

# 1.2 Geographic Data

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Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

**Total: 10 marks**

## Objective

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Build the skills to answer exam questions on **geographic data** 地理数据 and how it is gathered.

**You must be able to:**

- distinguish **quantitative** 定量 from **qualitative** 定性 geographic data
- identify sources: **GIS** 地理信息系统, **GPS** 全球定位系统, **remote sensing** 遥感, **census** 人口普查, fieldwork
- explain what each source is good for
- recognise that all geographic data is tied to a **location** 位置

## 1 Worked examples

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Study these first. Each one shows the method for a task used later.

### ■ Quantitative vs qualitative

**Quantitative** data are numbers (a census count, rainfall in mm). **Qualitative** data are descriptions (an interview, a field sketch, a photograph).

### ■ Key data sources

**GPS** gives precise location; **remote sensing**/satellites image large areas; **GIS** layers and analyses spatial data; a **census** counts a population; **fieldwork** gathers local first-hand data.

### ■ All data is spatial

Geographic data always answers *where* as well as *what* —every observation is tied to a location, which is what lets it be mapped and analysed.

## 2 Practice

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**2.1** Define quantitative geographic data and give one example.

[2]

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**2.2** State what remote sensing is and one thing it is useful for. [2]

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**2.3** A government wants to plan services for a growing city.

(a) Name the data source that counts the whole population. [1]

(b) Name the system used to layer and analyse that data spatially. [1]

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### 3 Exam-style questions

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**3.1** Interviews with residents about how safe they feel in a park are an example of [1]

- A quantitative data
- B qualitative data
- C remote-sensing data
- D census data

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**3.2** A phone that records the exact coordinates of a photo is using [1]

- A GIS
- B GPS
- C a census
- D a cartogram

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**3.3** Modern geographers combine many data layers.

(a) State one advantage of GIS over a single paper map. [1]

(b) State one limitation of relying only on satellite data. [1]

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### 4 Go further

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- work through the **1.2 Geographic Data** lesson on the **Learn** page;
  - read the **Thinking Geographically** section of the AP Human Geography handout on the **Know** page.

## Solutions

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**2.1** numerical data; e.g. a census population count or rainfall total.

**2.2** gathering data from a distance, e.g. by satellite/aircraft; useful for imaging large or hard-to-reach areas, land-cover change.

**2.3** (a) the census. (b) GIS —a geographic information system.

**3.1 B.** descriptions/opinions from interviews are qualitative data.

**3.2 B.** GPS supplies precise location coordinates.

**3.3** (a) it can overlay/analyse many variables and update quickly. (b) it may miss local, on-the-ground detail or people's views.