



Personal Product Choices

Middle School Food and Agricultural Literacy Curriculum

Precepts

- N. Decision Making
- N3. Make ethical decisions

National Standards

- ESS.04.02.06.c. Survey and evaluate local recycling programs and procedures.
- CS.03.02.01.c. Make decisions for a given situation by applying the decision-making process.
- CS.03.02.03.b. Practice ethical behaviors.
- NL-ENG.K-12.12 – Applying Language Skills
- NS.5-8.6 – Science in Personal and Social Perspectives
- NSS-C.5-8.5 – Roles of the Citizen

Student Learning Objectives

- As a result of this **unit** the students will...
- Identify best practices to be utilized in Natural Resources Stewardship.
- As a result of this **lesson** the students will ...
- Identify personal product choices and the environmental impact.

Content Outline

Objective 1. Identify **personal produce choices** and the environmental impact.

I. **Personal product choices**

- A. What are personal product choices?
 - 1. **Personal product choices:** selections made by an individual based on his/her personal preferences
 - a. Caffeinated soda vs. non-caffeinated soda
 - b. An SUV vs. a compact car
 - c. Wheat bread vs. white bread
- B. How do our personal product choices impact the environment?

Time

Instruction time for this lesson: 45 minutes.

Resources

Environmental Protection Agency. (2004). Moving out, moving in – making environmental — choices when you move. Retrieved August 26, 2009, from Environmental Protection Agency web site: <http://www.epa.gov/waste/aging/move.pdf> — Green Purchasing. (2009). Wastes – what you can do. Retrieved August 27, 2009, from — Environmental Protection Agency web site: <http://www.epa.gov/epawaste/wycd/funfacts/shopping.htm> — National FFA Organization. (2003). LifeKnowledge Precepts and Signs of Success. — National FFA Organization. (2009). LifeKnowledge Online. Retrieved July 17, 2009, from <http://www.agedlearning.org>. — Ontario Secondary School Teacher's Association. (2009). My eco footprint. Retrieved August — 27, 2009, from Ontario Secondary School Teacher's Association web site: <http://www.ossf.on.ca/adx/asp/adxGetMedia.aspx?DocID=8296,7219,546,541,442,365,Documents&MediaID=2192&Filename=eco-footprint-appendices.pdf> — Saving the Ocean's Fish. (2009). Threatened fish species to avoid eating. Retrieved August 27, — 2009, from Scuba Travel web site: <http://www.scubatravel.co.uk/fisheat.html>. — World now. (2009). How our food choices impact the environment. Retrieved August 26, 2009, — from World Now web site: <http://www.wect.com/Global/story.asp?S=9842734>

Tools, Equipment, and Supplies

- Writing surface
- Transparencies and projector
- MS.NR.7.3.AS.A – one per student
- MS.NR.7.3.TM.A – one per teacher
- MS.NR.7.3.TM.B – one per teacher
- Writing utensils for writing surface
- MS. NR.7.3.ASSESS.A – one per student

Key Terms

The following terms are presented in this lesson and appear in **bold italics**:

Personal product choices

- 1. Food – location where food is produced and purchased
 - a. Buy locally produced foods such as fruits and vegetables to avoid the extra energy costs associated with the production and transportation of processed foods
 - b. Eat species of fish that are not overfished (cod, salmon, grouper)
 - c. Instead of bottled water, buy a reusable water container



Personal Product Choices

2. Paper products – is there an option to purchase products made from recycled paper?
 - a. Notebook paper used in school
 - b. Tissue
 - c. Napkins and paper towels
3. Packaging – packaging can be wasteful
 - a. Avoid products that are overly packaged
 - b. Buy items in bulk because it reduces packaging waste
 - c. Choose paper bags over plastic bags because plastic is not biodegradable
4. Transportation – privately owned vehicles that use fossil fuels are not always necessary means of transportation
 - a. Walk or use a bicycle instead of a car
 - b. Use public transportation such as buses if possible
 - c. Encourage car-pooling
5. Energy efficiency – some products are more energy efficient than others
 - a. Use rechargeable batteries
 - b. Purchase low-energy fluorescent light bulbs that last longer
 - c. Perform regular maintenance on large appliances to extend their usable life

Instruct students to talk with a friend throughout this lesson; grouping of students can be determined by you. It may be easiest to have students match up with someone sitting close by. Do this before starting the lesson.

Interest Approach

Read the following scenario to students:

Imagine for a moment that you have the most beautiful hair that anyone has ever seen. Your hair is very long and you constantly receive compliments about your long, beautiful hair – especially when you get your hair cut. One day, while getting your hair cut, the cosmetologist says, “I have an idea! Let me cut your hair short. I think you would look really good with short hair – in fact, I have the perfect short hair style in mind.” Would you let the cosmetologist cut your hair short? Raise a hand if the answer is no.

Observe the responses and then continue.

Here is a twist to the scenario. What if the cosmetologist said, “I have an idea! Let me cut your hair short. I think you would look really good with short hair – in fact, I have the perfect short hair style in mind. If you let me cut your hair short, then I can donate the long hair that I cut to an organization called Locks of Love. They will take your hair and create a wig or a hairpiece for a child who has lost all of her hair because of a medical illness such as cancer. Your beautiful hair would make a child who has lost her hair very happy.” Now, if this were the case, would you let the cosmetologist cut your hair short? Raise a hand if you changed your mind or thought about changing your mind.

Observe the responses. Ideally, some students who originally said no would have changed their mind. Continue.

It is interesting how our perspectives can change if we know that the outcome will make a positive difference. Today, we are going to talk about choices that we make about different products that we use and how our choices can have a positive or negative impact on the environment. If we are familiar with how our actions might be destructive to the environment, then we may be more inclined to make choices that do not harm the environment.

This is important because we all have the responsibility of keeping our environment safe and clean. As you learn about these choices, be prepared to share ideas with classmates and think about the future of our environment.

Summary of Content and Teaching Strategies

Objective 1. Identify personal product choices and the environmental impact.

In this lesson, use **MS.NR.7.3.AS.A** and project **MS.NR.7.3.TM.A** and **MS.NR.7.2.TM.B** to highlight content outline of Objective 1. Keep the transparency master covered, and uncover as you discuss each component of the outline. Distribute **MS.NR.7.3.AS.A** and continue.

**Personal Product Choices**

Everyone has been given an activity sheet that will be used in today's lesson. As we look at the sheet (hold sheet up and point to columns), we see that there are three columns. Two of the columns are blank – we will be writing in the blank columns. Each block in the column on the left (point to this column) has a word that highlights a specific area we will talk about.

As we discuss each topic, write in the corresponding box one example of a choice that would have a positive environmental impact and one example of a choice that would have a negative environmental impact. If this makes sense, show two thumbs up. Demonstrate two thumbs up and observe for comprehension.

Answer questions if necessary, then continue.

Let's look at this sheet a little closer. We see a definition at the top – personal product choices. Who will read this definition?

Call upon a student to read the definition and then continue.

I. Personal product choices

A. What are personal product choices?

1. **Personal product choices:** selections made by an individual based on his/her personal preferences

Thank you. Think about this definition. Pause for a few seconds. We make selections every day, often without thinking about it. Here are a few questions to consider. Without answering aloud, which is better: caffeinated soda or non-caffeinated soda? Pause for a few seconds. An SUV or a smaller, compact car?

Pause for a few seconds.

What about this: wheat bread or white bread?
Pause for a few seconds.

- a. Caffeinated soda vs. non-caffeinated soda
- b. An SUV vs. a compact car
- c. Wheat bread vs. white bread

In the questions asked, we probably had a variety of answers.

While some may prefer caffeinated soda to non-caffeinated soda, others prefer non-caffeinated soda to caffeinated soda. There may even be some who do not have a preference. Now, we will think about other choices that we make, but these choices will be discussed with the environment being a consideration.

- B. How do our personal product choices impact the environment?

The activity sheet and a writing utensil should be available because we will document these discussions. Pause and allow students to obtain these items if they are not already on the desktop. Once all materials are out, continue.

First, let's discuss food, including things that we eat and drink. The location where food is produced and purchased can have different impacts on the environment.

1. Food – location where food is produced and purchased

Answer this question with a friend – what types of food choices could have an impact on the environment?

This may be confusing – if you notice that students are confused, provide them with an example from the list below. After 30 seconds of conversation, continue.

Please share some thoughts on how food choices can impact the environment.

Allow students to share responses. If students are slow to respond, prompt different students. After a few responses, provide examples from the list below if they were not already given.

- a. Buy locally produced foods such as fruits and vegetables to avoid the extra energy costs associated with the production and transportation of processed foods
- b. Eat species of fish that are not overfished (cod, salmon, grouper)
- c. Instead of bottled water, buy a reusable water container

Excellent work – there are many ways that our food choices can have a positive impact on the environment. If it has not been done already, list one of these strategies on the activity sheet. Pause and allow students to record this information on the activity sheet, then continue.



Lesson Number: MS.NR.7.3

Middle School Food and Agricultural Literacy Curriculum

Personal Product Choices

In addition to food, there are other product choices that we make which can have a positive or negative impact on the environment. An example is something we are using right now. What might that be?

Allow students to guess.

If no one guesses paper after a few tries, tell the students you are talking about paper products. On the writing surface, write in large letters "PAPER PRODUCTS" and then continue.

Regarding paper products, there are many choices to purchase things that are made from recycled paper.

2. Paper products – is there an option to purchase products made from recycled paper?

When I say GO, please respond to this question by writing your answer under the phrase "paper products" shown here (gesture to the large PAPER PRODUCTS you just wrote).

Ensure that the necessary writing utensils (chalk, marker, etc) are available for students to use).

Here's the question: "What are some examples of products we can purchase that are made from recycled paper?"

Following writing, we will go around the room sharing answers until everyone has had an opportunity to write. Do not write an answer that has already been written. What questions are there? GO.

Allow students to write responses on the writing surface (dry erase board, chalk board, chart paper, etc). When students have finished writing, read the list aloud. If the items below are not on the list, add them. Correct any inaccurate responses.

- a. Notebook paper used in school
- b. Tissue
- c. Napkins and paper towels

Fantastic! Has an example been written on the activity sheet?

Pause for a few seconds while students write down this information and then continue.

We have talked about food choices and paper product choices. The food and paper products we consume come in different types of packaging. Packaging can sometimes be wasteful. Let's take a look at how our product choices can impact the environment where packaging is concerned.

As you uncover the information below on the transparency, call on a student to read the information aloud.

Briefly discuss each point.

3. Packaging – packaging can be wasteful
 - a. Avoid products that are overly packaged
 - b. Buy items in bulk because it reduces packaging waste
 - c. Choose paper bags over plastic bags because plastic is not biodegradable

Remember to add this information to the activity sheet.

Pause for a few seconds while students write, then continue.

Now, let's consider the different modes of transportation that are used in society.

Pause for a few seconds while students think.

There are many possibilities, including privately owned vehicles. Privately owned vehicles that use fossil fuels, however, are not always a necessary means of transportation.

4. Transportation – privately owned vehicles that use fossil fuels are not always necessary means of transportation

There are methods of using less fossil fuels instead of riding alone in a privately owned vehicle. What are some of these methods? Answer that question with a friend.

Pause and allow students to talk with a friend. After a few seconds, continue.

Which group of friends will share what they talked about?

Allow students to share responses. If students are slow to respond, prompt different students. After a few responses, provide examples from the list below if they were not already given.



Personal Product Choices

- a. Walk or use a bicycle instead of a car
- b. Use public transportation such as buses if possible
- c. Encourage car-pooling

Great work, write these ideas on the activity sheet.

Pause for a few seconds while students write, then continue.

The last product choice we will discuss relates to energy efficiency. There are many appliances that are more energy efficient than others, which means they use less energy. Additionally, there are some smaller product choices that will help conserve energy.

5. Energy efficiency – some products are more energy efficient than others

Let's take a look at this list. Uncover the transparency and have a student read through the list.

Briefly describe each point made.

- a. Use rechargeable batteries
- b. Purchase low-energy fluorescent light bulbs that last longer
- c. Perform regular maintenance on large appliances to extend their usable life

Let's not forget to record this information.

Pause while students write on the activity sheet, then continue.

It should be evident at this point that the decisions we make regarding product choices can have an impact on the environment, but what about the other choices that we make in life? Sometimes we are faced with making a difficult decision because our choice may have a negative impact on someone else, or the decision may go against our personal values. When this happens, we have to make decisions based on our ethical beliefs. Let's talk about that for a minute.

Answer this question:

When faced with a difficult choice, how do you go through the decision-making process?

For example, if a friend is doing something that could potentially be harmful to them and you are aware of the situation, do you tell someone or not? Tell a friend the answer to this question.

Pause for 30 seconds while students have this conversation, and then continue.

Wow ! There are some great decision-making skills in this classroom. Who will share how they make an ethical decision?

Allow students to share responses. If slow to respond, prompt a few students. After a few responses, continue.

Thank you for sharing – excellent work today. We have discussed five areas of product choices where our decisions can have a positive or negative impact on the environment. Examples of each should now be written on the activity sheet. As we prepare to review, keep this sheet available because it may be needed for reference. We will be splitting into groups for the next activity. Take this sheet (hold up activity sheet) and a writing utensil with you to your group.

Review/Summary

For this review, you will utilize the *Karaoke e-Moment®*. In this e-Moment, you will ask students to create a song or a rap which represents one of the many ways that personal product choices impact the environment.

Divide the students into five groups and assign a different area of personal product choices from the lesson – food, paper products, packaging, transportation, or energy efficiency – to each group.

Groups should also have a designated workspace. Deliver the directions with enthusiasm. After dividing students into five different groups and assigning an area of personal product choices to each group, continue.

There are many songs we have heard since childhood including "Twinkle, Twinkle Little Star," "Row, Row, Row Your Boat," and many others. Today, we are going to create a song or a rap to the same tune or melody as a song that is familiar to us; however, we will change the words to reflect different ways that **personal product choices** impact the environment.

Each group has been assigned an area of **personal product choices**. Groups will select a song and rewrite the lyrics so that the new song reflects the assigned concept.



Personal Product Choices

The song each group chooses may be a popular song that is currently playing on the radio, a song remembered from childhood, or possibly a song we might know that is not played on the radio but familiar to us all, such as a patriotic song. Here is an example of a song that has been rewritten to emphasize the concept of recycling:

Sing to the tune of "Row, Row, Row Your Boat."

Recycle, recycle, recycle your trash

To help keep the world clean,

Paper, plastic, cardboard, and glass,

We should all Go Green.

Any song can be used. It does not have to be a song mentioned; however, it should be a song that we are all familiar with.

After this activity, each group will share the song created with the class. Five minutes will be allotted to create a song. What questions are there?

Once all questions have been answered, instruct the students to begin working. Observe that each group is on task. At three minutes, give the students a warning that only two minutes are left. Once time is up, have each group share their song and then continue.

Great work today, especially with the songs. Now that we are familiar with how **personal product choices** impact the environment, it is important that we make purchasing decisions with the environment in mind. Additionally, we should share this information with others. The more people are familiar with how their decisions impact the environment, the cleaner our environment will be. We will all hopefully be living on this planet for a long time. It is important that we take steps now to keep the environment clean so that we can enjoy it in the future.

Application

Extended classroom activity:

Students can perform a web search for "carbon footprint calculators" that will help them identify their individual impact on the environment based on the choices they make. One example can be found using the following web address:

<http://www.ossf.on.ca/adx.aspx/adxGetMedia.aspx?DocID=8296,7219,546,541,442,365,Documents&MediaID=2192&Filename=eco-footprint-appendices.pdf>

Or use the the global footprint calculator at: <http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/>. With the avatars and animations, the students can explore other countries to see how their choices and their footprint might change if they lived elsewhere.

In the event the links are bad, the web search mentioned above should help identify other carbon footprint calculators.

FFA activity:

FFA members can research local producers and create a resource page advertising from whom and at which locations locally produced products can be purchased. This resource page can be made available on the chapter website and copies can be placed in the main office of the school and sent home with students to encourage purchasing locally.

SAE activity:

Students members with an SAE in this area can go grocery shopping with an adult and conduct an inventory of products purchased. After evaluating the inventory, the student can, in turn, educate the adult about personal product choices and environmental impact.

Evaluation

MS.NR.7.3.ASSESS.A. or

MS.NR.7.3.ASSESS.B.

Answers to Evaluation

MS.NR.7.3.ASSESS.A

1. a

2. a

3. c

4. d

5. b

MS.NR.7.3.ASSESS.B

Answers will vary.



Personal product choices : Selections made by an individual based on his/her personal preferences

Instructions: For each topic listed below, list an example of a choice that would have a positive environmental impact and a choice that would have a negative environmental impact.

Product Choice	Positive Environmental Impact	Negative Environmental Impact
FOOD		
PAPER PRODUCTS		
PACKAGING		
TRANSPORTATION		
ENERGY EFFICIENCY		



Personal product choices

What are personal product choices?

Personal product choices: Selections made by an individual based on his/her personal preferences

- Caffeinated soda products vs. non-caffeinated soda products
- An SUV vs. a compact car
- Wheat bread vs. white bread

How do our personal product choices impact the environment?

- Food – location where food is produced and purchased
- Buy locally produced foods such as fruits and vegetables to avoid the extra energy costs associated with the production and transportation of processed foods
- Eat species of fish that are not overfished (cod, salmon, grouper)
- Instead of bottled water, buy a reusable water container
- Paper products – is there an option to purchase products made from recycled paper?
- Notebook paper used in school
- Tissue
- Napkins and paper towels



Personal product choices

How do our personal product choices impact the environment?

- Packaging – packaging can be wasteful
- Avoid products that are overly packaged
- Buy items in bulk because it reduces packaging waste
- Choose paper bags over plastic bags because plastic is not biodegradable
- Transportation – privately owned vehicles that use fossil fuels are not always necessary means of transportation
- Walk or use a bicycle instead of a car
- Use public transportation such as buses if possible
- Encourage car-pooling
- Energy efficiency – some products are more energy efficient than others
- Use rechargeable batteries
- Purchase low-energy fluorescent light bulbs that last longer
- Perform regular maintenance on large appliances to extend their usable life



Name _____

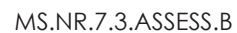
Date _____

Directions: Read each statement and decide whether it is true or false.

1. _____ **Personal product choices can have a negative impact on the environment.**
 - a. True
 - b. False
2. _____ **Some electrical appliances are more energy efficient than others.**
 - a. True
 - b. False

Directions: Read each question and circle the response that best answers the question.

3. _____ **Which of the following is an example of how fossil fuel usage could be decreased?**
 - a. Using rechargeable batteries
 - b. Buying items in bulk
 - c. Ride a bike instead of taking a car
 - d. All of the above answers
4. _____ **Which of the following is not a product that can be made from recycled paper?**
 - a. Paper towels
 - b. Notebook paper
 - c. Tissue
 - d. None of the above answers
5. _____ **Why are paper bags a more environmentally friendly choice over plastic bags?**
 - a. Paper bags do not use natural resources
 - b. Plastic is not biodegradable
 - c. Both a. and b.
 - d. Neither a. nor b.



Date: _____

[illegible]