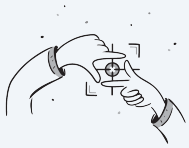
Guiding a discussion (advanced/expert)



Name: Date:

When guiding a discussion on global warming and heatwaves, it's crucial to create a balanced and fact-based environment. Start by defining global warming and its causes, such as greenhouse gas emissions from burning fossil fuels. Use visual aids like graphs to show rising global temperatures and the increasing frequency of heatwaves. Encourage students to share their observations and experiences with extreme heat.

Highlight real-world examples, such as the 2021 Pacific Northwest heatwave, which saw unprecedented temperatures and had severe impacts on public health and infrastructure. Discuss the consequences of heatwaves, including heat-related illnesses and agricultural damage.

Promote critical thinking by asking open-ended questions like, "How do heatwaves affect ecosystems?" and "What can individuals and communities do to mitigate these effects?" Ensure that all students have the opportunity to speak and remind them to respect differing viewpoints. By providing a comprehensive overview and encouraging active participation, you can foster a deeper understanding of the topic.

This table will help you prepare for the discussion

Step	Discussion Element	Description and Examples
1	Introduction to Global Warming	• Define global warming. • Explain the role of greenhouse gases like CO_2 and methane. • Visual aids: Graphs of rising global temperatures.
2	Causes of Global Warming	• Burning fossil fuels (coal, oil, natural gas). • Deforestation and land use changes. • Industrial processes and waste management.
3	Heatwaves Explained	• Define what a heatwave is. • Explain the frequency and intensity of heatwaves. • Visual aids: Graphs showing the increasing frequency of heatwaves.

4	Real-World Examples	• 2021 Pacific Northwest heatwave: Unprecedented temperatures, impacts on health, and infrastructure. • European heatwaves of 2003 and 2019. • Australian heatwaves affecting wildlife and agriculture.
5	Consequences of Heatwaves	• Heat-related illnesses (heat stroke, dehydration). • Impact on agriculture (crop failures, livestock stress). • Infrastructure stress (power outages, road damage). • Ecosystem disruptions (wildfires, water shortages).
6	Encouraging Observations	• Invite students to share personal experiences with extreme heat. • Discuss local examples and impacts. • Encourage dialogue and varied perspectives.
7	Critical Thinking Questions	• How do heatwaves affect ecosystems? • What can individuals and communities do to mitigate these effects? • What policies could help reduce the impact of heatwaves?
8	Promoting Respectful Dialogue	• Ensure every student has the opportunity to speak. • Remind students to respect differing viewpoints. • Create a supportive environment for discussion.

9	Conclusion	• Summarize key points discussed. • Highlight the importance of understanding and addressing global warming and heatwaves. • Encourage continued learning and action.

This mind map can aid you in preparing for a discussion