TEACHER GUIDE



TO: Teachers

- FROM: Northwest Indiana Solid Waste District 103B South Main Street • P.O. Box 731 • Monticello, IN 47960 800-856-0980 • educator@nwiswd.org www.nwiswd.org
- DATE: Fall 2019

We hope that your school year is off to a great start. In this edition of *Trash Talk!*, we look at ways your students can improve the environment by recycling and composting.

Inside this Teacher Guide, we have provided ideas to "reuse" the newsletter for daily instruction, journal writing prompts, and an extension activity.

On the back page, we provide information about this issue's activities so that you can incorporate *Trash Talk!* into your daily curriculum. We've noted how these activities correlate to the Indiana Academic Standards for third and fourth grades. For your convenience, we have provided Teacher Keys below for the activities.

As always, we welcome your comments and suggestions. We hope you have a wonderful school year!

Teacher Keys for Trash Talk! Activities

What's Wrong?

These answers were incorrect: 1, 3, 4, 5, 6, 10 Correct answers are: 1. C; 2. D; 3. P; 4. C; 5. P; 6. D; 7. C; 8. P; 9. D; 10. P

Dare to Compare

- **B** 1. 9, 10, 11,12 2. cross out 9, 10,11
 - 3. 12
- **C** (Answers may vary.)
 - 1. A
 - 2. C
 - 3. 15
 - 4. 7 < C < 17; Odd number: 9, 11, 13, 15; 15 is factor of 5

Where in the World?

South Korea

Counting the Votes

1. 63%, yes	2. 7%, no;
3. 93%, yes	4. 83%, yes;
5. 3%, no	6. 53%, yes

Something's Missing

If your family doesn't already do backyard composting, now is a great time to start. You can mix together fall leaves, dying garden plants and flowers, and fruit and vegetable scraps. After Halloween, you can smash pumpkins and jack-olanterns (remember to remove candles) and add them to the bin.

Supplying the Demand

The price of used bottles will increase.

Reuse Ideas

Math

- If the average American creates 5 pounds of trash per day and recycles 34.7% of that amount, how many pounds per day does the average American recycle?
- Round: 36,256,213 to the thousands place.
- What are the common factors of 15 and 25? What are the common factors of 12 and 15? What are the common factors or 8, 12, and 16?
- After completing "Counting the Votes," put the percentages in order from least to greatest.

English/Language Arts

- Circle two nouns, two adjectives, and two verbs.
- Highlight an email address in the newsletter.
- Fix the spelling errors in this sentence. Wurms mayke conposting moore fun.
- Write these words in ABC (alphabetical) order: biodegrade bacteria broccoli bag bin rot spoil grow decay decompose soil
- Find and circle a word that is a synonym of *fungus*.

Science

- Select the term that doesn't belong: rot spoil grow decay
- Fill in the blank: A scientist who studies bacteria is a _____
- Which tool would you use to study bacteria?
 microscope telescope screwdriver stethoscope

Social Studies

- What ocean is east of Japan?
- What continent is home to India, China, and Mongolia?
- Which country is bigger: China or Japan?



What Did the Bug Say to the Leaf?

Make one copy of the blackline master for each student or group. Have students solve the riddle. As an extension, have students choose a riddle and create a similar puzzle.

Riddle answer: "Nice eating you!"

Journal Writing Prompts

The original "Keep Calm and Carry On" poster was created in Great Britain in 1939 during the Second World War. Create a "Keep Calm" poster for your class or family.

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How can technology be good for the environment?

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Write shape poem about America Recycles Day. What shape will you choose?

Plastic Fact of the Day

Ninety percent of the plastic items in our daily lives are used once and then tossed: grocery bags, plastic wrap, disposable cutlery, straws, drink-cup lids, etc. Take note of how often you rely on these single-use plastics and see if you can replace some of them with reusable versions.



What Did the Bug Say to the Leaf?

Name:

Instructions: Put the words below in alphabetical order, starting at the top. When you are done, read down the fourth column to solve the riddle.

	С	0	I	Ν	E	D
THROWN						
RINGER						
LEGACY						
INSECT						
-COINED						
UPTURN						
FRUITY						
LAYERS						
OBLIGE						
GRACED						
PLANET						
STAYED						
LITTER						

Skills and Standards

Activity	Subject Areas	Skills Addressed
Something's Missing	English/ Language Arts	Decoding and reading words by applying phonics and word analysis skills; Applying foundational reading skills to demonstrate reading fluency and comprehension; Applying context clues to determine the meanings of unknown words; Exploring ideas under discussion by drawing on readings and other information Grade 3: 3.RF.4; 3.RF.1; 3.RV.2.1; 3.SL.2.2 Grade 4: 4.RF.4; 4.RF.1; 4.RV.2.1; 4.SL.2.2
Dare to Compare	Math	Multiplying or dividing to solve word problems involving multiplicative comparison; Making sense of problems and seeking entry points to a solution; Modeling with mathematics; Analyzing patterns and relationships; Reasoning abstractly and quantitatively Process Standards (all grades): PS.1; PS.2; PS.4; PS.5; PS.6 Grade 3: 3.NS.2; 3.C.1; 3.C.5; 3.AT.1; 3.AT.2; 3.AT.3; 3.DA.1 Grade 4: 4.NS.2; 4.C.2; 4.C.3; 4.C.4; 4.AT.4; 4.DA.1
What's Wrong	Science	Describing the movement of matter among plants, animals, decomposers, and the environment; Understanding that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction in a different ecosystems Grade 3: 3.LS.3 Grade 4: 4.LS.3
Where in the World?	Social 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 3: 3.3.1; 3.3.4; 3.3.12; 3.3.13 Grade 4: 4.3
Counting the Votes	Social Studies	Explaining the importance of being a responsible citizen (civic virtues); Understanding the role of citizens in making decisions and rules within a community, such as voting in elections and voicing opinions in a positive way Grade 3: 3.2.5; 3.2.6 Grade 4: 4.2.5; 4.2.6
Supplying the Demand	Social Studies	Explaining that prices change as a result of changes in supply and demand for specific products Grade 3: 3.4.1 Grade 4: 4.4.4
Outside Pages Text	English/ 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 3 & 4: RN.1; RN.2.1; RN.2.2; RN.3.1; RN.4.1; RV.2.1; RV.3.2; 4.ML.1