The Simple AP® Human Geography Unit 2 Cheat Sheet

2.1–2.2 Population Distribution & Its Consequences

Where People Live (2.1)

Physical factors: climate, landforms, water, soil. People cluster in low, mild, well-watered areas.
Human factors: jobs, transport, govt policy, history (old river-valley hearths still dense).
Clusters: East Asia, South Asia, Southeast Asia & Europe hold most of the world's people.

Density Measures

Type	Formula	Tells you
Arithmetic	People/land	Crowding
Physiological	People/arable	Farm strain
Agricultural	Farmers/arable	Farm tech

Egypt: modest arithmetic density but huge physiological density (packed along the Nile).

Consequences (2.2)

Carrying capacity: max pop an area can support w/o damage. Depends on tech & resources.
Economic: dense areas → bigger labor pool & markets, but strain on housing, jobs, services.
Environmental: dense or fast-growing areas → deforestation, water shortage, air pollution.
Social: crowding strains schools & health care.
Political: more people → more seats.

⚠ High arithmetic density ≠ overpopulation. Compare people to resources, not just to land.

✓ FRQ: name the density type, then explain what it reveals about that place's land.

2.3 Population Composition

Key Measures

Sex ratio: males per 100 females. >100 in Gulf states (male labor migrants); <100 in aging places.
Dependency ratio = (ages 0–14 + 65+) ÷ (ages 15–64) × 100 → dependents per 100 workers.
Young dependents high → need schools. **Old dependents** high → need pensions, health care.

Reading Population Pyramids

Pyramid: bar graph of age cohorts (5-yr groups) by sex; males left, females right.

Shape	Means	DTM stage
Wide base	High CBR, growth	Stage 2
Base narrowing	CBR falling	Stage 3
Column	Stable, low CBR	Stage 4
Narrow base	Pop. shrinking	Stage 5

Bulges & Notches

Bulge: big cohort (e.g., U.S. baby boom, 1946–64) → shows up older in each new pyramid.
Notch: small cohort → war deaths, famine, epidemic, or strict birth limits (China).
Lopsided working ages: many more males 20–40 → labor in-migration (Qatar, UAE).
Predict needs: wide base → schools, jobs later; heavy top → elder care, pensions.

⚠ A pyramid is a snapshot of one year. Trends need 2+ pyramids for the same place.

✓ FRQ: name the cohort, describe the shape, then link it to a cause or a future need.

2.4 Population Dynamics

Core Rates

Measure	Definition
CBR	Births per 1,000 people/yr
CDR	Deaths per 1,000 people/yr
RNI	(CBR − CDR) ÷ 10, in %
TFR	Avg. births per woman
IMR	Infant deaths per 1,000 births

Replacement level: TFR ≈ 2.1 keeps pop. steady (w/o migration). Below → long-run decline.
Life expectancy: avg. years a newborn is expected to live. ↑ w/ health care, food, sanitation.

Growth Math

Pop. change = (births − deaths) + (immigrants − emigrants), usually measured per year.
Doubling time ≈ 70 ÷ RNI (Rule of 70). RNI 2% → doubles in ~35 yrs; 1% → ~70 yrs.
Example: CBR 30, CDR 10 → RNI = (30 − 10) ÷ 10 = 2.0% → ~35-yr doubling time (fast).

Patterns & Drivers

High TFR: rural, farm economies (kids = labor), high IMR, low female education, religious norms.
Low TFR: urban, high cost of raising kids, women in school & paid work, contraception access.

⚠ CBR & CDR are per 1,000 people; RNI is a percent (so divide the gap by 10).

✓ Explain WHY a rate is high or low: tie it to economy, health care, or gender roles.

2.5 The Demographic Transition Model

DTM Stages

Stage	CBR / CDR	Growth
1 High stationary	High / high	Very low
2 Early expanding	High / falls	Rapid
3 Late expanding	Falls / low	Slowing
4 Low stationary	Low / low	Very low
5 Declining	CBR < CDR	Negative

What Drives Each Shift

Stage 1 → 2: CDR drops b/c of better food supply, sanitation, clean water, vaccines.
Stage 2 → 3: CBR drops b/c of urbanization, women's education, contraception, lower IMR.
Stage 4 → 5: TFR well below 2.1 + aging pop. → deaths outnumber births → pop. shrinks.
Examples: Stage 2: Niger. Stage 3: India, Mexico. Stage 4: U.S., France. Stage 5: Japan, Italy.

Epidemiologic Transition

ETM: shift in leading causes of death as a country develops. Pairs w/ DTM stages.
ETM stages: 1 famine & pestilence → 2 receding pandemics → 3 degenerative (heart disease).
Later: 4 delayed degenerative (longer life) → 5 reemerging infections (COVID-19, TB).

⚠ No country is in Stage 1 today. Stage 2 is the rapid-growth stage, not Stage 3.

✓ FRQ: cite a stage AND the CBR/CDR change that defines it, plus one cause.

2.6–2.7 Malthus & Population Policies

Malthusian Theory (2.6)

Malthus (1798): pop. grows geometrically (2, 4, 8…); food grows arithmetically (1, 2, 3…).
Prediction: pop. outruns food → famine, disease, war (**positive checks**) unless births fall.
Neo-Malthusians (Ehrlich, *The Population Bomb*): add resource depletion & pollution.

Critiques

Boserup: pop. pressure drives farm innovation (new methods) → more food, not famine.
Tech: Green Revolution (HYV seeds, fertilizer, irrigation) raised yields far past his forecast.
Distribution: hunger today mostly from poverty, conflict & access, not total food supply.

Population Policies (2.7)

Type	Goal	Example
Antinatalist	Fewer births	China 1980–2015
Pronatalist	More births	France, Hungary
Immigration	Shape migration	Canada points

China: one-child policy → low TFR, skewed sex ratio, fast aging → 2-child (2016), 3-child (2021).
India: 1970s forced sterilization backfired; later voluntary family planning instead.
Pronatalist tools: baby bonuses, paid parental leave, cheap child care, family tax breaks.

⚠ Pronatalist policies rarely lift TFR much: costs of raising kids & career goals still win out.

✓ Policy FRQs: name the type, the goal, and one intended + one unintended effect.

2.8–2.9 Women & Demographic Change; Aging

Women & Demographic Change (2.8)

Female education ↑ → later marriage, later 1st birth, more jobs → fewer children (TFR ↓).
Paid work: careers raise the cost of time out of work → smaller & later families form.
Contraception & health care access → women control family size; IMR ↓ → fewer births needed.
Legal change: property, voting & divorce rights → women gain more choice in family size.

Aging Populations (2.9)

Causes: low TFR + longer life expectancy → share of people age 65+ rises steadily over time.

Effect of aging	Example response
↑ Elderly dependency	Raise retirement age
Pension, health costs ↑	Raise taxes, cut benefits
Labor shortage	Admit more immigrants
Shrinking pop.	Pronatalist incentives

Examples: Japan (~30% age 65+), Italy, South Korea (world's lowest TFR, under 1.0).
Economy: fewer workers paying in, more retirees drawing out → strain on public budgets.

Making the Link

Chain: women's education ↑ → TFR ↓ → aging ↑ → dependency & labor shortages ↑.

⚠ Aging is not only a rich-country issue: China & Thailand are aging before getting rich.

✓ Name a policy response (raise retirement age) & explain how it eases the problem.

2.10–2.11 Causes & Types of Migration

Push & Pull Factors (2.10)

Factor	Push (leave)	Pull (go to)
Economic	No jobs	Better pay
Political	War	Safety
Social	Bias	Family
Environment	Drought	Mild climate

Intervening obstacle: barrier along the way (border wall, cost, visa rules, mountains).
Intervening opportunity: a closer pull that stops the move short of its planned goal.

Models & Patterns

Ravenstein: most moves are short; long moves → big cities; each flow → counterflow.
Distance decay: fewer migrants as distance ↑.
Gravity model: flow ∝ (pop_1 × pop_2) ÷ distance.

Chain migration: migrants follow family/friends who moved earlier → ethnic enclaves.

Forced vs. Voluntary (2.11)

Forced: no real choice. **Refugee**: crossed an intl border, fears persecution at home.
IDP (internally displaced person): forced out but still inside own country (Syria, Sudan).
Voluntary: chosen move: **transnational**, **internal**, **step**, **chain**, **guest worker**, seasonal.

⚠ Refugee vs. IDP: a refugee crossed an international border; an IDP never did.

✓ Pair a push w/ its matching pull to explain a flow (war in Syria → safety in Germany).

2.12 Effects of Migration

On the Sending Place

Remittances: money sent home → big share of GDP in places like Nepal, Honduras, Tajikistan.
Brain drain: skilled workers leave → loss of doctors, nurses, engineers, teachers.
Demographics: young adults leave → aging origin, skewed sex ratio, fewer births at home.
Return migrants: bring savings & skills home.

On the Receiving Place

Brain gain: skilled newcomers fill labor gaps; migrants pay taxes & start businesses.
Ethnic enclaves: neighborhoods w/ shared language, shops, worship (e.g., Chinatowns).
Culture: new foods, languages, religions → diffusion, **acculturation**, **assimilation**.

Policy & Politics

Term	Meaning
Guest worker	Temp. legal labor migrant
Quota	Cap on migrants per country
Xenophobia	Fear/dislike of outsiders
Counterurbanization	City → rural/suburb move

Guest workers: Turkish workers in West Germany (1960s); South Asians in the Gulf today.

⚠ Effects cut both ways: name a positive AND a negative for both origin and destination.

✓ FRQ: say WHO is affected (origin or destination) and at what scale.