
# Gold Seal Lesson

| *Author(s):* | | | *Lesson Title:* | | | |
|---|---|---|---|---|---|---|
| *Marsha Kucker* | | | *Throw it in the Garbage* | | | |
| ***Grade Span*** | | | ***ICLE Application Model*** | | | |
| ***K-4*** | ***5-8*** | ***9-12*** | ***A*** | ***B*** | ***C*** | ***D*** |
| ***X*** | | | | | | ***X*** |

**Instructional Focus:**

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| **Science in Personal and Social Perspectives**<br>Students apply scientific principles to personal and social issues. |
| **Science in Inquiry**<br>Students demonstrate knowledge and skills necessary to perform scientific inquiry. |
| **Habits of Mind**<br>Students develop habits of mind including curiosity, open-mindedness and persistence. |
| **Speaking**<br>Students speak for a variety of purposes and audiences with sophistication and complexity appropriate to the grade level. |
| **Listening**<br>Students listen for a variety of purposes appropriate to the grade level. |

**Performance Task**

1. Using the contents of the classroom trash can, discuss with the students who placed the garbage in the trash can and why it was put there. Ask the students – Where do we put our garbage in the school's cafeteria? Lavatory? Office?, etc. – Why? Discuss. Ask the students – Where do you put your garbage at home and who takes care of the garbage at home? Discuss.

2. As a class, brainstorm the different types of garbage we have at home. List and sort the items into different categories. (i.e., paper, glass, aluminum cans)

3. Question the students as to where they think the garbage goes once it leave the classroom. Introduce the term landfill as a special place where trash is taken to be thrown away. A landfill is a giant hole in the land where the trash is placed and then covered up.

4. Introduce the term "recycling" to the class. Explain that the class is going to start a recycling project. Have students develop a plan to recycle paper. Ask them also to bring pop (soda) cans from home or those picked up as litter. Work with the custodial staff to set up a process for collecting and storing the cans.

5. Have the class discuss options for use of funds collected from the can recycling project. (Examples – donation to homeless shelter, donations to a city park, etc.)

**ICLE Essential Skills**

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| Make observations using senses and instruments. Inferences and interpretations are arrived at based on observations. Classify observable properties and organize observations in a meaningful and logical way. (s5) |
| Understand how humans, through technology, cause environmental change by disrupting the equilibrium or balance of nature by introducing pollutants into the environment. (s6) |
| Understand the human impact on the environment through pollution (air, water, and soil), and ways to improve it through education, research, laws, and conservation. (s10) |
| Know and apply the principles of scientific inquiry. (Implicit in this statement are the processes of prediction, estimation, developing hypotheses, drawing conclusions, evaluation, and following ethical principles and professional procedures.) (s114) |
| Plan and apply real or hypothetical models and constructions to facilitate investigation and learning and the solution to practical problems. (s115) |
| Follow oral or written directions. (ela 4) |
| Express opinions clearly and forcefully without interrupting or insulting others. (ela 16) |
| Use brainstorming, role playing, and standard problem solving strategies to define a problem and suggest solutions. (ela 19) |
| Participate, sometimes leading, in group meetings by contributing, taking turns speaking, and working toward a common goal. (ela 20) |
| Gather information such as data, facts, ideas, concepts, and generalizations from oral sources. (ela 51) |

**Scoring Guide:**

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| See attachment: Throw it in the Garbage Chart |

**Keywords**

| English Language Arts | Mathematics | Science |
|---|---|---|
| **Reading** | **Algebra** | **Earth Science**<br>**Scientific inquiry**<br>**Environment** |
| **Writing** | **Geometry** | **Life Science**<br>**Environment**<br>**Scientific inquiry** |
| **Communications**<br>**Discussion**<br>**Listening**<br>**Illustration**<br>**Visuals** | **Statistics** | **Chemistry** |
| **Literature** | **Calculus** | **Physics** |
| **Other** | **Trigonometry** | **Other** |
| | **Other** | |

**Throwing it in the Garbage**

# Chart

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| **3** | **BEYOND** | Analyzed and readily understood the task.<br><br>Developed an efficient and workable strategy.<br><br>Showed explicit evidence of carrying out the strategy.<br><br>Synthesized and generalized the conclusion. |
| **2** | **AT LEVEL** | Understood the task.<br><br>Developed a workable strategy.<br><br>Inferred (some evidence) but not always clear.<br><br>Connected and applied the answer. |
| **1** | **NOT YET AT** | Partially understood the task.<br><br>Appropriate strategy some of the time.<br><br>Possible evidence of a plan – not clear.<br><br>Partial connection of answer. |
| **0** | | Totally misunderstood.<br><br>Inappropriate, unworkable strategy.<br><br>No evidence of carrying out a plan.<br><br>No connections of answer.<br><br>Blank. |