

1 Maps, scale and spatial thinking – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)
reference map	参考地图	_____
thematic map	专题地图	_____
choropleth	分级统计图	_____
dot	点密度图	_____
graduated symbol	比例符号图	_____
isoline	等值线图	_____
cartogram	变形地图	_____
Density	密度	_____
Concentration	集中度	_____
Pattern	分布模式	_____
scale of analysis	分析尺度	_____
Distance decay	距离衰减	_____
Time-space compression	时空压缩	_____

Recall

You have used maps and geography before:

- A map is a flat picture of a place, and it always leaves things out.
- Places are near or far from each other, and distance affects how they interact.
- Some things are spread evenly across an area; others cluster together.

This sheet turns those everyday ideas into the vocabulary AP Human Geography grades you on.

New ideas

■ 1 Two kinds of map

A **reference map** 参考地图 shows where things are — countries, roads, rivers. A **thematic map** 专题地图 shows a variable: how much of something is where.

The thematic types you must name are: **choropleth** 分级统计图 (areas shaded by value), **dot** 点密度图 (one dot equals a number of things), **graduated symbol** 比例符号图 (bigger symbol, bigger value), **isoline** 等值线图 (lines joining equal values), and **cartogram** 变形地图 (area size distorted to show the value).

■ 2 Every projection lies

A globe is curved; paper is flat. Flattening always distorts **shape**, **area**, **distance** or **direction** — you can preserve some, never all. Mercator keeps direction, which is why sailors used it, but it inflates land near the poles: Greenland looks the size of Africa and is fourteen times smaller.

■ 3 Density, concentration, pattern

These three are graded as separate terms and students routinely swap them.

Density 密度 is how many per unit area. **Concentration** 集中度 is how tightly they are packed — clustered or dispersed. **Pattern** 分布模式 is the arrangement — linear, centralised, random.

■ 4 Scale of analysis

The **scale of analysis** 分析尺度 is the level you look at: global, regional, national, or local. The same data can show opposite patterns at different scales — a country can be growing while half its provinces shrink. Naming your scale is a mark.

■ 5 Distance decay and time-space compression

Distance decay 距离衰减 says interaction between two places weakens as the distance between them grows. **Time-space compression** 时空压缩 says improvements in transport and communication have weakened that effect — the friction of distance is falling.

Practice

Try these in order. The methods are all above.

1.1 Name the type of thematic map that shades whole areas according to a value. [1]

1.2 Explain one way the Mercator projection distorts the world map. [2]

1.3 Distinguish between the density and the concentration of a phenomenon. [2]

1.4 Explain how the scale of analysis can change the conclusion drawn from the same data. [2]

1.5 Define distance decay, and explain how time-space compression affects it. [3]
