

Can Your Land Support Your People?

Science · Grades 4-12 · 45-60 minutes

This free lesson runs the full SFC Nations cycle: Learn » Explore » Create » Make Decisions » Apply. The academic content comes first, then the student uses it to run a nation of their own.

1. LEARN

The concept, stated plainly.

- An ecosystem is a community of living things plus the non-living conditions they depend on: water, soil, climate, and energy.
- Carrying capacity is the largest population an environment can support without degrading.
- Resources are renewable (timber, fish, water if managed) or non-renewable (oil, coal, most minerals).
- Every extraction has a downstream effect. Clearing forest for farmland changes water, soil, and habitat at the same time.

2. EXPLORE

Poke at it before applying it.

1. List the resources your nation's real-world location actually has.
2. Sort them into renewable and non-renewable.
3. Pick one resource and trace three steps of what happens if you double how fast you use it.
4. Which single resource would hurt most to lose? Why that one?

3. CREATE

Make something that is yours.

1. Draw or describe your nation's environment: climate, water, land, and energy sources.
2. Write a one-page resource plan naming what you will use, protect, and avoid.
3. State a population your environment can support, and show your reasoning.

4. MAKE DECISIONS

No option is free. Choose anyway.

1. Clearing forest raises income now and lowers long-term food security. Clear it or not?
2. You can build a coal plant today or a slower renewable project. Which do your citizens need more?
3. A neighbor will pay well for water rights. Sell?

5. APPLY WHAT YOU LEARNED

Use it in your nation and measure the result.

1. Track your population and happiness for one week alongside your resource decisions.
2. Identify one measurable consequence of a resource choice you made.
3. Revise your resource plan and mark exactly what evidence changed your mind.

Student worksheet

Name: _____ Date: _____

1. What limits your nation's carrying capacity most?

2. Which resource decision had a consequence you did not predict?

3. Give one example of a renewable resource you could still ruin. How?

4. What would you protect first if your population doubled?

Parent and teacher notes

- Grade the reasoning, not the outcome. A defended bad decision beats a lucky one.
- Ask “what did that cost you?” after every choice the student makes.
- Let a nation fail once. The recovery week teaches more than the lesson did.

Want more? Explore the complete HOMESCHOOL NATIONS curriculum at sfcnations.com/homeschool
• Why this works: sfcnations.com/homeschool/why-sfc