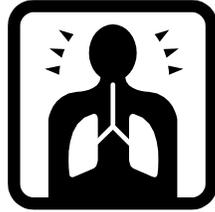


High School Activities



“Tar & Breathing: Why they Don’t Mix”

Supplies needed: 2 coffee filters, water, funnel, clear jar or beaker, blackstrap molasses or other tar-like substance

Optional lending library items: Smoked Lung Model, Lou Wheeze Smoker’s Lungs Comparison Model, Cough Up a Lung Model

Purpose: to demonstrate how an accumulation of tar can inhibit the absorption of oxygen.

Directions:

1. Place the funnel in the jar or beaker and line with coffee filter.
2. Pour water through the funnel. Note how quickly the water runs through.
3. Remove the wet filter.
4. Coat another filter with molasses or other tar-like substance and place it in the funnel.
5. Pour water into the funnel. Note how slowly the water runs through.

Discussion points:

- The filter paper represents lung tissue
- The water represents oxygen
- The molasses or tar-like substance represents tar
- Lungs coated with tar do not exchange oxygen as well as healthy lungs



“Carbon monoxide simulation”

Supplies needed: ½ tsp of coffee grounds, food coloring (blue or green work best), eye dropper or small straw to deliver a drop of food coloring, small clear bottle with lid about 2/3 full of water

Optional lending library items: Lou Wheeze Smoker’s Lungs Comparison Model

Purpose: to provide a demonstration of how carbon monoxide mixes in the blood stream.

Directions:

1. Place coffee grounds in bottle of water, shake vigorously.
2. Note how the coffee colors the water very slowly.
 - The coffee represents oxygen in the blood.
3. Using same bottle of water (now colored with coffee grounds), add one drop off food coloring.
4. Note how quickly the food coloring colors the water.
 - The food coloring represents carbon monoxide as it enters the bloodstream.

Discussion points:

- Carbon monoxide (CO) is a by-product of smoking.
- CO is an odorless, colorless gas that reduces oxygen levels in the blood.
- CO is the same deadly gas found in car exhaust fumes.
- CO is picked up in the blood 240 times faster than oxygen.



“What are they really saying?”

Supplies needed: Tobacco ads from magazines. If difficult to find, go to www.tobaccofreekids.org/adgallery for a list of ads to print

Optional lending library items: A Closer Look at Tobacco display case

Purpose: to analyze advertisements about tobacco products and learn to identify what the advertisers are telling you and if it is true.

Directions:

1. Hold up a magazine ad for a tobacco product. Ask the following questions:
 - What product is being advertised?
 - What message(s) are the pictures giving?
 - What message(s) are the words giving?
 - Do the pictures and words give the same message?
 - What age person would this ad appeal to the most? Why?
 - Are the messages in this ad true?
 - How would you change this ad to make it more truthful about the effects of tobacco use?
 - ❖ Optional activity: divide class into small groups, supply each group with one ad and a large piece of poster paper, instruct them to re-create the ad so it is accurate and share their process with rest of the class

Discussion Points:

- Tobacco companies target youth in their advertising campaigns and messages.
- Some of the non-verbal messages given in the tobacco ads are not true.
- Tobacco ads say things people want to hear.
- Visit <http://www.tobaccofreekids.org/research/factsheets/pdf/0008.pdf> for an updated document on tobacco industry marketing.