

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]
