Overview

Billy Jonas, an Asheville, NC-based musician will perform *Music From Anything!,* an interdisciplinary program in making music and musical instruments from found, foraged and recyclable objects. Sing-a-longs, bang-a-longs, and homemade instruments are just a few of Jonas's ideas to get the audience involved. Students will create their own instruments out of recyclable objects, write their own songs, and make their own music. The materials in the activities address state science teaching standards for grades one through eight.

About the Artist

For more than two decades, **Billy Jonas** has made a career out of creative and interactive performances for all ages. Jonas is a founding member of "The Billys," and is well known for his unique use of random objects to make music. He strives to allow every audience member to participate by discovering music with common items.

His CD "What Kind of Cat are You?!" received a First Place/Gold from American Federation of Independent Musicians and a Parent's Choice Gold. He has also been listed in a New York Times "Best" listing. Jonas has shared the stage with Richard Thompson, Patti Larkin, Ani DiFranco, David Wilcox, and Pete Seeger.

Vocabulary

Byproduct- something produced in an industrial or biological process.
Chemical- a substance obtained from a chemical process or used to get a chemical result.
Industrial- used in or developed for use in industry,
Landfill- a system of trash and garbage disposal in which the waste is buried between layers of earth.
Manufacture- to make from raw materials by hand or by machinery
Mechanical- made or operated by a machine or machinery.
Raw material- something from which a useful or desirable product can be manufactured or produced.
Reduce- to make smaller in size, amount, or number.
Reuse- to use again especially in a different way.
Recycle- to process in order to regain materials for human use again.
Stream- a body of running water (as a river or brook) flowing on the earth.
Sustainable- able to be maintained at a certain rate or level.
Technology- the use of science in solving problems.
Waste- material left over, rejected, or thrown away.

Internet Resources

Bill Jonas
http://www.billyjonas.com

Environmental Protection Agency
http://www.epa.gov/

Georgia Recycles
http://www.georgiarecycles.org/

Earth 911
http://www.earth911.com/

Georgia Department of Community Affairs
http://www.dca.state.ga.us/development/EnvironmentalManagement/index.asp

SAVANNAH MUSIC FESTIVAL
CONCERT ETIQUETTE

A live music performance can be very exciting. All of the people involved in the production, both cast and crew work very hard to be sure they give a great performance. It is the job of the audience members to help the performers give their best performance possible. The audience can do this by practicing the rules of concert etiquette.

- Follow the directions of your teachers and the M.C. prior to the performance.
- If you are visiting the Trustees Theater, arrive at the theater early. Doors open at 10:00 AM. Performance begins sharply at 11:00 AM.
- Visit the restroom before the performance begins.
- If you have a cell phone please turn it off. If it must be on, put it on vibrate.
- Pay attention to announcements that are made prior to, and after, the show.
- Don't speak during the performance...whispering is still speaking, so only in an emergency or if the performer asks you to participate.
- Do not take pictures during the performance. It can be very distracting to the performers and can cause a mishap.
- Remain in your seat for the entire performance. It is rude to get up in the middle of a quiet moment...rude to the performers and your fellow audience members.
- Do not eat or drink in the theater. If you must have a cough drop, or something of that nature, do not make noise with the wrapper.
- Do not put your feet up on the seats or balcony and do not kick the seat in front of you.
- Don't put or throw anything on the stage.
- Do laugh when the performance is funny.
- Do applaud when it is appropriate during the performance.
- Do applaud when the performance is over...this tells the performers and crew that you appreciate their work.
- Stand and applaud if you really thought the show was great.
- Stay seated until your school is called after the performance.

Activity #1
1st & 2nd Grade: Who is Coming?

Georgia Performance Standards covered:

Grade 1: ELA1SV1 The student uses oral and visual strategies to communicate. The student:

b. Recalls information presented orally.

c. Responds appropriately to orally presented questions.

Grade 2: ELA2SV1 The student uses oral and visual strategies to communicate. The student:

a. Interprets information presented and seeks clarification when needed.

Objective: Students will engage in a classroom discussion led by the teacher in order to inform the students of Billy Jonas's program and what they'll be learning.

Procedure:

1. After the teacher has become familiar with the program, the teacher will lead a classroom Q&A session by asking the students the following questions:
    a. What does Billy Jonas do?
        i. Example answer: Billy Jonas is a teacher; a musician; he sings; he plays many different instruments.
    b. What kind of instruments will he be playing?
        i. Example answer: Instruments like his voice; a guitar and instruments made of recycled stuff, bottles; cans; buckets; frying pans; anything!
    c. What does he sing about?
        i. He sings songs; stories; poems; things he made up and things you'll make up!
    d. What is he going to do at our school?
        i. He will play a concert; lead workshops in instrument making from recyclable stuff that you bring to school, songwriting, and music making.
    e. How are we going to do all that?
        i. We will start small and keep on going one step at a time!

Activity #2
1st & 2nd Grade: Recycling Mobile

Georgia Performance Standards covered:

Grade 1: VA1PR.1 Creates artworks based on personal experience and selected themes.

a. Creates artworks to express individual ideas, thoughts, and feelings from memory, imagination, and observation.

Grade 2: VA2PR.1 Creates artworks based on personal experience and selected themes.

a. Creates artworks to express individual ideas, thoughts, and feelings from memory, imagination, and observation.

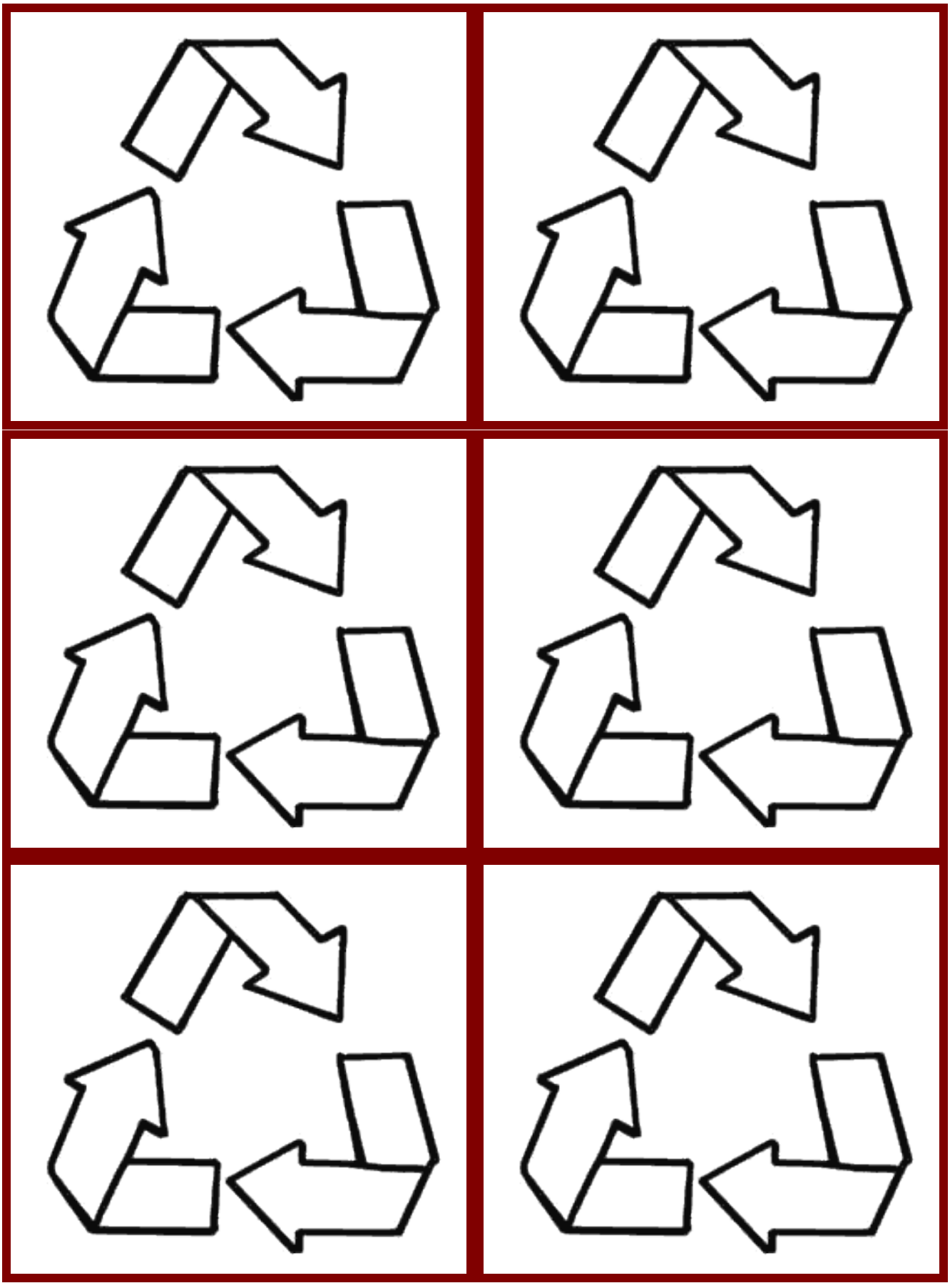
Objective: Students will create a mobile using the Recycle symbol handout provided that demonstrates different ways to protect the environment.

Materials: A heavy wire coat hanger; string, ribbon or yarn, a paper punch; pens or pencils, crayons or markers; scissors; and Recycle symbol handout (attached in the guide).

Procedure:

1. Have the students color and cut out each of the Recycle symbols provided in the handout (one sheet per child).
2. Ask the students to come up with different ways they can save the environment and protect the world. (Recycle, plant a tree, turn off water, etc.).
3. Have the students draw or write their ideas on the other side of the Recycle symbol boxes.
4. Have the students gather their cutouts and hole punch each one. Use the string, yarn, or ribbon to put one end through the hole and tie the other end to the hanger.

Assessment: Display mobiles in the classroom. Let several students tell the class about his or her mobile and how they plan on protecting the environment.



Activity #1
3rd and 4th Grade: What is Stuff Made of?

Georgia Performance Standards covered:

Grade 3: S3L2 Students will recognize the effects if pollution and humans on the environment.

b. Identify ways to protect the environment.

Grade 4: S4CS1 Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

c. Offer reasons for findings and consider reasons suggested by others.

Objective: Students will determine what their favorite things are made of and where they came from.

Materials: Pens or pencils; a picture of the student's favorite item, and paper.

Procedure:

1. Instruct students to bring a picture of their favorite thing (Ex. their house, a toy, a favorite marker, etc.).
2. Pair students up that have similar items.
3. Provide students with writing utensils and paper and have them and their partner figure out what their objects are made of.
4. Allow students to investigate and research in order to determine what their objects are made of and where those materials came from.
5. Instruct pairs to come up with ways they can preserve these materials that make up their favorite objects. (Ex. reducing, reusing, recycling).
6. Allow pairs to share with the class their items and what they discovered.

Assessment: Have each student write a brief paragraph on what they learned about their item.

Activity #2
3rd & 4th Grade: Recycling Vocabulary Word Search Puzzle

Georgia Performance Standards covered:

Grade 3: ELA3R2 The student acquires and uses grade-level words to communicate effectively. The student:

e. Identifies and infers meaning from common root words, common prefixes (e.g., un-, re-, dis-, in-), and common suffixes (e.g., -tion, -ous, -ly).

S3L2 Students will recognize the effects of pollution and humans on the environment.

b. Identify ways to protect the environment

Grade 4: ELA4R3 The student understands and acquires new vocabulary and uses it correctly in reading and writing. The student:

b. Determines the meaning of unknown words using their context.

e. Identifies the meaning of common prefixes (e.g., un-, re-, dis-).

Objective: Students will complete the word search puzzle and discuss definition of vocabulary terms.

Materials: Pens or pencils; Recycling Vocabulary Word Search handout and Vocabulary Definitions sheet (attached in the guide).

Procedure:

1. Distribute a Recycling Vocabulary Word Search sheet to each student.
2. Instruct students on how to complete the word search.
3. After the activity is completed, have a classroom discussion on what each word means, emphasizing the use of the common prefix re-.
4. Answer any questions the student may have on meaning of vocabulary words.

Assessment: Check each word search puzzle for completeness and accuracy.

NAME: _____ DATE:_____

Instructions:

- Find the 14 bold face words in the puzzle
- Circle each word
- Words can be found vertically, horizontally and diagonally

Recycle Word Search

I Y G O L O N H C E T L D I
L E N L E C U D E R O U E A
M E N L D R E L A U E I R C
I B G I C E A A H T H W N E
C P N F E U L I I C N E C R
A I N D U S T R I A L F H M
R A R N I E E E S F M A E L
E L B A N I A T S U S T M O
C U H L E A R A A N S C I R
Y B N E D E R M S A L C C O
C N Y A A N N W W M B U A E
L T S M E C H A N I C A L A
E R M E B Y P R O D U C T O
R L C C E A N S D L T M M W

reduce
reuse
recycle
sustainable
waste
stream
landfill
industrial
mechanical
chemical
manufacture
technology
raw material
byproduct

Activity #1
5th & 6th Grade: Reduce, Reuse, Recycle!

Georgia Performance Standards covered:

Grade 5: ELA5LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student:

g. Actively solicits another person's comments or opinions

S5CS1 Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

c. Offer reasons for findings and consider reason suggested by others.

Grade 6: S6E6 Students will describe various sources of energy, and with their uses and conservation.

b. Identify renewable and nonrenewable resources.

Objective: Students will distinguish between the three R's and establish their own plan for enacting the three R's in their life and community.

Materials: Pens or pencils; Paper; and the Reduce, Reuse, Recycle Worksheet (attached in the guide).

Procedure:

1. Divide students into small groups.
2. Explain to the groups the three R's and what they mean.
3. Give each group writing utensils and the three R's worksheet.
4. Have each group complete the worksheet provided to them.
5. Once completed, have each group discuss what they're going to actively do to use the three R's at home and in the community.

Assessment: Check each group's worksheet for specificity and accuracy.

Reduce, Reuse, Recycle!

Define the following:

REDUCE:

REUSE:

RECYCLE:

1. List as many materials as possible that are reduced, reused, or recycled:

2. What does recycling do for the environment? Is it helpful or a waste of time and energy?

3. What can YOU do to reduce, reuse, and recycle at home or in your community

Activity #2
5th & 6th Grade: How Long Does Trash Last?

Georgia Performance Standards covered:

Grade 5: S5CS1 Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

c. Offer reasons for findings and consider reasons suggested by others.

Grade 6: S6E6 Students will describe various sources of energy, and with their uses, and conservation.

b. Identify renewable and nonrenewable resources

Objective: Students will work together in groups to formulate their best estimate of how long trash items might last in a landfill and learn about environmental consequences of not recycling.

Materials: Pens or pencils; Landfill Waste Student handout; and Landfill Waste answer sheet handout (attached in the guide).

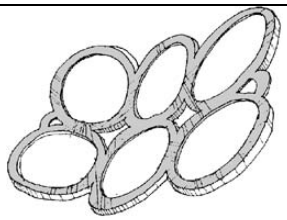
Procedure:

1. Divide students into small groups.
2. Give each group a handout and have them discuss how long they think each item takes to decompose in a landfill.
3. After discussion, have the groups rank in order according to how long they think an item might last in a landfill. Have the groups use numbers to show their ranking, with #1 being the item they think will degrade fastest and #12 being the item that will last the longest.
4. Have the groups share their lists with the class. Call on one group to share their answers first. Have them tell you the sequence they decided on. Compare and contrast the differences between groups by keeping track of the sequences on the board.
5. After all groups have presented their lists, provide them with the correct order and the amount of time it takes for each item to decompose. Direct an open discussion on what the data tells you about landfills. Do items continue to degrade and make room for new garbage? Or will those landfills eventually fill up? What does this say about the importance of recycling?

Assessment: Have students write a paragraph on what they learned about landfills and what they can do to prevent landfills from filling up.

Landfill Waste Ranking Sheet

Rank each waste item in order: #1 being the fastest to decompose and #12 taking the longest to decompose.

Waste	Ranking	Waste	Ranking
 Tin can		 Plastic jug	
 Paper bag		 Banana	
 Styrofoam cup		 Aluminum can	
 Cigarette butt		 Wool sock	
 Plastic 6-pack rings		 Glass bottle	
 Cotton rag		 Leather boot	

Landfill Waste Answer Sheet

(Answers are listed in ranking order)

Banana: 3-4 weeks
Paper bag: 1 month
Cotton rag: 5 months
Wool sock: 1 year
Cigarette butt: 2-5 years
Leather boot: 40-50 years
Tin can: 80-100 years
Aluminum can: 200-500 years
Plastic 6-pack rings: 450 years
Plastic jug: 1 million years
Styrofoam cup: Unknown? Forever?
Glass bottle: Unknown? Forever?

Activity #1
7th & 8th Grade: Resource Vocabulary Crossword Puzzle

Georgia Performance Standards covered:

Objective: Students will complete the crossword puzzle and have a clearer understanding of the vocabulary terms.

Materials: Pen or pencils; Resource Vocabulary Crossword Puzzle student handout; Resource Vocabulary Crossword Puzzle answer sheet and the Vocabulary Terms sheet (attached in guide).

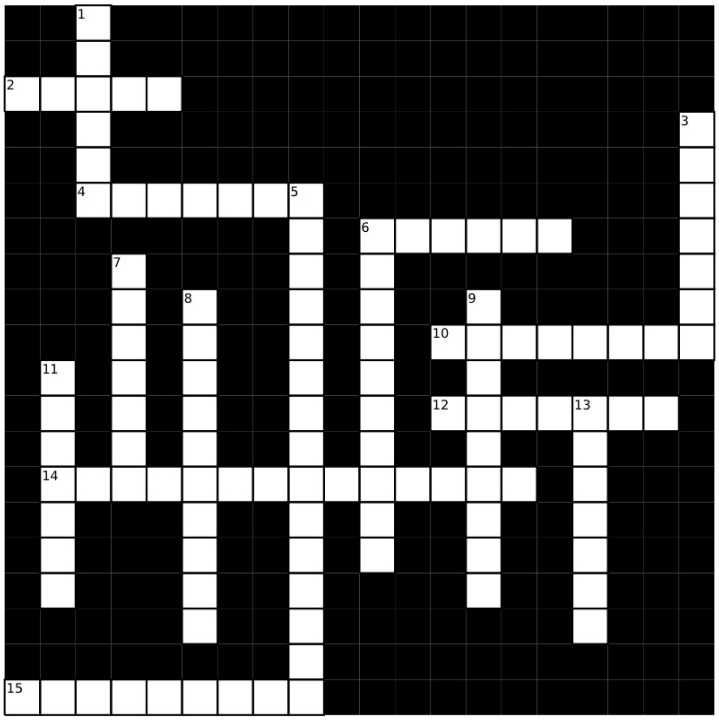
Procedure:

1. Distribute a Resource Vocabulary Crossword Puzzle to each student.
2. Instruct students on how to complete the crossword puzzle.
3. After the activity is completed, have a classroom discussion on the meaning of each word used in the crossword puzzle.
4. Answer any questions the students may have on meaning of vocabulary words.

Assessment: Check each crossword puzzle for completeness and accuracy.

NAME_____**DATE**_____

Resources Vocabulary



Across

2 A pit or tunnel where materials are taken (gold, coal, diamonds, etc.)
4 Used in electronic devices
6 To create or produce for the first time
10 A building for refining materials
12 Process of wearing or grinding something down
14 Chemical from petroleum and natural gas
15 To break down

Down

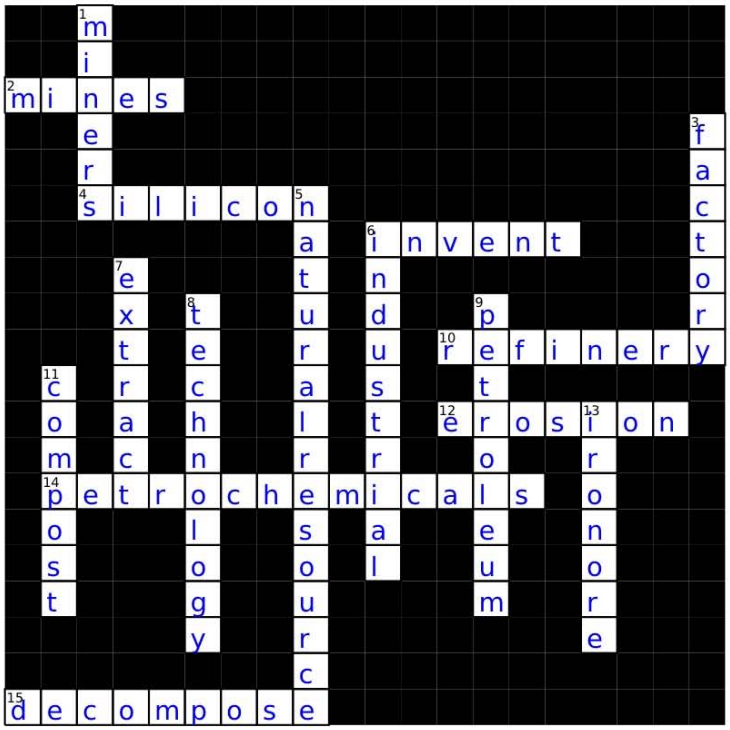
1 Workers in a mine
3 A building equipped for manufacturing
5 Supplied by nature (2 Words)
6 Engaged in industry
7 To get out by pressing, distilling, or by a chemical process
8 The use of science in solving problems
9 Source of gasoline
11 Decayed matter of once living things used to fertilize land
13 A natural mineral that is mined (2 Words)

Word Bank

Refinery	Technology
Miners	Refinery
Compost	Factory
Decompose	Extract
Invent	Mines
Erosion	Silicon
Petroleum	Natural resources
Iron ore	

ANSWER SHEET

Resources Vocabulary



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7 To get out by pressing, distilling, or by a chemical process
8 The use of science in solving problems
9 Source of gasoline
11 Decayed matter of once living things used to fertilize land
13 A natural mineral that is mined (2 Words)

Activity #2
7th & 8th Grade: Resource Flow Chart

Georgia Performance Standards covered:

Grade 7: S7CS5 Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

a. Observe and explain how parts can be related to other parts in a system.

Grade 8: S8CS5 Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

a. Observe and explain how parts can be related to other parts in a system

Objective: Students will work together in groups to formulate a flow chart of where materials come from and the stages involved in getting them to their present state.

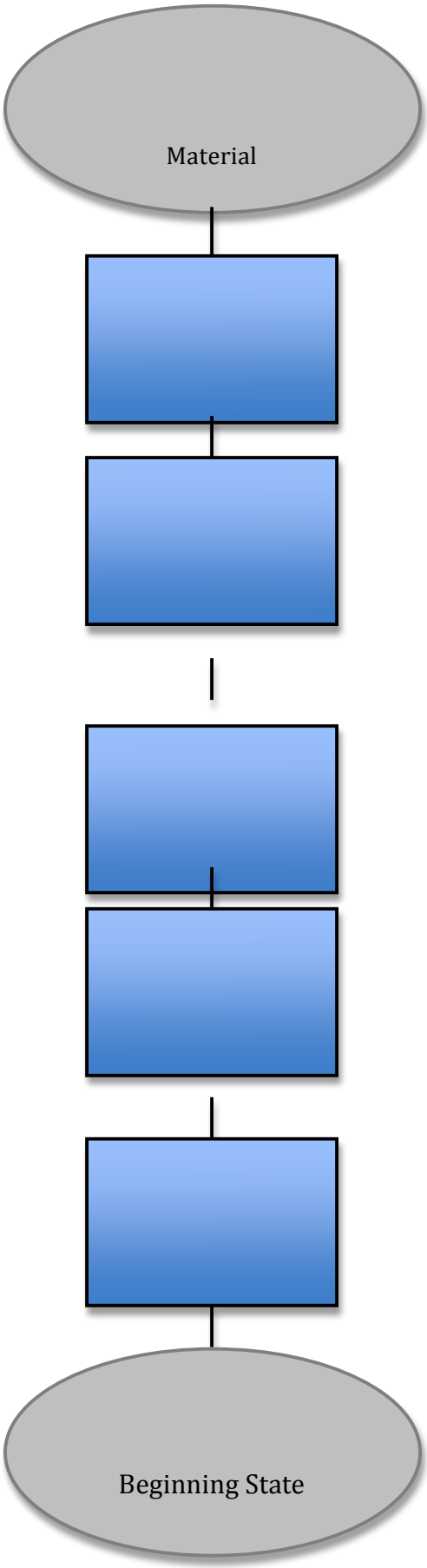
Materials: Pen or pencils; and Resource Flow Chart student handout (attached in guide).

Procedure:

1. Divide students into groups of five.
2. Give each group a Resource Flow Chart handout and one word from the materials list below:
    a. Plastic
    b. Aluminum
    c. Paper
    d. Styrofoam
    e. Glass
3. Have students create a flow chart of where the materials came from. Have them write their word that you have given them in the circle at the top. Each box below that represents a different stage involved in getting the material to their present state.
    a. For example: Plastic materials come from stores, which gets plastic from a truck/train/boat/plane, which got them from a factory, which got them from chemists, who go them from petrochemicals, which comes from oil, which come from oil wells (in Texas, Alaska, Saudi Arabia, etc), which come from decomposed dinosaurs, which come from the ground.
4. Have groups hypothesize the process they think their material comes from on their flow chart.

Assessment: Have each group discuss their material and the flow chart they design

Resource Flow Chart



Home Activity
Make Your Own Instrument!

Objective: Students will create their own instruments at home with a variety of recycled materials.

Materials: Cardboard products, metal cans (rinsed), plastic bottles, rubber bands, balloons, wax paper, beans or rice, tape, pencils and decorating material (crayons, markers, construction paper, etc.)

Procedure:

1. Provide children with the various materials.
2. Get creative. For example: children can place beans or rice in plastic bottle to create shakers, an empty oatmeal box to create a drum, or a kazoo out of a paper towel role and wax paper.
3. Have children decorate their instruments with the decorating materials you provide.
4. Play the instrument! Let your child experiment with the different sounds their instrument(s) make.

Study Guide Feedback Form

The following questions are intended for teachers and group leaders who make use of the Savannah Music Festival study guide.

1. In what grade are your students?

2. Which show did you see? When?

3. Was this your first time at an SMF educational performance?

4.Was this the first time you used an SMF Study Guide?

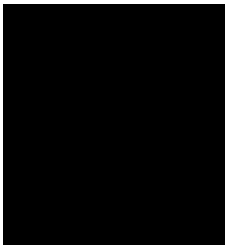
5. Did you download/use the guide before or after the concert?

6. Did you reproduce the grade-appropriate activity sheet for your class?

7. Do you think the study guide and activity helped your students better understand the material?

8. Do you think the study guide and activity helped you meet state science teaching standards?

Additional information and/or comments:



Fax this form to us at (912) 236-1989
Your feedback will be greatly appreciated.
Thank you for visiting Savannah Music Festival.
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