**Design & Technology**

**AQA GCSE** Logo

Description automatically generated with low confidence

**Fossil Fuels**

**Materials required for questions**

* Pencil
* Rubber
* Calculator

**Instructions**

* Use black ink or ball-point pen
* Try answer all questions
* Use the space provided to answer questions
* Calculators can be used if necessary
* For the multiple choice questions, circle your answer

**Advice**

* Marks for each question are in brackets
* Read each question fully
* Try to answer every question
* Don’t spend too much time on one question

**Good luck!**

**Q1.** Which one of the following statements is true?

**A** Coal is used to generate hydro-electric power

**B** Fossil fuels produce argon when they burn.

**C** Oil is extracted from the ground to produce petroleum

**Q2.** Which fossil fuel is the least commonly used for electricity generation today due to pollution concerns?

**A** Gas

**B** Coal

**C** Oil

**Q3.** Why are fossil fuels considered a reliable energy source?

**A** They are unlimited in supply

**B** They provide consistent power regardless of weather conditions

**C** They do not require any machinery to generate electricity

**Q4.** How is electricity primarily generated from coal?

**A** By directly converting coal into electrical current

**B** By chemically processing coal into electricity

**C** By burning coal to produce steam that drives a turbine

**Q5.** Explain the disadvantages of extracting fossil fuels as a source of energy **(3 marks)**

**Answers**

**Q1**.C

**Q2**. C

**Q3**. B

**Q4**. C

**Q5.**

* Mining of coal produces lots of waste (slag heaps) and pollution (of water courses).
* Visual pollution associated with open cast mining, location of power plants near rivers (water needed for cooling).
* Pollution associated with extraction of fossil fuels deep in the ground leads to atmospheric pollution.
* Shale gas extracted by pumping pressurised water and chemicals deep into the ground is believed to cause earthquakes/seismic shocks and damage to water courses.
* Drilling for oil can lead to pollution of marine ecosystems and pollution, eg Deepwater Horizon disaster in 2010 in the Gulf of Mexico.