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## Powers of Persuasion

*Writing opinion pieces, supporting a point of view  
with reasons and information*

Share facts from the Textile Recycling Fact Sheet and the infographic mini poster with your students. Students may be surprised to learn that clothing and textiles can be recycled—just like glass, paper, aluminum, and plastic!

Once students have learned the facts, urge them to share these facts and raise others' awareness as well. Introduce the different persuasion techniques with your class:

- bandwagon—a statement suggesting that everyone is doing something, and the reader should too
- slogan—a catchy phrase or statement
- repetition—repetition of a title, a product name, or an important fact
- testimonial—a well-known person speaks in favor of a topic
- emotional appeal—a person is depicted as having strong feelings about an issue
- expert opinion—an endorsement from someone who is an authority

In advance, gather several student-appropriate magazines that contain advertising. Divide the class into six groups, and assign each group one of the persuasion techniques. Then challenge them to find and share several examples of their assigned technique. Once each group understands its technique, direct the groups to each create a poster or banner to display in the hallway to teach others about textile recycling—and to persuade them to give it a try!

**Teacher tip:** Check out the *Wear It? Recycle It!* poster contest hosted by SMART: Secondary Materials and Recycled Textiles Association. Your students' posters could be the start of a winning entry!



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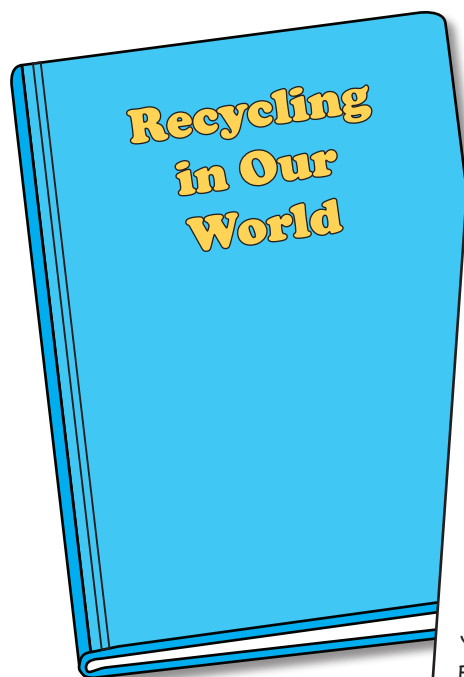
## Oh So Opinionated!

**Writing opinion pieces supporting a point of view with reasons; explaining how an author uses evidence to support points in a text; integrating information from two texts to write about the subject**

Get students reading and writing about textile recycling and other types of recycling with this activity. Check out a variety of library books about recycling. Give each student a chance to read at least one book; then discuss with students the benefits of different types of recycling and the types of recycling covered in the books. Students will likely find that, while recycling paper, metal, glass, and plastic is well represented in the books, recycling textiles such as clothing and linens is not covered (or not covered as thoroughly). Discuss with students how the books' authors use reasons and evidence to support particular points about recycling.

Next, challenge students to write letters to the book publishers and authors to persuade them to include information about textile recycling in the next edition of their book. Remind students to use information from the books and from the Textile Recycling Fact Sheet and infographic mini poster to back up their opinions. Who knows, students might be surprised to see what the next edition of the book includes!

**Teacher tip:** Display the letters on a bulletin board titled "A New Chapter: Clothing and Other Textiles Should Be Recycled Too!"



Dear Author,

I read your book, *Recycling in Our World*. I thought you did a good job of explaining why recycling is so important, and I learned a lot of important information.

I was sorry to see that you did not include clothing and textiles with the types of items that can be recycled. Our class is learning about textile recycling. I'd like to share some important facts with you:

- Any textile—worn, torn, or stained—can be recycled.
- The average US citizen throws away 70 pounds of clothing every year.
- 95% of fabrics can be recycled. But right now, only 15% are donated. The rest go to landfills.
- Recycled textiles are used for many purposes. T-shirts can be turned into rags for cleaning, wiping, and polishing. Wool sweaters can be turned into carpet padding. Even old stuffed toys can be turned into seat padding for cars.

I hope you'll take time to learn more about textile recycling, as our class has and add that information to your next book.

Your loyal reader,  
Emily

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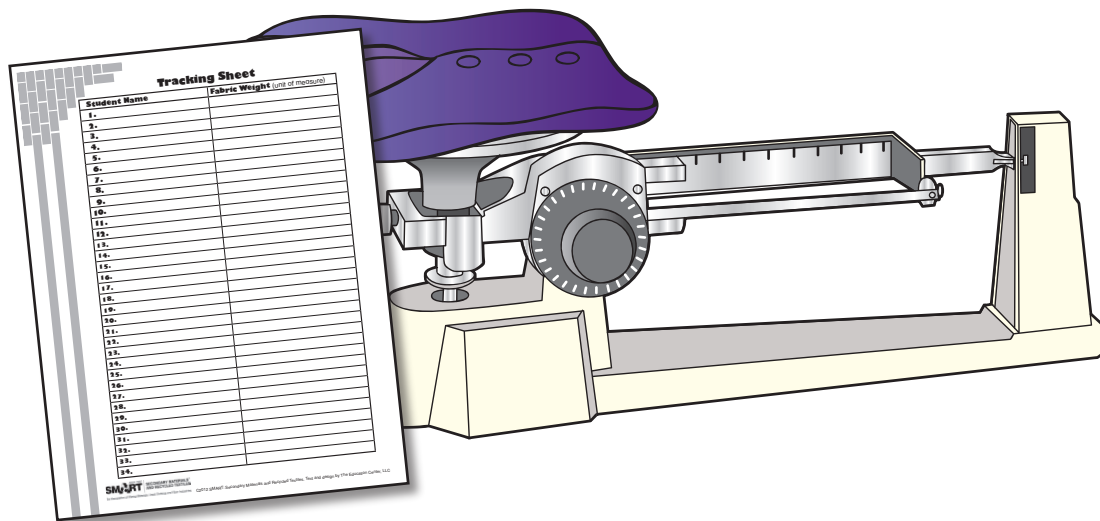
## Textile Recycling Measures Up!

***Solving problems involving measurement and conversion of measurements from a larger unit to a smaller unit***

Give students' measurement skills a workout while demonstrating how quickly clothing and other textiles add up in landfills. Ask each student to bring in one piece of old clothing. (Make sure families know that the clothing won't be returned and will be donated to a charity after the activity.) Using your balance scale, have each student measure the weight of his or her item and list it on the tracking sheet (scroll down). As a class, calculate the total weight of the items and discuss how one might easily find this many items when cleaning out a closet or dresser. Continue the math practice by having students convert pounds to ounces and kilograms to grams. Once the activity is complete, drop off the clothes at a charity.

**Teacher tip:** For a quick math game, divide the class into teams. Call two pairs of students to the board and have them race to add their textiles' weights, subtract to find which student's textile is heavier and how much heavier it is, convert the combined weights to ounces, or round off the combined weights to the nearest pound or kilogram.

For a quick science investigation, gather several different types of textiles, including towels, T-shirts, socks, and pillowcases. Cut an equal-size piece from each (about the size of a washcloth). Also gather some paper towels. Ask students to predict which item will absorb the most water. Then put equal amounts of water in plastic cups and place the textile pieces inside. After a few minutes, remove the textile pieces and examine the cups to see how much water remains. Students will see how useful recycled textiles can be!



# Tracking Sheet

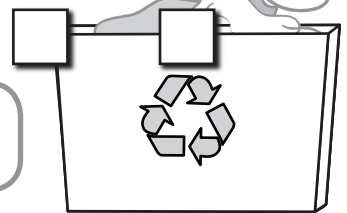
<b>Student Name</b>	<b>Textile Weight</b> (Be sure to list the unit of measure.)
1.	
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32.	
33.	
34.	

# Be Smart About Textile Recycling!

Check the box to show whether each sentence is a fact or an opinion. Underline the key words that helped you.

	<b>Fact</b>	<b>Opinion</b>	
1. Worn, torn, or stained textiles can be recycled.	<input type="checkbox"/>	<input type="checkbox"/>	
2. The average US citizen throws away 70 pounds of clothing each year.	<input type="checkbox"/>	<input type="checkbox"/>	
3. Rags made from old T-shirts are fun to use for cleaning, wiping, and polishing.	<input type="checkbox"/>	<input type="checkbox"/>	
4. Every year, 21 billion pounds of textiles go to our landfills.	<input type="checkbox"/>	<input type="checkbox"/>	
5. Clothing items that are donated to charities should make people happy.	<input type="checkbox"/>	<input type="checkbox"/>	
6. You will get a good night's sleep if your pillow is stuffed with pieces from mismatched socks.	<input type="checkbox"/>	<input type="checkbox"/>	
7. Fibers from old jeans are used to make home insulation.	<input type="checkbox"/>	<input type="checkbox"/>	
8. Torn bath towels are used to make wiping cloths.	<input type="checkbox"/>	<input type="checkbox"/>	
9. Recycling clothing and textiles is the best thing to do for our planet.	<input type="checkbox"/>	<input type="checkbox"/>	
10. Old stuffed animals make the most comfortable stuffing for automotive seats.	<input type="checkbox"/>	<input type="checkbox"/>	
11. Wool sweaters are itchy, but they make good carpet padding.	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ninety-five percent of textiles can be reused or recycled.	<input type="checkbox"/>	<input type="checkbox"/>	
13. Landfills are too large and too smelly.	<input type="checkbox"/>	<input type="checkbox"/>	
14. Charities make over \$100 million by reselling clothing or selling textiles to be recycled into wiping rags, carpet padding, and insulation.	<input type="checkbox"/>	<input type="checkbox"/>	
15. Everyone is excited to donate or recycle clothing instead of throwing it away.	<input type="checkbox"/>	<input type="checkbox"/>	

**Bonus:** On the back of your paper, rewrite the opinion sentences to be facts.





## Answer Key

### Be Smart About Textile Recycling!

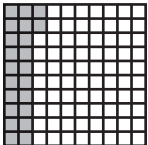
1. fact
2. fact
3. opinion
4. fact
5. opinion
6. opinion
7. fact
8. fact
9. opinion
10. opinion
11. opinion
12. fact
13. opinion
14. fact
15. opinion

**Bonus:** Answers will vary.

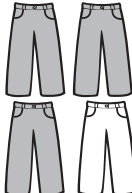
# Wear It? Recycle It!

Write each shaded portion as a fraction, decimal, or percent.

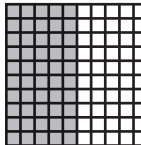
1. fraction: \_\_\_\_\_  
 decimal: \_\_\_\_\_  
 percent: \_\_\_\_\_



2. fraction: \_\_\_\_\_  
 decimal: \_\_\_\_\_  
 percent: \_\_\_\_\_



3. fraction: \_\_\_\_\_  
 decimal: \_\_\_\_\_  
 percent: \_\_\_\_\_



Read each statement. Write each percent as a fraction and decimal.

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>4. 95% of textiles, worn or torn, can be recycled.<br/>             fraction: _____ decimal: _____</p> <p>5. Only 15% of textiles are actually donated or recycled.<br/>             fraction: _____ decimal: _____</p> <p>6. 85% of textiles worn go to our landfills.<br/>             fraction: _____ decimal: _____</p> <p>7. 45% of donated textiles are clothes that can be worn again.<br/>             fraction: _____ decimal: _____</p> | <p>8. 20% of donated textiles can be turned into fibers to make other items such as carpeting.<br/>             fraction: _____ decimal: _____</p> <p>9. 30% of donated textiles can be used for other purposes, such as cleaning cloths.<br/>             fraction: _____ decimal: _____</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Read each problem. Round your answer to the nearest pound.

10. You are dropping off 27 pounds of old clothes at a charity. If 95% can be recycled, how many pounds of clothes will be recycled?  
 \_\_\_\_\_
11. Your sister just cleaned out her closet. She is taking 17 pounds of clothes to a charity. If 45% can be worn again, how many pounds of clothes will that be? \_\_\_\_\_
12. Your aunt is moving, and she took 52 pounds of old towels, sheets, and linens to be recycled. If 30% can be turned into wiping rags, how many pounds will that be?  
 \_\_\_\_\_
13. Your little brother has outgrown last year's clothes. You are helping your family drop off 32 pounds of old clothes at a charity. If 95% can be recycled, how many pounds of clothes will be recycled? \_\_\_\_\_
14. Oops! The clothes just came out of the dryer, and someone left a pen in a pocket. The laundry is ruined. Your dad takes 12 pounds of stained fabrics to a charity. If 30% can be used for other purposes, such as wiping rags, how many pounds will that be? \_\_\_\_\_



## Answer Key

### Wear It? Recycle It!

1. fraction:  $\frac{22}{100}$ , or  $\frac{11}{50}$   
decimal: .22  
percent: 22%
2. fraction:  $\frac{3}{4}$   
decimal: .75  
percent: 75%
3. fraction:  $\frac{50}{100}$ , or  $\frac{1}{2}$   
decimal: .50  
percent: 50%
4. fraction:  $\frac{95}{100}$ , or  $\frac{19}{20}$   
percent: .95
5. fraction:  $\frac{15}{100}$ , or  $\frac{3}{20}$   
percent: .15
6. fraction:  $\frac{85}{100}$ , or  $\frac{17}{20}$   
percent: .85
7. fraction:  $\frac{45}{100}$ , or  $\frac{9}{20}$   
percent: .45
8. fraction:  $\frac{20}{100}$ , or  $\frac{1}{5}$   
percent: .20
9. fraction:  $\frac{30}{100}$ , or  $\frac{3}{10}$   
percent: .30
10. 26 pounds
11. 8 pounds
12. 16 pounds
13. 30 pounds
14. 4 pounds



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## Let's Talk Textiles!

### Writing dialogue

(W.3.3b; W.4.3b; W.5.3b)

1. Discuss with the class the importance of textile recycling. Ask questions, such as the ones below, listing responses on the board.
  - What do you do with clothes when you outgrow them? (*donate them, throw them away, use them as cleaning rags, save them for a younger sibling, etc.*)
  - Where do clothes go if you throw them away? (*to a landfill*)
  - What are textiles? (*Textiles are any items made from woven or non-woven cloth or artificial fabrics, like vinyl.*)
  - What is textile recycling? Why is it important? (*Textile recycling is the reusing or reprocessing of used clothing, fibrous material, and clothing scraps. It's important because old clothing fills up landfills, increases the use of natural resources, increases the need for chemicals used in manufacturing new textiles, and increases pollution caused by the manufacturing of new textiles.*)
2. Introduce the concept of textile recycling centers. Explain that nearly 100% of items donated to these centers are recycled. Further point out that damaged clothing can be recycled into wiping rags, carpet padding, insulation, and more. Families can also donate textiles to charities' secondhand stores, such as Goodwill or The Salvation Army, instead of throwing them away.
3. As a class, brainstorm a list of textiles that students might find in their homes that can be recycled. Examples could include but are not limited to shower curtains, rugs, towels, clothes, shoes, etc.
4. Next, have each student choose one item from the list brainstormed in Step 3. Direct the student to pretend that he and the item—which a parent has decided needs to be thrown away—are discussing how to convince the parent to recycle the item instead. Encourage students to include facts from the discussion to support reasons for recycling the textile and to use correct punctuation and capitalization in the conversation.
5. Provide time for students to share their conversations in groups or as a class. Then bind them together in a class book titled "It's Smart to Recycle Textiles!" Share the book with other classes on your grade level or hall and encourage students to check it out of your class library to take home and share.



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## Recycling Rangers Tip

Share this fact with students: the average US citizen throws away about 70 pounds of clothing each year. Challenge students to share this information with their families and then brainstorm ways to cut that number to zero in the household.

## It Makes Sense to Recycle!

Read the article.

Did you know that textiles can be recycled? **Textiles** are items made from cloth or **artificial** fabrics like vinyl. The average person throws away about 70 pounds of clothing a year. How much textile trash is that? It's a whopping 21 billion pounds of waste. Clothes that are not recycled end up in landfills. They can take hundreds of years to break down, or **decompose**. Some of these trashed textiles may release harmful substances into the soil and water.

What happens when textiles are recycled? Recycling textiles reduces the use of natural resources. For example, fewer natural resources like water and petroleum are used to create new clothing and textiles. Another benefit is that fewer chemicals are needed when we recycle textiles instead of manufacturing new ones. Plus recycling textiles decreases pollution caused by manufacturing new clothes. In fact, the 2 million tons of textiles that are recycled each year in the US are equivalent to removing 1 million cars from America's highways!

Textiles can be recycled in many ways. You can donate used clothing to a charity. These clothes are then sold or sent to other countries that can use them. Even old towels, stained clothing, and torn textiles can be recycled. So donate your items to a recycling center or charity. When you recycle textiles, you get a cleaner, greener Earth in return!

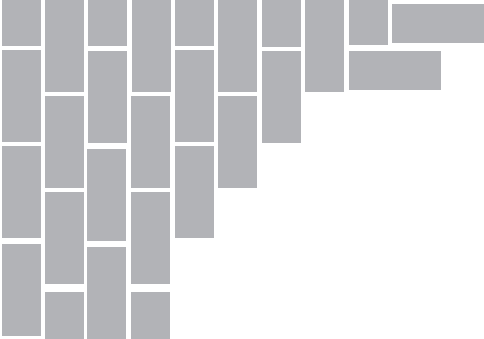


Write your answers on another sheet of paper. Use evidence from the text to support your answers.

1. According to the text, what does the term *textile* mean?
2. How many pounds of clothing does the average person throw away each year?
3. What do you think the word *artificial* means? Tell how you know.
4. According to the text, what does the word *decompose* mean?
5. Name two benefits of recycling textiles.
6. Summarize why textile recycling is important for a greener Earth. Use details from the text.

### Recycling Rangers Tip

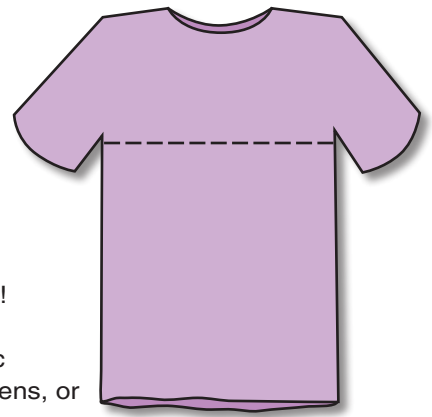
Charities raise \$100 million per year from the sale of secondhand clothing. What an easy way to make a contribution—without spending any extra money! The next time you're cleaning out your closet, remember that fact. Tell your family you want to donate old clothing instead of throwing it in the trash.



**Answer Key**  
**“It Makes Sense to Recycle!”**

1. A textile is any item made from cloth or artificial fabrics.
2. about 70 pounds
3. produced by humans
4. to break down
5. Possible answers include decreasing use of natural resources, decreasing the use of chemicals in manufacturing new textiles, reducing pollution from manufacturing new textiles.
6. Summaries will vary but should include details from the text.

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## Recycled Pillow Pals

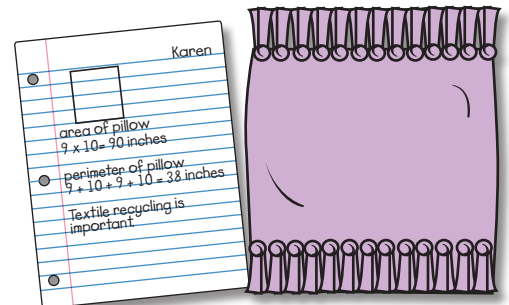
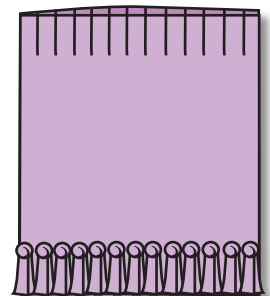
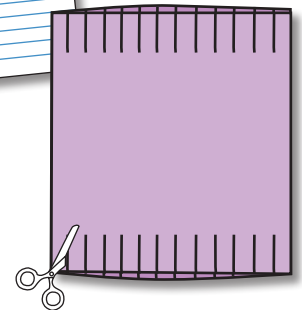
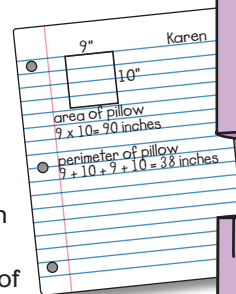
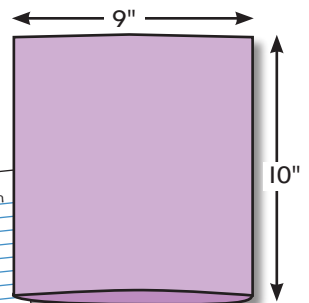
*Measuring perimeter and area, opinion writing*

*(3.MD.C.7b; W.3.2)*

Reinforce the importance of recycling textiles by making fluffy pillows!

**Materials for each student:** old t-shirt; ruler or yardstick; scissors; fabric markers; recycled stuffing material (such as old stuffed toys, towels or linens, or other donated clothing items cut into strips)

1. Ask each student to bring in a clean, discarded t-shirt from home. (Have a few extras on hand so everyone can participate in the activity.)
2. Have each child lay her t-shirt on a flat surface. Help her cut the sleeves and top of the shirt off with scissors to form a rectangle as shown.
3. Once all shirts have been cut, have each student measure the length and width of her rectangle and record the measurements. (If necessary, help the student round a measurement to the nearest whole number.) Then ask each child to use the length and width to calculate the area and perimeter of her rectangle.
4. Model for the class how to position the rectangle so that the open sides are at the top and bottom. Then show students how to cut three-inch slits, spaced about an inch apart, through both layers of the rectangle at the bottom. Repeat with the top of the rectangle.
5. Have the student use the fabric markers to decorate one side of her rectangle with the "Donate, Recycle, Don't Throw Away" slogan to encourage others to recycle textiles.
6. Starting with the bottom of her rectangle, have the student tie the front and back strips together in double knots until the entire row is tied.
7. Have the student stuff the rectangle with the other old clothing and textiles to make a pillow.
8. At the top of her pillow, have the student repeat Step 6.
9. Finally, have the student write a short opinion piece on her paper, explaining why textile recycling is important.



### Recycling Rangers Tip

Is there a holiday coming up? Recycling Rangers can make recycled pillow pals for Mother's Day, Father's Day, December holidays, Valentine's Day, or family birthdays. As an alternative, students can make pillows for preschoolers and kindergarteners and talk to them about textile recycling. When they present their gifts, encourage them to share how important textile recycling is. It's a keepsake and a lesson wrapped into one!

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## Transforming Textiles

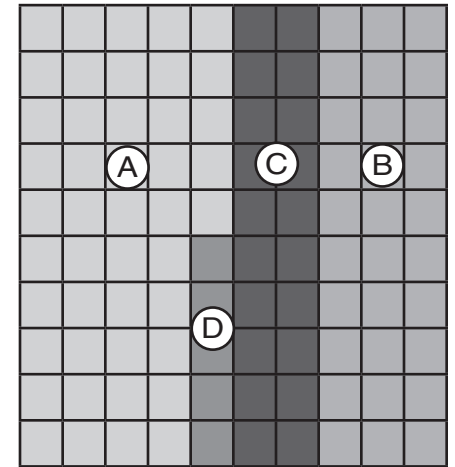
Comparing decimals to the thousandths  
(5.NBT.A.3b)



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**Did you know?** Once used clothing is sorted at a textile recycling center, the used clothing is recycled in one of four ways.

- (A) 45%, or 0.45, is exported to least developed and developing countries.
- (B) 30%, or 0.30, becomes wiping and polishing cloths for commercial and industrial businesses.
- (C) 20%, or 0.20, is reused as furniture stuffing, insulation, upholstery, sound proofing, carpet padding, and building and other materials.
- (D) 5%, or 0.05, is unusable and cannot be recycled.



Write  $>$ ,  $<$ , or  $=$ .

Then cross out a matching symbol below.

A.  $2.69$    $2.96$

F.  $2.852$    $2.852$

K.  $0.512$    $5.210$

P.  $1.001$    $0.999$

B.  $4.567$    $4.657$

G.  $5.641$    $5.614$

L.  $3.467$    $3.674$

Q.  $0.898$    $0.989$

C.  $0.499$    $0.500$

H.  $1.777$    $1.787$

M.  $6.813$    $6.913$

R.  $10.5$    $10.05$

D.  $0.189$    $0.109$

I.  $1.111$    $1.011$

N.  $8.234$    $8.324$

S.  $0.045$    $0.45$

E.  $1.621$    $1.612$

J.  $7.117$    $7.017$

O.  $5.219$    $5.129$

T.  $47.52$    $47.502$



Since 1932  
**SMART** SECONDARY MATERIALS®  
AND RECYCLED TEXTILES

The Association of Wiping Materials, Used Clothing and Fiber Industries

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### Answer Key “Transforming Textiles”

- A.  $2.69 < 2.96$
- B.  $4.567 < 4.657$
- C.  $0.499 < 0.500$
- D.  $0.189 > 0.109$
- E.  $1.621 > 1.612$
- F.  $2.852 = 2.852$
- G.  $5.641 > 5.614$
- H.  $1.777 < 1.787$
- I.  $1.11 > 1.011$
- J.  $7.117 > 7.017$
- K.  $0.512 < 5.210$
- L.  $3.467 < 3.674$
- M.  $6.813 < 6.913$
- N.  $8.234 < 8.324$
- O.  $5.219 > 5.129$
- P.  $1.001 > 0.999$
- Q.  $0.898 < 0.989$
- R.  $10.5 > 10.05$
- S.  $0.045 < 0.45$
- T.  $47.52 > 47.502$

### Recycling Rangers Tip

Here's a number to think about: 21 billion pounds of textiles end up in landfills each year. Do your part to make sure worn, torn, stained, or old clothing and textiles get recycled instead of thrown away.