

Terms

Logic Chaining

A step-by-step way of connecting ideas so each point follows from the last. Strong writing and reasoning depend on it, especially under time pressure.

Federal Research References

Use these trusted tips, public databases and portals to compare AI-generated information with verified, original data and reports. Great for student projects, fact-checking, and developing strong research habits.

USDA ARS / NASS

The Agricultural Research Service and National Agricultural Statistics Service offer data tools and research on agriculture, farm economy, and crop yield trends. Great for student research on regional agriculture and data verification.

 <https://www.nass.usda.gov/>

USDA Research, Education, and Economics (REE)

Centralized gateway to USDA's science branches, including food systems, rural economics, education studies, and more. Good for exploring multi-disciplinary reports.

 <https://www.ree.usda.gov/welcome>

USDA Forest Service R&D / Treesearch

Massive repository of peer-reviewed forestry, ecology, and environmental conservation reports. Excellent for environmental research and historical land-use data.

 <https://www.fs.usda.gov/research/treesearch>

Science.gov

Search across over 60 federal agencies for data on climate, health, energy, education, transportation, and more. High-trust portal for source validation.

 <https://www.science.gov>

Sample Prompts for Student Research

1. USDA NASS / ARS (Agriculture Data)

- “Compare corn crop yields in Iowa vs. Nebraska over the last 10 years. Use NASS data to verify trends.”
- “What are the major pests impacting soybeans in the Midwest? Summarize findings from ARS.”

2. USDA REE Portal (Education & Economics)

- “Find a USDA report on rural education outcomes after 2020. What factors are driving changes?”
- “Explore USDA research on food deserts — what are the economic impacts?”

3. Forest Service / Treesearch

- “What are the ecological impacts of controlled burns in Western forests? Pull peer-reviewed examples.”
- “Use Treesearch to find long-term land use data for the Appalachians.”

4. Science.gov

- “Search for government-backed studies on freshwater access in the U.S. since 2010.”
- “How do U.S. agencies define ‘climate resilience’? Summarize findings from at least two departments.”

Sample Exit Ticket Template

Quick Wrap-Up Response (Exit Ticket)

Student Name: _____

Date: _____

1. What did I build or test today?

2. What surprised me the most?

3. What part was most confusing, and why?

4. Could I explain this to someone else?

☐ Yes ☐ Not yet ☐ Sort of