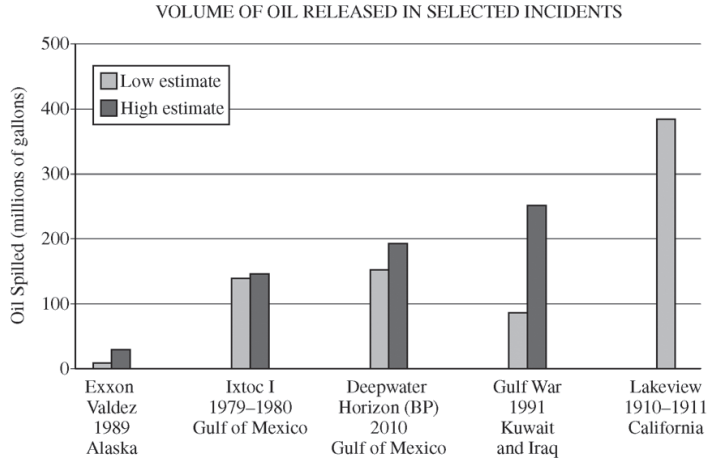
- Exxon Valdez, 1989, Alaska: Low estimate 11, High estimate 32
- Ixtoc I, 1979–1980, Gulf of Mexico: Low estimate 140, High estimate 148
- Deepwater Horizon (BP), 2010, Gulf of Mexico: Low estimate 152, High estimate 192
- Gulf War, 1991, Kuwait and Iraq: Low estimate 88, High estimate 252
- Lakeview, 1910–1911, California: single bar (low estimate only) 385]

## Question 3

Oil spills can be devastating in scope and damage. Since 1900, there have been many oil spills around the world that have had significant ecological and economic impacts.

**(a)** Using the data in the graph above, determine the maximum volume of oil estimated to have been spilled during the Deepwater Horizon (BP) incident.

# Question 3



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2015 ■ Q3

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## Question 3

Oil spills can be devastating in scope and damage. Since 1900, there have been many oil spills around the world that have had significant ecological and economic impacts.

**(b)** Describe TWO environmental problems that can result from oil spills in coastal areas.



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2015 ■ Q3

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## Question 3

Oil spills can be devastating in scope and damage. Since 1900, there have been many oil spills around the world that have had significant ecological and economic impacts.

**(c)** Identify one economic impact that results from oil spills in coastal areas.

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2015 ■ Q3

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**(d)** Chemical dispersants have been used in cleanup efforts following major oil spills.

**(d)(i)** Discuss both one advantage and one disadvantage of the use of chemical dispersants for oil spill cleanup.

**(d)(ii)** Identify either one biological or one physical method (other than chemical dispersal) used for oil spill cleanup in coastal waters or on beaches and describe how the method is used.

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Oil spills can be devastating in scope and damage. Since 1900, there have been many oil spills around the world that have had significant ecological and economic impacts.

**(e)** Catastrophic spills make up less than 20 percent of the oil that pollutes marine waters. Identify one other source of oil contamination and explain how the oil from this source enters marine waters.

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Oil spills can be devastating in scope and damage. Since 1900, there have been many oil spills around the world that have had significant ecological and economic impacts.

**(f)** Petroleum has many uses as a raw material for consumer goods. Identify one substitute for petroleum in a specific consumer product (other than fuel).