EDUCATOR'S GUIDE

with Timon and Pumbaa: AFETY SMART Goes Green

Safety Smart is an initiative aimed at improving the awareness and understanding of children ages 4-14 in safety and in managing themselves and their surroundings as safely as possible—by conscious action, not chance. Toward that end, Underwriters Laboratories, UL, produces multimedia public service announcements; arranges for Safety Ambassadors' visits for children to learn from professional safety experts; hosts field trips to its laboratories, where students see safety engineers at work and participate in their own hands-on safety experiments; regularly takes a public stance on emerging safety issues, especially regarding products that may pose a risk to consumers; and supports the development of its youth safety education programs. Through its efforts, Safety Smart cultivates safety awareness, provides opportunities for children to learn and practice safe behaviors, and helps children learn to make more informed safety choices today and in the future.

BOL

Do your part! Be Safety Smart!



SYNOPSIS

When Timon and Pumbaa discover that their favorite vacation spot has been harmed by pollution, they learn how to be Safety Smart[®] about the environment. Students in kindergarten through Grade 4 join Timon and Pumbaa as they make sure the land, water, and air is clean and safe. Students learn the importance of reducing, reusing, and recycling, as well as ways to conserve water and energy.

The activities and worksheets in this Educator's Guide are based on environmental themes and lessons from the program. Three worksheets are take-home activities that students can do with their family. Many of these activities have been translated into the 15 languages included on the DVD. To find these translated activities:

- 1. Insert the DVD into your computer DVD-ROM drive
- 2. Macintosh users, double-click the DVD icon on your desktop
- 3. PC users, right click on the DVD icon and select open
- 4. Open the ROM folder
- 5. Click on the pdf file
- 6. Click on the translated activities file

OBJECTIVES

The content of the **DVD** addresses the following objectives:

Students will understand that:

- being green means helping the environment—the air, water, and land.
- everything you throw away has to go somewhere; for example, dumping waste down a storm drain pollutes water because drains lead to rivers, lakes, and oceans.
- many things can be recycled, which means turning them into other useful items.
- water is a natural resource we can't live without; we need to conserve water and keep it clean; ways to reduce our use of water include taking short showers and turning off the faucet while brushing teeth.
- fuel is a natural resource we need to conserve; conserving fuel and energy reduces pollution; ways to conserve fuel include walking, biking, carpooling, and taking public transportation; ways to conserve energy include turning off lights when leaving a room and replacing regular bulbs with compact florescent lights (CFLs).
- if we hurt the environment, we hurt things that depend on the environment.
- we can reuse things instead of throw them out.
- we can do things everyday to show we're being green, such as use a cloth shopping bag and a refillable water bottle.

The activities in this Educator's Guide address the following objectives:

Students will:

- · Choose the appropriate "R" word that completes a sentence.
- Make a sign that communicates the dangers of throwing trash down a storm drain.
- Make and explain decisions about whether environmental situations are Safety Smart®.
- Draw pictures that illustrate ways to conserve energy.
- Describe what they can do to help others be Safety Smart® about the environment.
- · Work as a team to describe ways to reuse items, instead of throw them out.
- · Sort items to indicate whether they can be recycled, donated, or composted.
- Fill out a checklist to indicate ways they will be Safety Smart® about the environment.



Academic Standards Addressed

DVD or Activity		Arts Education (Natl. Arts Education Assns.)	Language Arts (NCTE)	Science (NSTA)	Social Studies (NCSS)
C	VD Content	None addressed.	None addressed.	C. Life Science D. Earth and Space Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments IX. Global Connections X. Civic Ideals & Practices
	Timon and Pumbaa's "R" Words	None addressed.	3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts.	C. Life Science F. Science in Personal and Social Perspectives	X. Civic Ideals & Practices
	Storm Drain Signs	Visual Arts 1. Understanding and applying media, techniques, and processes: Students use different media, techniques, and processes to communicate ideas, experiences, and stories	 Students adjust their use of spoken, written, and visual language Students employ a wide range of strategies as they write Students apply knowledge of language structure Students participate as knowledgeable, reflective, creative, and critical members 	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments IX. Global Connections X. Civic Ideals & Practices
	ls it Safety Smart®?	None addressed.	 3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. 11. Students participate as knowledgeable, reflective, creative, and critical members 	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments X. Civic Ideals & Practices
In-Class Activities	Let's Pumbaa- pool!	Visual Arts 1. Understanding and applying media, techniques, and processes: Students use different media, techniques, and processes to communicate ideas, experiences, and stories	4. Students adjust their use of spoken, written, and visual language	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments X. Civic Ideals & Practices
	Helping Others Be Safety Smart®	Visual Arts 1. Understanding and applying media, techniques, and processes: Students use different media, techniques, and processes to communicate ideas, experiences, and stories	 Students adjust their use of spoken, written, and visual language Students employ a wide range of strategies as they write Students apply knowledge of language structure 	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments X. Civic Ideals & Practices
	Reuse It!	None addressed.	 Students adjust their use of spoken, written, and visual language Students employ a wide range of strategies as they write Students apply knowledge of language structure Students participate as knowledgeable, reflective, creative, and critical members 	F. Science in Personal and Social Perspectives	X. Civic Ideals & Practices
	Sort It!	None addressed.	11. Students participate as knowledgeable, reflective, creative, and critical members	C. Life Science D. Earth and Space Science F. Science in Personal and Social Perspectives	X. Civic Ideals & Practices
	Safety Smart® Checklist	None addressed.	3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts.	C. Life Science F. Science in Personal and Social Perspectives	X. Civic Ideals & Practices
	Sing Along with Timon & Pumbaa	None addressed.	None addressed.	F. Science in Personal and Social Perspectives	X. Civic Ideals & Practices

(continued)



Academic Standards Addressed (continued)

	DVD or Activity	Arts Education (Natl. Arts Education Assns.)	Language Arts (NCTE)	Science (NSTA)	Social Studies (NCSS)
	Helping the Environment	Visual Arts 1. Understanding and applying media, techniques, and processes: Students use different media, techniques, and processes to communicate ideas, experiences, and stories	 4. Students adjust their use of spoken, written, and visual language 5. Students employ a wide range of strategies as they write 6. Students apply knowledge of language structure 	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments X. Civic Ideals & Practices
Take-Home Activities	Starts with "RE"	None addressed.	 5. Students employ a wide range of strategies as they write 6. Students apply knowledge of language structure 	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments X. Civic Ideals & Practices
	Describe a Picture	Visual Arts 1. Understanding and applying media, techniques, and processes: Students use different media, techniques, and processes to communicate ideas, experiences, and stories	 Students adjust their use of spoken, written, and visual language Students employ a wide range of strategies as they write Students apply knowledge of language structure 	C. Life Science F. Science in Personal and Social Perspectives	III. People, Places, & Environments X. Civic Ideals & Practices
	Color It	None addressed.	None addressed.	None addressed.	None addressed.
	Maze Craze	None addressed.	None addressed.	None addressed.	None addressed.

GLOSSARY

Conserve: Protect natural resources by not overusing them.

Environment: The surroundings that influence organisms, including air, water, and land.

Natural Resources: Materials found in nature that are useful to humans, such as air, water, soil, and minerals.

Pollution: Harmful substances that create an unhealthy environment.

Recycle: To turn something that would otherwise become waste into something useful.

Reduce: To lessen the amount of something, such as using less fuel and creating less waste.

Reuse: To extend the life of something by using it again, rather than throwing it away.

PREVIEW QUESTIONS

- 1. What is the environment?
- 2. What is a natural resource?
- 3. What is pollution?
- 4. Why is it important to protect the environment and the Earth's natural resources?

POSTVIEWING QUESTIONS

- 1. What happened to Timon and Pumbaa's favorite vacation spot?
- 2. What can Timon and Pumbaa do to protect their favorite vacation spot?
- 3. What are some ways to reduce waste?
- 4. What does the word 'conserve' mean? Why is it important to conserve water and energy?

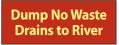
SUGGESTED CLASSROOM ACTIVITIES

Timon and Pumbaa's "R" Words

Have students use copies of the worksheet provided to complete each sentence with the "R" word they learned in the program.

Storm Drain Signs

Some storm drains are marked with signs like the following:



Write this sign on the board and explain that signs like this are on some storm drains. Ask students what they think the sign means. Make sure students understand that dumping trash down a storm drain pollutes the rivers, lakes, streams, and the ocean. As Timon and Pumbaa said in the program, "Everything we throw away has to go somewhere."

Have students make their own signs to post at school, warning about the dangers of storm drain pollution. Ask them to include a short message and a drawing that illustrates what the message means.

Encourage students to come up with clever rhymes for their poster, such as:

- Clean up the muck to save a duck.
- The things you pour will go to the shore.
- Clean up your trash so it doesn't go splash.
- Trash down a drain makes the turtles complain.

Is it Safety Smart[®]?

Distribute copies of the worksheet provided. Ask students what it means to be Safety Smart[®] about the environment. Discuss each picture on the page and ask students to decide whether it is Safety Smart[®] or not. Ask them to explain their decisions.

Establish a rule for each situation. For example, the rule for the first situation could be: "No trash on the ground."

Let's Pumbaa-pool!

Ask students why it's important to conserve energy. Have them create a poster showing three ways to conserve energy. For example, students might draw a picture of people carpooling (also known as "Pumbaa-pooling"). Present the posters on a wall in your classroom or hallway.

Helping Others Be Safety Smart®

Have students use copies of the worksheet provided to describe what they would do to help others be Safety Smart[®] about the environment.



Reuse It!

Divide students into teams and give each team one copy of the Reuse It! worksheet. Have each team work together to brainstorm three ways to reuse each item on the page. Afterward, have teams share their ideas with the class.

Sort It!

Write "recycle," "donate," and "compost" on the board. Ask students what kinds of things can be recycled (paper, plastic, aluminum, and glass) and what can be donated (old clothes, toys, books, etc.). Ask what things can be composted. If students aren't familiar with composting, explain that it's nature's way of recycling—bugs and worms turn old leaves and food scraps into rich soil that helps plants grow. Give students an example of a food scrap, such as the leafy end of a carrot. You might also read *Compost!* by Linda Glaser (see Resources below).

Distribute copies of the Sort It! worksheet and have students cut out the items at the bottom of the page. Ask them to sort the items into the proper bins at the top of the page. (Note: Some items can be placed in more than one category. For example, you can recycle a magazine and newspaper as well as donate them to someone.)



Safety Smart[®] Checklist

Distribute copies of Timon and Pumbaa's Safety Smart[®] Checklist for students to fill out. Explain that they can bring in their completed checklists to receive a certificate.

TAKE-HOME ACTIVITIES

Make copies of the take-home worksheets and have students do these activities with their family.

SING ALONG WITH TIMON AND PUMBAA

Reduce, hey, reuse, ho, recycle, recycle My friends, it is all up to you It's up to you Refill, yes, renew, nice, remember, remember There's so much that people can do! That's Safety Smart. Replace, hey, refresh, ho, replenish One more time! Be part of the happening scene Just listen to the rhumba and like Timon and Pumbaa Go Green, go green, go green. All you wild 'bout safety folks, let's make life sweet, yeah! Let's turn off the lights and what a world we'll see. 'Stead of driving, use your paws or legs or feet. Yeah! And I'm telling you we'll save some energy. Reduce, hey, reuse, ooo, recycle, recycle! Come join in the hullabaloo. I'm talkin' to you! Refill, yes, renew, whee, remember. I got it! It just takes a moment or two. Not long at all. Replace, hey, refresh, ho, replenish! You know it. Just try it and see what we mean. Let's have some fun! Reduce, refresh, refill, renew, replace, recycle, return, review! Reuse, remind, have fun! Be kind! Go green (la la la la la la), green (cha cha cha cha cha), green! Now that's what I call being green!





RESOURCES

Books

Bial, Raymond. *A Handful of Dirt*. Walker, 2000. Grades 3-5. An introduction to the nature and importance of soil and the organisms it supports.

Burnie, David. *Endangered Planet (Kingfisher Knowledge)*. Kingfisher/Houghton Mifflin, 2007. Grades 4-8. An exploration of natural cycles and habitats, emphasizing the impact of humans on the environment.

Cherry, Lynn. *The Great Kapok Tree.* San Diego: Harcourt Brace Jovanovich, 1990. Grades K-5. A man begins to chop down a kapok tree, but soon must rest. When he falls asleep, the rainforest animals whisper in his ear about the dangers of destroying the rainforest.

Glaser, Linda. Compost! Millbrook Press, 1993. Grades K-3. This nonfiction picture book describes the process of composting—turning food scraps and yard waste into soil.

McDonald, Megan. Judy Moody Saves the World. Candlewick, 2002. Grades 2-5. After learning about the destruction of the rainforest and endangered species, Judy sets out to help protect the environment.

DVD

Bill Nye the Science Guy: Garbage. Prod. KCTS Seattle. DVD. Disney Educational Productions, 2004. Grade 4 and up. Bill demonstrates the vast amounts of nonbiodegradable waste humans create.

Bill Nye the Science Guy: Pollution Solutions. Prod. KCTS Seattle. DVD. Disney Educational Productions, 2004. Grade 4 and up. Bill demonstrates how important it is for all humans to prepare for the future by recycling, researching, and developing innovative solutions to combat pollution.

Bill Nye the Science Guy: Water Cycle. Prod. KCTS Seattle. DVD. Disney Educational Productions, 2004. Grade 4 and up. Bill demonstrates the phases of the water cycle, and science kids show us some easy things we can do to keep the water supply clean and healthy.

Recycle Rex. Prod. California Department of Recycling. DVD. Disney Educational Productions, 2006. Grades K-6. A group of dinosaurs learn about recycling when their sports field is in jeopardy of becoming a garbage dump.

Internet

Composting for Kids http://aggie-horticulture.tamu.edu/sustainable/slidesets/kidscompost/cover.html

Energy Information Administration: Solar Energy http://www.eia.doe.gov/kids/energyfacts/sources/renewable/solar.html

Environmental Education for Kids: Global Warming is Hot Stuff! http://www.dnr.state.wi.us/org/caer/ce/eek/earth/air/global.htm

EPA: Climate Change http://www.epa.gov/climatechange/

EPA: Climate Change Kids Site http://epa.gov/climatechange/kids/index.html

EPA: Fifteen Things You Can Do to Make a Difference in Your Watershed http://www.epa.gov/owow/adopt/earthday/index.html

The Green Squad http://www.nrdc.org/greensquad/

Natural Resources Defense Council http://www.nrdc.org/

PBS Nova: Saved by the Sun http://www.pbs.org/wgbh/nova/solar/

Recycle City http://www.epa.gov/recyclecity/

Time for Kids: Global Warming http://www.timeforkids.com/TFK/specials/articles/0,6709,1113542,00.html

U.S. Department of Energy: Energy Education http://www1.eere.energy.gov/education/

Date:

Goes Green!

Name: ____

TIMON AND PUMBAA'S "R" WORDS

Timon and Pumbaa learned seven R words that can help save the environment. Fill in the blanks using the R words in the box. Use each word only once.

	responsibility resource refillable	realize reduce	recycle reuse	
1.	Use a		wate	er bottle.
2.	Donate old items so othe	ers can		them.
3.	Helping the environmen	it is our		
4.	We need to		_ how to help the env	vironment.
5.	You can		plastic bottles into	useful things.
6.	Water is a natural		that we have	to conserve.
7.	We should		the amount o	f trash we throw out.



Name:_____

IS IT SAFETY SMART®?

What is happening in each picture? Decide if it's Safety Smart® or not.



Safety Smart[®]?

YES NO



Safety Smart®?

YES NO



Safety Smart[®]?

YES NO



Date:_____

Safety Smart [®] ?	YES	NO
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Safety Smart®? YES NO



Safety Smart®? YES NO



Name:_____

Date:_____

HELPING OTHERS BE SAFETY SMART®

Plan how to help others be Safety Smart[®] about the environment. Complete each section.

Who will you help?

How will you help them?

Draw a picture to show how you will help others be Safety Smart[®] about the environment.



Team Members: _____

REUSE IT!

For each item below, describe three ways you can reuse it, instead of throw it out.

Ways to Reuse It

Date:

	1.
	2.
	3.

Ways to Reuse It

	1.
	2.
	3.

Ways to Reuse It

	1.
	2.
	3.



Name:

Date:

SORT IT!

Cut out the items at the bottom of the page. Then sort them into the correct bins.

RECYCLE	DONATE	COMPOST



Goes Green!

Name:__

Date:_____

TIMON AND PUMBAA'S SAFETY SMART® CHECKLIST

What have you learned about being Safety Smart[®]? Check the rules that you will follow at home. Complete this checklist to get your certificate!

Do I make sure that I?	YES
Recycle plastic water bottles?	
Keep trash out of storm drains?	
Use only the water that I need?	
Take short showers?	
Turn off the faucet while brushing my teeth?	
Use CFLs instead of regular light bulbs?	
Save fuel by walking, riding a bike, or carpooling?	
Reuse things instead of throw them out?	
Donate old clothes and toys?	
Reduce waste by using a refillable water bottle?	
Reduce waste by using a reusable shopping bag?	

Date:

Goes Green

Name:

TAKE-HOME ACTIVITY: HELPING THE ENVIRONMENT

Dear Family: Your child is learning that what we say can be written down. Read the directions on this page to your child and then do the activity together.

Directions

- 1. Draw a picture to show something you learned about helping the environment.
- 2. Describe what you learned and write it down together.
- 3. Read your words together.

What I Learned:

Date:_____

Goes Green

Name:

TAKE-HOME ACTIVITY: **STARTS WITH** "RE"

Dear Family: Your child is learning that what we say can be written down. Read the directions on this page to your child and then do the activity together.

Directions

- **1**. Read the words listed below.
- 2. Ask what is similar about all of the words (they all start with "RE").
- 3. Ask your child to use each word in a sentence. Together, write the sentences in the space provided.
- 4. Read the sentences together.

RESOURCE	
RECYCLE	
REUSE	
REDUCE	
RESPONSIBILITY	
REFILLABLE	

Date:

Goes Green!

Name:

TAKE-HOME ACTIVITY: DESCRIBE A PICTURE

Directions

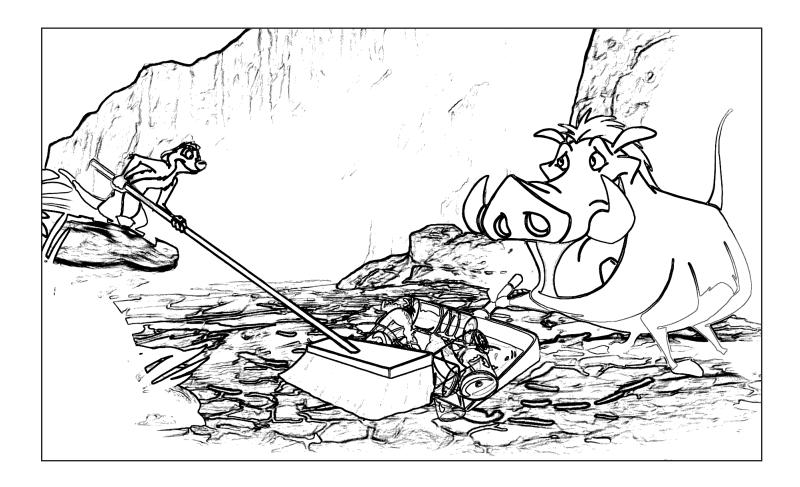
- **1**. Ask your child to tell you about this picture.
- 2. On the lines below, together write your child's description.
- **3.** Read your child's words together.



with Timon and Pumbaa: DAFEITY SMART Goes Green Date:_____

Name:_____

COLORING PAGE





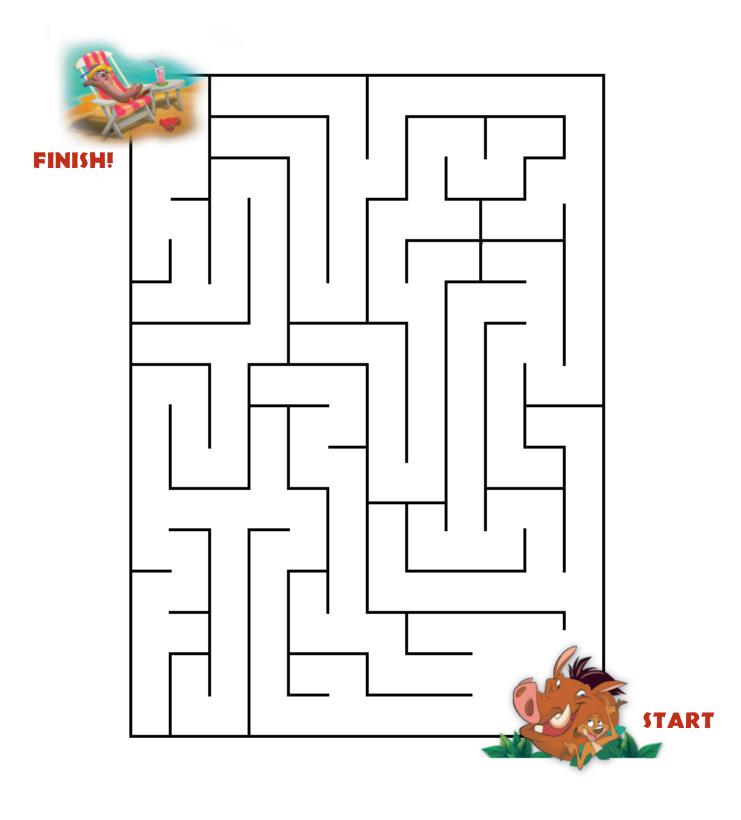


Name:_____

Date:_____

MAZE CRAZE

Help Timon and Pumbaa get to their favorite vacation spot!



SAFETY SMART

CERTIFICATE OF COMPLETION

Awarded To:

Safety Smart Goes Green!

DATE:___

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