

Standards-Based Lesson Template

Submission Date	2014-07-21 18:22:03
Teacher:	Kathy Borges
Class:	Academic Strategies
Lesson/Unit Title:	What is Air Pollution?
Abstract/summary of lesson:	Students will define what is Air Pollution and how does it affect your environment.
Students will know...	<ul style="list-style-type: none">-how air pollution affects their daily life.-how companies are held responsible for the emissions they release-how making simple changes in your life can affect air pollution
Students will be able...	<ul style="list-style-type: none">-state one way they can make a difference to affect air pollution-explain how a company must be inspected to make sure it meets the conditions of their permit.-participate in the Healthy Air Living contest.-go on the website to check air quality.
Standards/Skills addressed	<p>Standard W.7.2 Grade 7 b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</p> <p>When we are finished with this lesson, students will create a poster to show how air pollution affects their life and how important it is to live with healthy air.</p> <p>The poster will be submitted to the Air pollution Control District, the pictures that are chosen will be put in a calendar for 2015.</p>
Performance tasks/projects:	<p>The students will have 2 performance tasks:</p> <ol style="list-style-type: none">1. Students will create a poster demonstrating healthy air living.2. Students will write a summary of the facts about air pollution, how is air pollution controlled, how everyday people affect air quality, how are companies held responsible for the emissions they release.3. What are ways that people can control air quality.
Test and quiz questions or essay prompts:	<p>Essay prompt: How can you affect air quality?</p>
Other evidence to be used (e.g., observations, evaluation of work samples, discussion):	<p>Students can use the website: www.valleyair.org and www.healthyairliving.com to</p>
Student self-assessments:	<p>In their essay, "How can you affect air quality?" will demonstrate if they understand that every person can make a difference when it comes to air quality.</p>

Objectives

Students will:

- state one way they can make a difference to affect air pollution
- explain how a company must be inspected to make sure it meets the conditions of their permit.
- participate in the Healthy Air Living contest.
- go on the website to check air quality.

Motivation:

I will tell students that our air quality is one of the worse in the nation.

I will ask students about what they think air quality is, if they have ever heard of a "Spare the Air day", if they have asthma and can feel a difference in their breathing when the air quality is poor.

Then discuss some ways that every person can make a difference when it comes to air quality.

Presentation:

When teaching the concept of the lesson, I will use PowerPoint, visuals, the flags that denote air quality, the Valley Air Website, the Healthy Air Living Kids Calendar and my own experiences as an intern.

I will explain the different places I went to

Application/Activities:

The two activities that each student will complete is a poster to be submitted into the poster contest for Valley Air Board and an essay explaining what is air pollution and how they can help improve the air quality in the San Joaquin Valley.

Materials needed:

The materials required are:

Computer

Paper for Poster

Colored Pencils

Computer Lab - when students look up the website.

Assessment/Evaluation:

Students will be evaluated on their essay and their poster.

The main objective is that they understand that each individual person affects air quality and they can make a difference to either improve air quality or make it worse.

Closure/Reflection:

Students will reflect on how air quality affects their life everyday.

Students will think about the different ways they can affect air quality, such as using an electric gas mower vs. a gas one.

I want students to think about the fact that they make a difference and even one small change, (telling their Mom not to leave the car on when waiting to pick them up from school for example) means that our air quality can improve. We live in one of the most polluted places in the United States so if everyone made one small change it can make a big difference.

Standards-Based Lesson Template

Submission Date	2014-07-21 19:01:08
Teacher:	Nicole Lewis
Class:	Science
Lesson/Unit Title:	Thinking like a Scientist: Using Observational Skills
Abstract/summary of lesson:	Using everyday objects, students will learn to observe objects by documenting minute details.
Students will know...	<p>Students will learn new vocabulary: observe, qualitative observation, and quantitative observation.</p> <p>Students will know how use various tools to measure such as; centimeter/millimeter (metric ruler), weights (electronic scale), mass (triple-beam).</p> <p>Students will know how to apply concepts to other models / objects during the year.</p>
Students will be able...	<p>easily define the differences between an observation, qualitative observations, quantitative observation, inference, and prediction.</p> <p>use various tools to collect data from any object / item.</p> <p>analyze and document all data collected: weight, mass, size, color, texture, taste, and smell.</p> <p>accurately document observational skills using sight, hearing, touch, taste, and smell.</p> <p>accurately analyze and document details using qualitative and quantitative observations.</p> <p>to learn the responsibilities of a successful contributing member of a team.</p> <p>analyze data collected for comparison and variations within all objects.</p>
Standards/Skills addressed	<p>S7.7a - using tools to collect information.</p> <p>S7.7c - communicate findings to others within a group, other groups, and class.</p> <p>- logical connections to understanding science concepts, test conducted, data collected, and conclusions drawn from the scientific evidence.</p>
Performance tasks/projects:	<p>S7.7a - using various tools to observe & collect data.</p> <p>S7.7c - communicate findings by documenting results on a lab form.</p>
Test and quiz questions or essay	QUIZ:

prompts:

Define observation.
Using your observational skills, describe the object in detail.
Describe the object by using ONLY your qualitative observation.
Describe the object by using ONLY your quantitative observation.
What does it mean to infer?
Write an inference of the picture / object.
What does it mean to predict?
Write a prediction of the picture / object.

Other evidence to be used (e.g., observations, evaluation of work samples, discussion):

During Observation lab, teacher will assess all students while they are performing the lab; be a good team member by sharing ideas / responsibilities / tasks, and using their new skills to document those details and various data collected.

Looking for detailed observations using various senses, good observational skills.

Thinking like a Scientist: Observation WORKSHEET (completed per student)

Thinking like a Scientist: Seneca Lab form (completed per group).

Student self-assessments:

Did all members participate in the lab equally? Give a score: 1 - 5

1 (least amount of participation) - 5 (equal participation)

Score your participation within the group. Give a score: 1 - 5

1 (low amount of participation) - 5 (equal participation)

Could you use these skills to observe other models?

Do you think these skills are important to learn? Why?

Describe a real-life situation where you can use these skills.

Objectives

After completing this lesson, students will be able to:

easily define the differences between an observation, qualitative observations, quantitative observation, inference, and prediction.

use various tools to collect data from any object / item.

analyze and document all data collected: weight, mass, size, color, texture, taste, and smell.

accurately document observational skills using sight, hearing, touch, taste, and smell.

accurately analyze and document details using qualitative and quantitative observations.

to learn the responsibilities of a successful contributing member of a team.

analyze data collected for comparison and variations within all objects.

Motivation:

Does anyone have a family member or know someone that works/worked at Seneca Foods? (discussion)

Explain my summer experience and the SPIE program. I will give students a little story of my experience working at Seneca.

Intertwine that CERES district is "Serious about College" promotion students are college ready...at least ready to be successful in the workplace.

I will explain how I was "SUPRISED" that so much SCIENCE knowledge was being used and/or what employees need to know, and even how they use science EVERYDAY at work (in various positions). Maybe describe a few ways that Seneca employees are using science daily. These are skills that they will be learning this year!

Presentation:

Vocabulary cards: observation, qualitative observ, quantitative observ, inference, and prediction.

Lecture with demonstrations & class participation: Give examples of each vocab using items within the room. Have students help give an observation using their senses. Have students only give me an example of a qualitative observation.

Have students give me an example of a quantitative observation.

Have students give an inference about an object.

Have students give a prediction.

Application/Activities:

Thinking like a Scientist: Observational Skills WORKSHEET

Students will use their new knowledge to complete the worksheet.

Describe your backpack using your observational skills.

Describe your backpack using ONLY qualitative observations.

Describe your backpack using ONLY quantitative observations.

Review with students and have them give an example that they listed for each observation.

Observational LAB: Seneca Quality Control

Using canned peaches from Seneca, students will use their knowledge and observational skills to collect data using various equipment. Students will weigh, measure, taste, test texture, smell, analyze color, quantity, and quality.

Materials needed:

Lab Forms to document data and describe observations.

Canned peaches from Seneca (about 30 hopefully).

Large Lab trays

Small lab trays

Electronic scale to weigh.

Triple Beam to find mass.

Metric ruler to measure length, width, height.

plastic spoons and knife for testing taste, texture, and smell.

Assessment/Evaluation:

Observation Quiz

Thinking like a Scientist: Observation WORKSHEET (completed per student)

Thinking like a Scientist: Seneca Lab form (completed per group).

Group Assessment

Closure/Reflection:

1) Summarize learned AND 2) Review learned:
Since completing the Observational Lab, you should feel more familiar with;

- new vocabulary terms: observation, qualitative observations, quantitative observations, inference, and prediction.
- gained knowledge on how to use new equipment.
- ability to critically observe an object and document minute details.
- collect various data and document on lab form.
- analyze data collected and look for similarities and/or differences.
- be a good team member.
- communicate findings.

3) Group Assessment Form:

- Self- Assessment, group, and answer questions about applying new concept/skills toward other labs and everyday life.

4) Connection to next lesson:

"The last few days we have enhanced our observational skills, and it has helped to prepare us to analyze objects in greater details. In the next few days we will be analyzing the pH of various fruits. In addition, we will be observing them under the microscope to look at cell structures." This leads to Plant & Animal Cells.

Standards-Based Lesson Template

Submission Date	2014-07-20 01:06:26
Teacher:	Navroz Pannu
Class:	CP Biology
Lesson/Unit Title:	Food Safety Lesson Plan
Abstract/summary of lesson:	Lesson is based on the safety measures that need to be taken while handling meat, poultry, seafood, fruits and vegetables.
Students will know...	Objectives 1. Students will explain the importance of food safety. 2. Students will list methods to prevent food borne illness. 3. Students will identify high risk populations for food borne illness.
Students will be able...	1. Students will explain the importance of food safety. 2. Students will list methods to prevent foodborne illness. 3. Students will identify high risk populations for foodborne illness.
Standards/Skills addressed	Students will know , understand, analyze, and apply concepts that are consistent with USDA guidance about the benefits of practicing food safety.
Performance tasks/projects:	Students will answer the food safety trivia questions, list the methods to prevent food borne illness and identify high risk populations for food borne illness.
Test and quiz questions or essay prompts:	Food Safety Trivia Questions Clean 1. How long should you scrub your hands with soap and water to effectively remove bacteria? 20 seconds 2. True or False: If you are peeling an apple, it should be rinsed. True 3. True or False: Wash poultry and meats before cooking. False 4. Before handling any food, what is the first thing a person should do? Wash his/ her hands Separate 1. True or false: Meat and poultry should be placed at the top shelf of the refrigerator to keep them separate from other foods. False 2. Give an example of how you can prevent cross-contamination when preparing food. Use separate cutting boards; wash and sanitize surfaces between tasks; wash hands before preparation and any time you change tasks; do not place cooked or ready –to –eat food on a dish that previously held raw seafood, meat or poultry. 3. What could happen if you placed cooked food on a plate

that previously held raw meat.

Since there are bacteria on the plate from the raw juices, you can cause cross-contamination and spread the potentially pathogenic bacteria to the cooked food. This could lead to a foodborne illness.

4. True or False: Using a separate cutting board for raw foods, like meat, poultry and seafood and another fresh foods, like fruits and vegetables, can cause cross-contamination.

False

Cook

1. True or false: Once chicken turns white in the middle, it is cooked to a safe internal temperature.

False

2. When checking to see if food is done cooking, what part of the meat, poultry, or seafood should you place the food thermometer?

The thickest part

3. How hot should you keep food when serving it?

140°F

4. True or false: Cookie dough should not be eaten until it is cooked.

True

Chill

1. What is the best way to defrost frozen meats, poultry and seafood?

The best way to defrost frozen meats, poultry, and seafood is in the refrigerator. Defrosting at room temperature is dangerous because while the inside might stay cold for a while, the outer parts of the food can become too warm and promote the growth of bacteria. Other safe defrosting methods include the microwave or submersion in cold water.

2. At what temperature should perishable items like meat, poultry, and seafood be stored?

40°F or less

3. How long can you leave leftovers out of refrigeration?

Leftovers should not be left out for more than two hours.

4. What is the "temperature danger zone" and why is it important?

The temperature danger zone is 40°F to 140°F. If perishable foods are kept in this zone for more than two hours, bacteria can grow very quickly. In fact, the amount of bacteria doubles every 20 minutes when perishable foods are at room temperature.

5. True or false: You should not put hot food in the refrigerator because it will make the refrigerator have to work harder.

False

Other evidence to be used (e.g., observations, evaluation of work samples, discussion):

Students will be observed while answering food safety trivia questions.

Objectives

Objectives

1. Students will explain the importance of food safety.

2. Students will list methods to prevent food borne illness.

3. Students will identify high risk populations for food borne illness.

Motivation:

1. Introductory

a. Introduction of the lesson/ topic

2. Developmental

a. Go over slides 1 and 2 and ask students: How many of

you have ever gotten “food poisoning” or know someone who did?

Presentation:

- III. Procedure
- 1. Introductory
- a. Introduction of the lesson/ topic
- 2. Developmental
- a. Go over slides 1 and 2 and ask students: How many of you have ever gotten “food poisoning” or know someone who did?
- b. Review slide number 3 with the class, highlighting some of the pathogens and their associated food sources.
- c. Go over slides number 4, 5, 6, and 7 to review how food borne illness can be prevented.
- d. Show slide 8 and ask: How many of you cook or help family with cooking? Do you ever use a food thermometer at hoe to measure the temperature of meat and hot dishes?
- e. Go over slides 9, 10 and 11 about how to chill food and discuss about high risk foods and high risk populations
- f. Slide 12: Activity – Food Safety Trivia
Make a “deck of cards” and/ or a wheel (like a wheel of fortune). Label each card, or section of the wheel with either “Clean”, “Separate”, “Cook”, or “Chill”. Have students choose a card or spin the wheel and ask a question from the category they get.
- g. Slide 13: Questions?

Application/Activities:

Activity – Food Safety Trivia
Make a “deck of cards” and/ or a wheel (like a wheel of fortune). Label each card, or section of the wheel with either “Clean”, “Separate”, “Cook”, or “Chill”. Have students choose a card or spin the wheel and ask a question from the category

Materials needed:

- 1. Laptop/ projector with PowerPoint presentation
- 2. Visuals: “Fight BAC Poster”
- 3. Handout; Food Safety Trivia Questions
- 4. Taste test Raisins
- 5. Reinforcement; More Matters Pen
- 6. Hand wipes
- 7. Caregiver newsletter: Food Safety and/ or Hand washing

Assessment/Evaluation:

Students will answer the food safety trivia questions, list the methods to prevent food borne illness and identify high risk populations for food borne illness.

Closure/Reflection:

- Conclusion
- 1. Distribute hand wipes.
- 2. Provide each student with a food tasting and encourage hi or her to make small changes in his or her diet now. Explain why this food is a healthy option.
- 3. Distribute the reinforcement, read the message and/ or explain the reason why they are receiving reinforcement.
- 4. Thank the students for their participation and answer any questions the students have.
- 5. Distribute Caregiver newsletter.