Year 9 Geography Knowledge Organiser

Geography – Urbanisation & Sustainability: Can One Person Really Save the Planet?

▨ Core Knowledge

1. What is Sustainability?
- Meeting present needs without compromising future generations
- Three pillars: environmental, social, economic

2. What is Climate Change & How Do We Contribute to It?
- Global warming due to greenhouse gas emissions
- Our individual and collective carbon footprints

3. What Are the Sustainable Development Goals (SDGs)?
- 17 UN goals to tackle poverty, inequality, and climate change by 2030
- Link to global citizenship and personal responsibility

4. What Are the Global Challenges We Face Today?
- Climate crisis, pollution, biodiversity loss, water and energy access

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▨ Urbanisation & Unsustainable Cities

5. Why Are Some Cities Growing Unsustainably?
- Case study: **Dhaka** – overpopulation, pollution, informal housing
- Urban challenges: traffic, poor infrastructure, health risks

6. How Are Some Cities Becoming More Sustainable?
- Case study: **Singapore** – green spaces, transport, innovation

Key Vocabulary	Common Misconceptions	Key Questions
Sustainability Carbon footprint Climate change Urbanisation Greenhouse gases Global challenges	Individual actions don't matter in solving global problems All cities grow sustainably with modern technology Climate change only affects polar regions	1. Can one person really make a difference in solving global challenges? 2. What makes a city sustainable—and why is it so hard to achieve? 3. How can global goals like the SDGs lead to real change at local and international levels?

Geography – Coasts & Climate: *What Price Are We Willing to Pay to Live by the Sea?*

▨ Core Knowledge

1. **What are coasts & who uses them?**
   Recreation, settlement, industry, ecosystems
2. **Processes shaping coasts** – erosion (hydraulic action, abrasion), transport (longshore drift), deposition
3. **Erosional landforms** – cave → arch → stack → stump (pop-up headland)
4. **Sediment transport** – "conveyor-belt" effect of longshore drift

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■ Climate Challenges

5. **Living by the coast:** risks (flooding, erosion, salt intrusion) & opportunities (tourism, fishing)
6. **Super typhoons:** formation, impacts on people & environments (case-study focus)
7. **Management & adaptation:** hard vs soft engineering, community resilience

🔑 Key Vocabulary	⚠ Common Misconceptions	❓ Key Questions
Coast | Erosion | Hydraulic action | Longshore drift | Stack/Stump Deposition | Fetch | Storm surge | Hard/Soft engineering	• Erosion and weathering are the same process. • Longshore drift moves material straight out to sea. • Hard engineering permanently "fixes" a coastline. • Only tropical coasts face storm hazards.	1. Why do people persist in living along hazardous coastlines? 2. How do natural processes create—and destroy—coastal landforms? 3. In an era of stronger storms and rising seas, which coastal-management strategies are worth the cost?

Geography – Food & Water Security: *Is It Too Late to Save the World?*

▨ Core Knowledge

1. What is the truth about climate change?
• Causes: greenhouse gases from fossil fuels, deforestation, industry
• Impacts: temperature rise, extreme weather, ecosystem disruption
Resource: *David Attenborough – The Facts*

2–3. Percy the Polar Bear – A Case Study
• Why is Percy "getting better at swimming"?
• How is climate change affecting Percy's habitat?
• Explore melting ice caps, rising sea levels, and loss of biodiversity

4. How Can We Fight Back Against Climate Change?
• Mitigation: renewable energy, carbon capture, reforestation
• Adaptation: resilient crops, climate-resilient homes

5. What Happens When Climate Change Forces People to Move?
• Climate migration and its human impact
• Case studies of climate refugees (e.g. Pacific Islands, Bangladesh)

Key Vocabulary	Common Misconceptions	Key Questions
Climate change Greenhouse effect Carbon footprint Habitat loss Climate refugee Food insecurity Water scarcity	• Climate change is only about hotter temperatures • It only affects wildlife, not people • It's too late to make a difference	1. How is climate change affecting habitats, people, and global resources? 2. What can we do—individually and globally—to fight back against climate change? 3. Is there still time to protect the future of our planet?