

Geography: scale, patterns and inquiry

Supported preparation only; actual school choices and assessed work remain separate

Population and spatial scale: method

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Density=population/area; growth compares population over time. Natural change combines births and deaths; migration adds inflows and outflows.

A regional average hides spatial variation. Development measures need comparable dates, boundaries, units and attention to distribution.

Population patterns and development: source representation

Original source / task evidence

Task: region A has 120,000 people over 300 km², with most residents in one town. Compute density and explain why it cannot describe every locality.

Separate what is stated from the interpretation.
Population and spatial scale

Original fictional task source; not an authentic selected work.

Population and spatial scale: worked case

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Task: region A has 120,000 people over 300 km², with most residents in one town. Compute density and explain why it cannot describe every locality.

Identify the evidence before reading the model.

Population and spatial scale: reasoning

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Density = $120,000 \text{ people} / 300 \text{ km}^2 = 400 \text{ people/km}^2$. This is an areal average, not a uniform settlement pattern.

Map smaller units and compare access, income or services within them.

Population and spatial scale: your transfer

Population and spatial scale: your transfer

A region adds uninhabited land to its boundary and its density falls. Does this demonstrate out-migration?

Pause and give an individual answer with reasons.

Population and spatial scale: transfer review

Population and spatial scale: transfer review

Density can fall because area increases while population is unchanged. Compare fixed-boundary populations and migration records before inferring movement.

The denominator change, not necessarily demographic change, explains the reported average.

Vulnerability and resources: method

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Exposure identifies people/assets in harm's path; vulnerability concerns susceptibility; resilience concerns capacity to respond and recover. Resource security includes reliable access and affordability, not just reserves.

Climate mitigation addresses emissions; adaptation addresses effects.

Climate vulnerability and resource security: source representation

Original source / task evidence

Task: two flood-exposed districts have different housing, drainage and warning access. Evaluate why a hazard map alone cannot predict losses.

Separate what is stated from the interpretation.
Vulnerability and resources

Original fictional task source; not an authentic selected work.

Vulnerability and resources: worked case

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Task: two flood-exposed districts have different housing, drainage and warning access. Evaluate why a hazard map alone cannot predict losses.

Identify the evidence before reading the model.

Vulnerability and resources: reasoning

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Similar exposure can produce different losses through vulnerability and response capacity. Compare actual housing, access and recorded impacts; do not infer vulnerability from an income label alone.

A barrier may move risk downstream, so evaluate multiple places and scales.

Vulnerability and resources: your transfer

Vulnerability and resources: your transfer

Compare warnings with drainage improvements for households unable to travel to a shelter.

Pause and give an individual answer with reasons.

Vulnerability and resources: transfer review

Vulnerability and resources: transfer review

Warnings supply information but need accessible response options. Drainage can reduce local impacts but takes resources and may shift water elsewhere.

Evaluate transport, shelter access, maintenance, upstream/downstream effects and household evidence before a conditional recommendation.

Fieldwork preparation: method

Fieldwork preparation: method

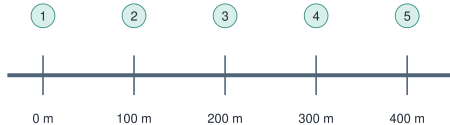
A geographic question needs a spatial relationship, justified sites and consistent measurements. Systematic sampling uses an interval; stratification represents relevant contrasting zones.

Keep real raw records, site evidence and conditions under school-approved access and safety.

Geographic inquiry and sampling: source representation

Original systematic pedestrian-count design

Shopping centre



Same five-minute count; comparable times; repeat each site.

Reused original source-lesson representation; values belong to that source example.

Fieldwork preparation: worked case

Fieldwork preparation: worked case

Original rehearsal counts at distances 0, 100 and 200 m are 30, 20 and 25 pedestrians in five minutes. Describe the pattern and improve the design.

Identify the evidence before reading the model.

Fieldwork preparation: reasoning

Fieldwork preparation: reasoning

Counts fall from 0 to 100 m then rise at 200 m; a simple monotonic decline is unsupported. Repeat comparable time windows and sites, inspect junctions/events and display the exception.

These illustrative data are not IA fieldwork.

Fieldwork preparation: your transfer

Fieldwork preparation: your transfer

One site is counted at lunch and another after closure. Why is the location comparison weak?

Pause and give an individual answer with reasons.

Fieldwork preparation: transfer review

Fieldwork preparation: transfer review

Time and activity vary with location, so the count difference cannot be attributed to location alone. Repeat comparable time windows at each site, use consistent intervals and record events and weather.

Preserve raw observations and remaining sampling limits.

Check yourself

Independent retrieval

One district average hides very different household exposures. What spatial evidence and sampling revision would improve the claim?

Write your reasoning before comparing it with the methods and limits taught in this lesson.