



# lesson detail

LEARNING OBJECTIVES | Identify cause and effect relationships | Classify issues

## 1> INTRODUCE.

Explain that in this step students will need to make a decision about which issue they should address as a group. There are several choices and many students may already have their favorite, but some may not be the right choice for the group. In order to help narrow down the list of issues, it might be helpful to do two things: look at cause and effect, and classify the issues.

Provide the conceptual framework and expectations.

## 2> EXPLORE CAUSE AND EFFECT RELATIONSHIPS FOR SPECIFIC ISSUES.

The first step in the selection process involves generating causes and effects for each issue that appears on the class list. This is important because Earth Force is about getting to the root cause of an issue—not finding quick fixes. Looking at cause/effect relationships broaden the possibilities because new issues may begin to appear.

For example, by identifying the causes of air pollution in a particular city, students may list school bus exhaust, factory emissions, and a local coal-burning plant.

This could lead to students becoming interested in addressing the school buses idling in front of their school or the local coal burning plant.

Cause and effect can also help narrow the list of issues by allowing students to see which issues they may have no control over. Consider the following list of issues that have appeared on Earth Force inventories:

- Broken tree branches
- Snow covering the playground
- Dead plants

Identifying the cause of each (ice storm, snow storm, winter season) helps students see that sometimes these are not issues that it would be worthwhile to address since they were all caused by weather and climate.

Use [the cause and effect handout](#) as a model for introducing cause and effect sequence. Students will develop cause and effect relationships for two issues based on their knowledge of this specific problem. Students can work alone or in small groups. Divide all issues among the students. At this stage, the goal is to have students compile the causes and effects that they are aware of, as well as make reasonable guesses about suspected causes and effects. Later in the process, they can verify their guesses as they do more extensive research on their selected issue.

As a large group, students compare and contrast issues to identify the underlying principles of issues. For example, one underlying principle for some issues could be that human action creates pollution, which has a negative impact on the environment.

## 3> CLASSIFY THE ISSUES INTO CATEGORIES.

Another way to help students get to the bottom of an issue is to classify them. This classification helps students understand the issue better and can influence what and how students think about their community.

Listing issues into categories by location or by problem type may help students decide which issues need to be eliminated (for example if the issue occurs in a park that can only be reached by bus) or which need to be considered (if the park is walking distance).

Grouping issues in different ways also influences students' perception of the issues. For example, our perception of foods may change if we group them into "gives us energy" and "drains energy" instead of looking at "sweets" and "vegetables."

- How did you reclassify the items?
- What do the items in your categories have in common?