



Breathing T's

Grades 4-5

An integrated lesson plan covering three sessions of approximately one hour each.

Lesson-Planning Approach

Some learners perceive their “world” as a whole, where all things are interconnected and dependent upon each other. These “integrated” students face major challenges in coping with our dominant educational, social, and economic systems, which tend to present information in a linear fashion without the necessity of integration into meaningful context. Integrated students are at-risk of failing as they attempt to grasp information in ways that do not match their experience. Among large populations of at-risk students are many from Native American and similar cultures who do not regard their world as a sum of parts but as a blend of all that they experience.

This lesson plan does include some traditional, linear approaches to delivering information (checklists, rules, analysis, problem solving and organization). In addition to the traditional, linear delivery of information, this lesson plan also includes some of the following strategies, designed to appeal to at-risk students as they learn academic/life skills:

- ❖ Integration of technology
- ❖ Story telling/anecdotal information
- ❖ Non-competitive group and team work
- ❖ Performance-based assessment and rubrics
- ❖ Visual presentations and practice through technology and other means
- ❖ Project-based assignments that integrate family and community
- ❖ Activities appealing to multiple intelligences (Gardner)

Lesson Overview

In this lesson students will draw the key elements of the respiratory system onto T-shirts, photograph the shirts, and then make collages to display their work.

Lesson Objectives

Lesson Project: Breathing T's

Project Objectives: When students complete this project, they will be able to...

- ❖ Identify and name key elements in the respiratory system and describe their functions.
- ❖ Paint elements of the respiratory system onto a T-shirt

Integration of Other Functional/Academic Skills: (Critical thinking is required throughout the lesson.) **Students will be able to...**

- ❖ Oral Language
 - Give oral explanations to class members
- ❖ Art
 - Use fabric paints and pens to create designs.
- ❖ Technology
 - Navigate through a bookmarked Internet site

State/National Standards

- ❖ Colorado State Reading Standard 2
 - *Students write and speak for a variety of purposes and audiences.*
- ❖ Colorado State Art Standard 1
 - *Students recognize and use the visual arts as a form of communication.*
- ❖ Colorado State Art Standard 3
 - *Students know and apply visual arts materials, tools, techniques and processes.*
- ❖ Colorado State Science Standard 3
 - *Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment.*

Websites

Required: [Looking at Your Lungs](#)

Pre-requisites

Third grade reading level and ability to navigate through bookmarked site

Required Materials

- T shirts with solid fronts or backs – one per student
- **NOTE:** Students can bring these from home or they can be acquired inexpensively at second hand stores.
- Assortment of fabric paints and fabric pens
- Newspaper to put under shirts while painting
- Pictures of the lungs for students to copy onto shirts

Handouts

[Handout #1 – Learning About Your Lungs](#)

Required Equipment/Technology

One computer with internet access for each student

THE LESSON

Note: Students do not learn from what you do but from what you have them do.

Preparation

Day 1

Activity 1	Time Estimate	Instructor Notes
Teacher reviews lesson with class	½ hour	Show a completed T-shirt or photos to students

Presentation

Day 2

Activity 2	Time Estimate	Instructor Notes
Students look over handout #1 . Students go to web site " Looking at Your Lungs " and read all. They should complete the handout during or after visiting the site.	1 hour	Read over handout #1 with class. Bookmark required website, "Looking at Your Lungs", http://www.kidshealth.org/kid/body/lungs_noSW_p7.html Students should not go to any links within this site except "smoking" on the last page.

Practice and Performance

Day 3

Activity 3	Time Estimate	Instructor Notes
Students choose from given pictures of the respiratory system and paint design onto T-shirts.	½ to 1 hour	Demonstrate use of paints. Remind students not to squeeze the tubes hard to prevent "blobs". Teacher may want to photograph completed T-shirts and print out or make a collage for display.

Lesson Assessment Strategy

These questions will be answered by student questionnaire not yet designed.

Preparation, Presentation and Overall Implementation (Instructor)

- Are instructions and expectations clear?
- Is the lesson adaptable for students with low reading and writing skills?
- How is this lesson integrated?
- Is modeling sufficient for students to work independently?
- Are IEP modifications being considered?
- Is enough time allotted for each activity?

Performance and Practice (Student)

- Are students connecting to the lesson?
- Are all students participating in the activities?
- Are all students performing at appropriate individual levels?
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Technology

- If required Internet site is down, is backup material available?

Name _____

Learning About Your Lungs Handout #1

1. The lungs are the large organs in your _____ system.
2. Your lungs are located in your _____ and are protected by your _____.
3. The muscle that works with your lungs so you can breathe in and out is called the _____.
4. Why is the trachea (**tray-kee-uh**) commonly called the “windpipe”?

5. The windpipe splits into two large tubes called the bronchi. Why are there two tubes?

6. _____ are the tiniest tubes in the lungs. They are each about the thickness of a hair.
7. About 600 million tiny air sacs called _____ allow oxygen from the air to pass into the blood. (All of our cells need oxygen to stay alive.)
8. As oxygen is used in the body, a waste product called _____ is breathed out.
9. How does cigarette smoke damage your body? _____

10. What would you do if a friend asked you to smoke a cigarette? _____

Rubrics for Handout	
5	9 or 10 answers correct Complete correct sentences where appropriate Neat and readable throughout
4	7 or 8 answers correct Complete sentences where appropriate Generally neat
3	4, 5 or 6 answers correct Answers are given in phrases, not complete sentences Difficult to read
2	Handout attempted Less than 4 answers correct
1	Handout not attempted or turned in

Rubrics for T-shirts	
5	Final shirt shows lungs, trachea, bronchii, and bronchioles "Respiratory System" written on shirt Neat and attractive
4	Final shirt shows three of the following: lungs, trachea, bronchii, bronchioles Neat and attractive
3	Final shirt shows only two of the following: lungs, trachea, bronchii, bronchioles Work is sloppy and incomplete
2	Final shirt shows only one of the following: lungs, trachea, bronchii, bronchioles Work is unclear and sloppy
1	T shirt not attempted

Activity Checklist

Breathing T's Activity Checklist

	Review handout #1.
	Go to bookmarked site on the Internet to learn about your lungs.
	Complete handout #1.
	Draw a picture of the respiratory system on your T-shirt in pencil. You can use a picture as a guide.
	Paint your picture using fabric paints or fabric markers.

Lesson Rubric

Rubrics for *Breathing T's*

	Handout	Breathing T
5	9 or 10 answers correct Complete correct sentences where appropriate Neat and readable throughout	Final shirt shows lungs, trachea, bronchii, and bronchioles "Respiratory System" written on shirt Neat and attractive
4	7 or 8 answers correct Complete sentences where appropriate Generally neat	Final shirt shows three of the following: lungs, trachea, bronchii, bronchioles Neat and attractive
3	4, 5 or 6 answers correct Answers are given in phrases, not complete sentences Difficult to read	Final shirt shows only two of the following: lungs, trachea, bronchii, bronchioles Work is sloppy and incomplete
2	Handout attempted Less than 4 answers correct	Final shirt shows only one of the following: lungs, trachea, bronchii, bronchioles Work is unclear and sloppy
1	Handout not attempted or turned in	T shirt not attempted