**🌊 Environmental Science – Weekly Lesson Plan (WAG)**

**Unit Focus: Terrestrial Biomes Dates: Sept. 22–26, 2025 Course:** Environmental Science | **Grade:** 9 | **Teacher:** [**Rani]**

| **Day** | **Learning Target (LT) & Success Criteria (SC)** | **Activation of Learning (5 min)** | **Focused Instruction – I DO (10 min)** | **Guided Instruction – WE DO (10 min)** | **Collaborative Learning – Y’ALL DO (10 min)** | **Independent Learning – YOU DO (10 min)** | **Closing (5 min)** |
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| **Mon (9/22)**Review Biogeochemical Cycles | **LT:** I can review and apply knowledge of the biogeochemical cycles.**SC1:** I can identify key steps in C, N, P, O, and S cycles.**SC2:** I can explain how these cycles support life in ecosystems. | **Quick Write**: “Which biogeochemical cycle do you find most important for life and why?” | **Direct Instruction**: Mini-review lecture using **anchor chart** for each cycle. | **Graphic Organizer (Guided):** Teacher models filling in cycle flowcharts with prompts. | **Jigsaw Strategy**: Students review one cycle in expert groups, then teach peers. | **Independent Reflection:** Students complete a comparison chart of cycles. | **Exit Ticket**: “Which cycle most influences aquatic ecosystems and why?” |
| **Tue (9/23)**Test on Biogeochemical Cycles | **LT:** I can demonstrate mastery of biogeochemical cycles.**SC1:** I can answer test questions with accuracy. | **Anticipation Guide**: True/False prompts about cycles (test prep). | **Test Administration**: Biogeochemical cycles assessment (Unit Test). | During test, teacher circulates to clarify directions. | N/A (independent test). | **Test Completion**: Students finish independently. | **3-2-1 Summary** (Post-Test Reflection): 3 strengths, 2 challenges, 1 next step. |
| **Wed (9/24)** **valuate claims, evidence, and reasoning of the relationship between the physical factors**  **(e.g., insolation, proximity to coastline, topography) and organismal adaptations within**  **terrestrial biomes.** | **LT:** I can describe **relationship between the physical factors**  **(e.g., insolation, proximity to coastline, topography) and organismal adaptations within**  **terrestrial**  biomes.**SC1:** I can classify aquatic ecosystems.**SC2:** I can compare their biodiversity. | Short clip of ocean & freshwater diversity. | Teacher models how to analyze biome characteristics. | **Collaborative Annotation:** Students annotate biome maps with teacher guidance. | Groups classify sample organisms into correct aquatic biome. | Students complete a biome summary chart (name, climate, organisms). | **One-Minute Summary**: “Which aquatic biome is most critical to humans and why?” |
| **Thu (9/25) Plan and carry out an investigation of how chemical and physical properties impact aquatic**  **biomes in Georgia.**  **(Clarification statement: Consider the diverse aquatic ecosystems across the state such as**  **streams, ponds, coastline, estuaries, and lakes.)** | **LT:** I can explain chemical and physical properties of aquatic ecosystems.**SC1:** I can identify abiotic factors (pH, salinity, temp, DO).**SC2:** I can analyze their effect on aquatic organisms. | **Do Now**: Students brainstorm abiotic factors they’ve observed in water. | **Modeling w/ Worked Examples:** Teacher demonstrates data interpretation of salinity and dissolved oxygen. | **Error Analysis:** Students analyze a flawed lab report on pH impact. | **Socratic Seminar:** Students debate “Which factor (temperature, salinity, DO) most influences biodiversity?” | **Independent Graphing Task:** Students plot given DO vs. fish diversity data. | **Revisit LT:** Students rate understanding (1–4) & write one lingering question. |
| **Fri (9/26)**Impact of Chemical & Physical Properties on Biomes | **LT:** I can evaluate how abiotic properties shape aquatic ecosystems.**SC1:** I can predict impacts of changes in chemical/physical factors. | **KWL Chart**: “What do I know/ want to know about human impacts on aquatic biomes?” | **Direct Instruction w/ Analogies**: Teacher uses analogies (e.g., fish in low-oxygen = humans at high altitude). | **Reciprocal Teaching:** Groups read & take roles (summarize, predict, question, clarify) on case study. | **Gallery Walk:** Groups create posters showing how one abiotic factor shapes a biome; peers rotate to critique. | Write a short claim-evidence-reasoning (CER) response on how a chemical factor impacts an aquatic biome. | **Peer Debrief**: Turn & talk – “What was most surprising about today’s case study?” |