



Background Research Guide

Project: _____

Group Members: _____

Complete each of these sections in a notebook or on separate paper. You can split up research tasks among group members.

1. Define the Big Picture:

- What is the global, national, or local issue related to your project?
- How does your project connect to environmental, technological, health, or sustainability challenges?
 - i. Example: If you're studying food waste, think about global food insecurity or the environmental impact of waste.

2. Identify Key Concepts and Terms:

- List important scientific, technical, or environmental terms related to your project (e.g., photosynthesis, CO₂ absorption, thermal mapping, composting).
- Research definitions, processes, and how these concepts function in real-world applications.

3. Research Current Events and Case Studies:

- Look for news articles, scientific studies, or case studies related to your topic.
- Are there communities, schools, or organizations addressing similar issues?
 - i. Example: If working on heat mapping, find case studies on urban heat islands in major cities.

4. Connect to Real-World Impact:

- Why does this topic matter to your school, community, or the world?
- How can your project's findings contribute to solving a problem or improving a situation?



- i. Example: Analyzing green spaces could influence how cities design parks to reduce heat.

Tips for Success:

- Use reliable sources: scientific articles, educational websites, and reputable news outlets.
- Take notes in your own words to ensure you understand the material.
- Discuss your findings with teammates to deepen your understanding and make connections.