

JOURNALING YOUR TRASH

Collect Observations and thoughts about Material Use

Curriculum topics

- Human Impacts
- Material Properties
- Recycling
- Informative & Narrative Writing

Subjects

- Earth & Space Science
- English/Language Arts

Grade range: K – 8

Who we are: Resource Area for Teaching (RAFT) helps transform the learning experience by inspiring joy through hands-on learning.



Have you ever observed how much and what types of trash are in your bins at home or school? How much and what types of trash do *you* contribute to the bins? These are great questions to explore with students! Most of the time, people throw items away without thinking about quantity even though they may know that not all types of trash go in the same containers. For example, children might know to look for a can/glass recycle bin when needed but not realize how many bottles or cans they dispose of in a day, month, or year. That is where a simple journal comes in handy!

This activity raises students' awareness about the types and amounts of trash at home or school trash bins. They peak inside local bins to observe and then record their findings as written notes and/or drawings in a journal made from recyclable materials. Students discuss their observations and formulate personal changes in behavior around material use.



A student journaling outside

Share Your feedback!

<http://bit.ly/RAFTkitsurvey>

Materials

Materials in the kit may vary but generally, this kit contains the following:

- File folder or cardstock, used (2)
- Copy paper, preferably reused (20)
- Pipe cleaners (3)
- String or yarn (1)
- Chopstick or skewer w/o point (1)
- Rubber bands (3)
- **Not included:** Hole punch

To Do and Notice



1. **Assembly:** Punch 3 binding holes through the file folder cover and blank paper sheets.
2. Insert the paper into the file folder and align the holes. Bind the book together using rubber bands, pipe cleaner, and string or yarn. The chopstick/skewer can be used as a sturdy spine onto which to tie the binding materials. **Example:** Thread one end of the rubber band through the top hole and loop it around the chopstick/skewer. Thread the other end of the rubber band through the second hole and secure into place by looping it around the chopstick/skewer. Repeat using the middle and the bottom hole and sliding the chopstick/skewer along. **See image of journal example (above, right, and on title page.)**
3. **Observe:** Use the Trash Journal to record observations about trash, litter, garbage, recycling, and reusing. Below are some suggestions for exploration:
 - At the grocery store, search out and list 3 items that have inefficient/high waste packaging and explain the reasons for your choices.
 - At home, look at items in the family's garbage. List the kinds of items your family throws away, and comment on 2 items that particularly struck you as items that did not need to become trash. Discuss recycling, waste production, and potential reduction with your family. Reflect on the discussion and the feelings of the family members.
 - Be aware of litter. Note 2 places that you notice a lot of litter; list the kinds of items that made up the litter (but don't touch the trash unless you are properly protected with rubber gloves); and comment on why you think that trash accumulated in those locations.
 - During an entire day, take an inventory of thrown-away items in your journal and comment on 2 items that you might be able to avoid throwing away in the future.
 - Find recycling symbols on products. Make a list of at least 10 different symbols, what products contained each symbol and note whether they reference the packaging or the products themselves (e.g. plastic food packaging vs ream of recycled paper).
 - Research how trash was handled in a different time. For example: Were there trash concerns in 19th century New York? If so, what specifically were the biggest concerns? What quantities and kinds of trash do we have now that were not a concern or did not exist in the past?
 - If possible, visit the local landfill. Reflect on the experience.
4. **Discussion:** What types of trash did you observe? How much of each type did you see? Where did you find most of the trash you observed (school, home, other)? What will you do now about your own habits related to trash production? What can your school do to reduce waste?
5. **Share** your learning with RAFT! Submit photos/video via email at education@raft.net or on social media ([Facebook](#), [Twitter](#), [Instagram](#)).

Core Content Skills:

Science & Engineering (NGSS)

Planning and Conducting Investigations, Analyzing and Interpreting Data, Biogeology, Earth Materials & Systems, Human Impacts on Environment, Properties of Materials, Cause and Effect

CCSS ELA

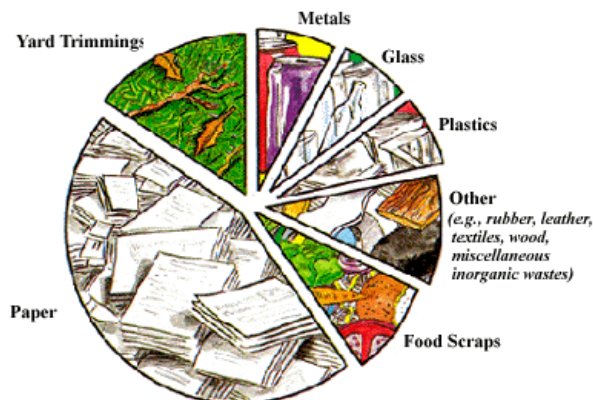
Opinions, Informative & Narrative Texts; Development, organization, and Range of Writing, Speaking & Listening

Social Emotional Learning

- Self-awareness
- Self-management
- Responsible decision-making

The Science Behind the Activity

People have been collecting and recording thoughts, ideas, and information in written form for millennia. Although not always taking present-day book form (e.g. clay tablets, scrolls), the concept of recording information in a book for remote retrieval was truly a giant leap for mankind. Major developments in book history include the first alphabets (appearing around 1000 B.C.) and mechanical printing (1455 A.D.) by Johannes Gutenberg that helped spark the European Renaissance. Many famous naturalists, including Charles Darwin and Meriwether Lewis, used journal drawings and notes as a means of collecting information.



All animals, in a sense, produce “waste” and leave physical evidence of their existence. Humans are unique in our abundant tool use, consumerism, production, and extreme environment modifications...to the point that our existence in such large numbers can have major effects on global and local environments. Human waste production has been an issue in cities for thousands of years, leading to water pollution and a variety of health issues (e.g. the Black Death). The trash problem is a larger concern today than ever before because there are more people, each person produces more waste, and the type of trash produced contains more non-biodegradable and potentially hazardous materials. Awareness is the first step. And then everyone needs to do their part to reduce, reuse, recycle, and respond.

Reuse

This kit uses 100% reusable materials designed for other uses. To continue making a positive impact in reducing waste, reuse these materials in other projects. Additionally, any unused materials can be collected and delivered back to RAFT.

Feedback

Please comment on this kit by taking this short survey: <http://bit.ly/RAFTkitsurvey>. Let us know of any material concerns (missing, broken, or poorly fitting parts) as well as any suggestions for improvement.

Visit <https://raft.net> to view related activities!

- Envelope Books
- Photosynthesis Review Books

Resources

- How to start journaling - <https://www.youtube.com/watch?v=9dCntOfRR1E>
- Interactive article (observations) - <https://wonderopolis.org/wonder/Are-You-a-Good-Observer>