Lesson Plan 2.3: Your Ecological Footprint Created by Sabrina Miller Fulbright Distinguished Award in Teaching Research June 2025

Lesson Objective	Students will use an online tool to calculate their ecological footprint (including carbon footprint) and their personal Earth overshoot day. Students will then compare their own footprint to others' around the world, learn about solutions, and consider what they can do to reduce their footprint.	
Standards Addressed	HS-ESS3-3. Create a computational model or simulation to illustrate the relationships among the management of natural resources, the sustainability of human populations, and biodiversity. Náttúruauðlindir og sjálfbær nýting: gert grein fyrir verndun og nýtingu náttúruauðlinda í tengslum við sjálfbæra þróun, sjálfbæra nýtingu og rýnt í eigin neysluvenjur Geta til aðgerða: skipulagt og tekið þátt í aðgerðum er varða	
	náttúruvernd og umhverfismál í nærumhverfi og í alþjóðlegu samhengi.	
United Nations Sustainable Development Goals Addressed	4 QUALITY EDUCATION 12 CONSUMPTION AND PRODUCTION CO 13 CLIMATE ACTION 13 CLIMATE ACTION	

Teacher Preparation

- Lesson handouts may be printed for students to complete on paper or be copied into a new Google Doc to be completed digitally.
- Each student should have their own device to calculate their personal ecological footprint using the website https://footprintcalculator.org/

Lesson Agenda	What Students Will Do:	What Teachers Will Do:
Warm Up (5 min)	Students will immediately begin working on the Warm Up activity as soon as they enter class. Students should complete the Warm Up within the first 3 minutes of class. Students should be prepared to share their answers to the Warm Up.	The teacher will circulate the room to check on student answers and call on students to share their answers / write their answers on the board.

Student Work Time: Ecological Footprint Calculator (20 min)	Students will have ~10 minutes to complete the Ecological Footprint survey. Students will then review their results and answer questions 1 - 8 on their handout.	The teacher should circulate around the room and check in with students as they are working.
Check-in (5 min)	Students will turn & talk with their group about their results and be prepared to discuss their results with the class.	After students have calculated their ecological footprint and reviewed their results, ask students to share their results with their group (3-4 students sitting nearby). Then call on a few students to share their results (use the slides as a reference).
Student Work Time: Focus on Solutions (10 min)	Students will explore solutions and consider what they can do. They will record their responses in questions 9 - 13 on their handout.	The teacher should individually check in with students during work time (especially ones who don't normally volunteer) to share their answers during End-of-Class Wrap Up.
End-of-Class Wrap Up (8-10 min)	Students should be ready to share their answers with the class if called on. Students may add on to their responses as new information/ideas are shared.	The teacher asks students to share what they can do, what their families can do, and what their government should do. May ask students to "turn & talk" to each other (for ~30 seconds) before sharing with the whole class.