MR SULLY UNFOLDS PHYSICS

Energy resources

AQA 4.1.3
Energy · Paper 1
Foundation & Higher

Name _____ Class _____ Date _____

We use energy resources for **transport**, **electricity generation** and **heating**. Each one has advantages and disadvantages.

KEY IDEAS

- Non-renewable: fossil fuels (coal, oil, gas) and nuclear fuel. They will run out.
- Renewable: bio-fuel, wind, hydro-electricity, geothermal, tides, the Sun and water waves. They are being (or can be) replenished as they are used.
- Compare resources on reliability, environmental impact and cost.

Section A · Recall

Grade 4–5

1 What is meant by a renewable energy resource? [1]

2 Name three non-renewable and three renewable energy resources. [3]

3 State the three main uses of energy resources. [3]

Section B · Compare

Grade 5–6

4 Complete the table. [5]

Resource	Renewable?	Reliable?	Main environmental problem
Coal			
Wind			
Nuclear			
Solar			
Tidal			

5 Explain why burning fossil fuels contributes to climate change. [2]

Section C · Stretch

Grade 7+

6 Explain why a country that uses a lot of wind and solar power still needs some reliable power stations, such as gas or nuclear. [3]

Exam-style question

AQA style

7 A town council must choose between building a gas-fired power station and a wind farm.

a Give one advantage of the gas-fired power station. [1]

b Evaluate the two options and recommend which the council should build. [6]

Total: _____ / 24

How confident am I?	Not yet	Nearly	Got it
I can name renewable and non-renewable resources	☐	☐	☐
I can compare reliability and environmental impact	☐	☐	☐
I can evaluate choices of energy resource	☐	☐	☐