

6.4 Distribution of Natural Energy Resources

Name: _____ Class: _____ Date: _____ **Total: 10 marks**

KEY WORDS unevenly distributed 分布不均 • wind 风能 • geothermal 地热能
• fossil fuels 化石燃料 • solar 太阳能

Objective

Build the skills to answer exam questions on the **distribution of natural energy resources**.

You must be able to:

- explain that energy resources are **unevenly distributed** 分布不均
- link distribution to geology and geography
- discuss the consequences for trade and security

1 Worked examples

Study these first. Each one shows the method for a question type used later — follow the steps and you can do the Practice and Exam-style questions yourself.

■ Uneven distribution

Energy resources are **unevenly spread** across the world because they depend on **geology and geography**:

- **Fossil fuels** form where ancient organic matter was buried (specific oil/coal regions).
- **Solar** is best in sunny low latitudes; **wind** where it is consistently windy; **geothermal** near plate boundaries; **hydro** where there are large rivers.

■ Consequences

Countries with few resources must **import** energy, affecting **trade**, prices, and **energy security**. Rich deposits can bring wealth but also conflict.

■ A worked link

A country near a tectonic boundary can use **geothermal** energy, while a flat, calm, cloudy country may rely on imports or other sources.

2 Practice

Now apply the methods above.

2.1 Why are energy resources unevenly distributed? [1]

2.2 Where is geothermal energy most available? [1]

2.3 What must a country with few energy resources often do? [1]

3 Exam-style questions

3.1 Solar power is most available in regions that are [1]

- **A** cloudy and dark
- **B** sunny (often low latitude)
- **C** near the poles only
- **D** underground

3.2 A country has strong, steady coastal winds but no fossil fuels.

(a) Suggest a suitable energy source. [1]

(b) Explain how uneven resource distribution affects a country's energy choices and security. [3]

3.3 Explain why a nation near a plate boundary might develop geothermal energy. [2]

Solutions

2.1 They depend on geology and geography, which vary from place to place.

2.2 Near plate boundaries / volcanic regions.

2.3 Import energy.

3.1 B — sunny (often low latitude).

3.2 (a) Wind energy. (b) A country uses the resources its geography provides; those lacking resources must import, which affects trade, prices, and energy security (dependence on others).

3.3 Near a plate boundary, heat from the Earth is close to the surface, so geothermal energy can be tapped to generate power.