## **Reuse Ideas**

### Math

Solve these problems:

70 ÷ 7 = \_\_\_\_\_ 115 × 21 = \_\_\_\_\_ 120 × 6 =\_\_\_\_

- Round 1,032,871,945 to the nearest thousand. Then round it to the nearest million.
- What is the greatest common factor of 70 and 115?
- TRUE or FALSE: Whitney bought snacks for the garden club members who were planning trees at the park. She bought three bags of oranges for \$3.99 each and two bags of apples for \$5.49 each. Whitney spent a total of \$22.95.

### **English/Language Arts**

• Circle two nouns, two adjectives, and two verbs.

| • | Write these words in ABC (alphabetical) order: |        |        |           |       |  |
|---|--|--------|--------|-----------|-------|--|
|   | stand  | second | study  | sand      | steel |  |
|   | sign   | sense  | silica | stainless | stars |  |

- Find a name of a city or town in the newsletter.
- Rewrite this sentence with the correct capitalization: aunt clara lived in beijing, china until last november.

### **Science**

- What does "LED" stand for when describing light bulbs? In addition to using less energy than incandescent (traditional) light bulbs, what is another advantage of LED bulbs?
- TRUE or FALSE: Petroleum is not a fossil fuel.
- Which three of these items are natural resources?
  oil plastic soil water concrete
- Select the item that does not belong in a recycling bin: paper cardboard straws aluminum cans

### **Social Studies**

- The first Earth Day was celebrated in 1970.
  Who was the President of the United States that year?
- The first Arbor Day was held in Nebraska in 1872.
  Find Nebraska on a map of the United States.
  What is the capital of Nebraska?
- What continent is home to India, Mongolia, and Nepal?
- TRUE or FALSE: China is the third largest country in Asia.

### **Journal Writing Prompts**

- Write a paragraph using these words: "plant," "soil," "spring," "gift," and "care."
- Using the letters in the words "Earth Day" make as many words as you can. You can use the letters more than once.
- Do you think recycling is an important way to help the planet? Why or why not? What are some of the things you and your family recycle?
- Create a story that includes a conversation between two very old, tall trees as they watch pollution float by in the river. What do you think they would like people to do to make the water and air cleaner for plants, animals, and humans?

### Extension Activity — All in a Day

Share (or copy and distribute) the activity shown on the next page with each student or group. This activity draws on skills from several subject areas, including social studies, science, math, and language arts. If you and your students want to learn more about how recycling and disposal have changed since 1960, visit EPA.gov/facts-and-figures-about-materialswaste-and-recycling.

### All in a Day

Instructions: Using the bar chart, answer the questions below.



- 1. Which year did Americans create the most trash per person per day?
- 2. Which year did Americans create the least amount of trash per person per day?
- 3. Did Americans create more trash per person per day in 2010 or 1990?
- 4. How many pounds of trash were created per person per day in 1970?
- 5. Which 10-year period saw the largest increase in trash creation?
- 6. How much did trash creation decrease between 2000 and 2010?

**Bonus:** In 2018, 32.1% of the trash created was recycled and composted. On average, how many pounds were recycled and composted per person per day? How many pounds each day were sent to landfills and disposal facilities? (Round to the nearest hundredth.)

## **Teacher Keys for Activities**

### **Dare to Compare**

L – Light Bulbs Replaced

- 1. 61, 62, 63, 64, 65, 66, 67, 68, 69
- 2. 62, 64, 66, 68
- 3. 64
- 4. Answers will vary. (Can be solved without clue C)
- T Trees Planted
  - 1. Answers will vary.
  - 2. Answers will vary.
  - 3. 56
  - 4. Answers will vary. (Can be solved without clues B and D)

### What's Wrong?

- 1. Incorrect Petroleum
- 2. Correct
- 3. Incorrect Iron ore
- 4. Correct
- 5. Incorrect Copper
- 6. Correct
- 7. Correct
- 8. Correct
- 9. Incorrect Trees
- 10. Incorrect Sand (silica)

#### Bonus:

- 1. Australia, China, Guinea, Brazil, India
- Answers will vary but may include bottles, jugs, food containers, straws, drink cups, utensils, buckets, toys, outdoor furniture, luggage, sports equipment, computers, TVs, cell phones, remote controls, clothing, shoes, eyeglasses, shopping carts, kitchenware, bags, traffic cones, carpet, and packing materials.

#### Where in the World?

China

#### Sign Sense

- 2. Unloading Zone
- 3. Cardboard Only
- 4. Mixed Paper
- 5. Bottles, Jars, Cans
- 6. Thanks for Recycling
- 7. Drive Carefully

### All in a Day (Extension Activity)

- 1. 2018
- 2. 1960
- 3. 1990
- 4. 3.25 pounds
- 5. 1980 to 1990
- 6. 0.29 pounds per person per day

Bonus: 1.57 pounds were recycled and composted; 3.33 pounds were disposed of.

# **Skills and Standards**

| Activity               | Subject Areas                      | Skills Addressed  |  |
|------------------------|------------------------------------|---|--|
| Dare to<br>Compare     | Math                               | Multiplying or dividing to solve word problems involving multiplicative comparison;<br>Making sense of problems and seeking entry points to a solution; Modeling with<br>mathematics; Analyzing patterns and relationships; Reasoning abstractly and<br>quantitatively        |  |
|                        |                                    | Grade 4: CCSS.MATH.CONTENT.4.OA.A.2; CCSS.MATH.CONTENT.4.OA.C.5;  |  |
|                        |                                    | Grade 5: CCSS.MATH.CONTENT.5.OA.B.3   |  |
| What's<br>Wrong?       | Science                            | Describing the movement of matter among plants, animals, decomposers, and the<br>environment; Understanding that plants and animals have internal and external<br>structures that function to support survival, growth, behavior, and reproduction in<br>different ecosystems |  |
|                        |                                    | Grade 4: 4-LS1-1  |  |
|                        |                                    | Grade 5: 5-LS2-1  |  |
| Where in the<br>World? | Social<br>Studies                  | Using cardinal directions to locate places on maps and globes; Examining ways people have tried to solve environmental problems; Identifying how human systems and physical systems have impacted the local environment   |  |
|                        |                                    | Grade 4: G1.4.1   |  |
|                        |                                    | Grade 5: G1.5.4; G2.5.6   |  |
| Sign Sense             | English<br>Language Arts           | Demonstrating knowledge of appropriate words related to different issues; Using word context and textual clues to determine the meaning of unknown words; Spelling  |  |
|                        |                                    | Grade 4: CCSS.ELA.LITERACY.RI.4.4; FS.4.3; FS.4.4.C; L.4.2.D  |  |
|                        |                                    | Grade 5: CCSS.ELA.LITERACY.RI.5.4; FS.5.3; FS.5.4.C; L.5.2.E  |  |
| Article Text           | English<br>Language Arts           | Reading and comprehending nonfiction, informational text; Applying context clues to determine meaning of unknown words; Determining meaning of content specific words and phrases in nonfiction text; Developing media literacy   |  |
|                        |                                    | Grade 4: CCSS.ELA.Literacy.RI.4.10; RI.4.2; RI.4.4; RI.4.7; L.4.4.A; L.4.4.C; L.4.6   |  |
|                        |                                    | Grade 5: CCSS.ELA.Literacy. RI.5.2; RI.5.4; RI.5.10; L.5.4.A; L.5.4.C; L.5.6  |  |
|                        | Science                            | Understanding how people affect ecosystems both positively and negatively;<br>Describing ways that humans can improve the health of ecosystems; Describing<br>ways that humans can harm the health of ecosystems  |  |
|                        |                                    | Grade 4: 4-ESS3-2   |  |
|                        |                                    | Grade 5: 5-ESS3-1   |  |
|                        | Integrated<br>Environmental<br>and | Developing and applying the knowledge, perspective, vision, skills, and habits of mind necessary to make personal and collective decisions and take actions that promote sustainability   |  |
|                        | Sustainability                     | Grade 4: ESE Standards 1-3  |  |
|                        |                                    | Grade 5: ESE Standards 1-3  |  |