

Mercury Quiz Show

Historic

1. Which character in Alice in Wonderland was crazy due to mercury poisoning?
 - a. Alice
 - b. Mad Hatter
 - c. Cheshire Cat
 - d. March Hare
 - e. Queen of Hearts
2. This Civil War era president consumed mercury for depression. He was subject to bouts of rage and bizarre behavior. During a debate he picked up a man by the collar and shook him until his teeth clattered. Once he discontinued mercury treatments he became reasonable. Who was this president?
 - a. Lincoln
 - b. Adams
 - c. Washington
 - d. Bush
3. At the age of 35 this composer died. One theory is that he had used mercury to cure urinary troubles and died of kidney failure. Who was this composer?
 - a. Gustov Mahler
 - b. Franz Liszt
 - c. Wolfgang Amadeus Mozart
 - d. Hendrick Andriessen
4. Several members of this expedition were treated with mercury for urinary troubles in their search for a northwest passage to the Pacific Ocean. Which expedition used mercury?
 - a. Peary
 - b. Lewis and Clark
 - c. Magellan
 - d. Shakelton
 - e. Coronado
5. The chemical symbol for mercury is Hg and is taken from the Latin word meaning quicksilver. What is this Latin word?
 - a. Hydrargyrus
 - b. Mercury
 - c. Mercurious
 - d. Swiftus
6. The word for mercury is derived from the Latin for mercurious swiftus. What is the meaning of mercurious swiftus?
 - a. Hard
 - b. Voluminous
 - c. Heavy
 - d. Mercury, messenger of the gods; to move quickly

Facts:

Mercury is a naturally occurring element that is present throughout the environment.

Methylmercury (an organic form of mercury) is highly toxic.

Health problems caused by mercury depend on how much has entered your body, how it entered your body, how long you have been exposed to it, and how your body responds to the mercury.

For more information contact:
The University of Georgia
Cooperative Extension Service
College of Family and Consumer Sciences
Housing & Environment Program
www.fcs.uga.edu/housing

Mercury Quiz Show

Qualities

1. Name a liquid metal.
 - a. Mercury
 - b. Lead
 - c. Iron
 - d. Gold
2. Name a metal that vaporizes at room temperature.
 - a. Zinc
 - b. Copper
 - c. Mercury
 - d. Gold
3. A gallon of which liquid weighs the most?
 - a. Water
 - b. Milk
 - c. Soda
 - d. Mercury
4. If a mercury thermometer were broken would the mercury slowly vaporize and slowly become a gas until cleaned up?
 - Yes
 - No
5. Mercury is commonly used in which of the following?
 - a. Thermometers
 - b. Switches
 - c. Barometers
 - d. Blood pressure cuffs
 - e. All of the above
6. Mercury combines with organic material in the environment to create a more toxic substance that is concentrated in fish tissue. What substance is this?
 - a. Methyl mercury
 - b. Water
 - c. Ammonia
 - d. Bleach
7. What color is mercury?
 - a. Blue
 - b. Green
 - c. Purple
 - d. Silver

Facts:

Mercury is a naturally occurring element that is present throughout the environment.

When liquid mercury is spilled, it forms droplets that can accumulate in the tiniest of spaces and then emit vapors into the air.

Mercury vapor in the air is odorless, colorless, and very toxic. Most mercury exposures occur by breathing vapors, by direct skin contact or by eating food or drinking water contaminated with mercury.

For more information contact:
The University of Georgia
Cooperative Extension Service
College of Family and Consumer Sciences
Housing & Environment Program
www.fcs.uga.edu/housing

Mercury Quiz Show

Health Effects

1. Is mercury is a very hazardous chemical that can cause serious health problems?
 - Yes
 - No
2. Can a broken thermometer in a home expose a family to potentially dangerous levels of mercury?
 - Yes
 - No
3. Which of the following fish typically contain high levels of mercury?
 - a. Shark
 - b. Swordfish
 - c. King Mackerel
 - d. Tilefish
 - e. All of the above
4. Who is the most at risk for mercury poisoning?
 - a. Fetuses
 - b. Children
 - c. Nursing infants
 - d. All of the above
5. What are the effects of mercury poisoning?
 - a. Nausea, shortness of breath, bronchitis, migraine headaches and fatigue
 - b. Damage to the nervous system, kidneys and liver
 - c. Tremors, numbness in the fingers and toes, loss of muscle control, memory loss and kidney disease
 - d. All of the above
6. As larger fish eat smaller fish mercury concentrates in the larger fish. Mercury concentration in fish tissue can be 1,000,000 greater than in water. What is this concentration called?
 - a. Persistence
 - b. Bioaccumulation
 - c. Toxicity
7. What percent of childbearing women (age 16 to 49) have blood mercury levels above established EPA levels?
 - a. 0.1 %
 - b. 8 %
 - c. 88 %

Facts:

Mercury is a naturally occurring element that is present throughout the environment.

Mercury pollution is released into the air from the burning of fossil fuels.

It falls down directly onto waterways or is deposited on land where it can be washed into the water.

Bacteria in the water cause chemical changes that transform mercury into a highly toxic form - methylmercury.

For more information contact:
The University of Georgia
Cooperative Extension Service
College of Family and Consumer Sciences
Housing & Environment Program
www.fcs.uga.edu/housing

Mercury Quiz Show

Potpourri

1. What is a common name for mercury?
 - a. Quicksilver
 - b. Space goo
 - c. There are no other names for mercury
2. Is it possible to destroy mercury?
 - Yes
 - No
3. What animals are most likely to have elevated mercury levels?
 - a. Large Fish
 - b. Snakes
 - c. Horses
 - d. Dogs
4. One gram of mercury is enough to contaminate all of the fish in what size lake?
 - a. One acre
 - b. One million acres
 - c. 20 acres
5. How much mercury is released to the air in the U.S. on a daily basis?
 - a. 870 pounds
 - b. One pound
 - c. One million pounds
6. The greatest source of mercury to the air is from which source?
 - a. Coal fired power plants
 - b. Burning Garbage
 - c. Landfills
 - d. Thermometers
7. Do some inoculations like DPT and Flu contain mercury as a preservative?
 - Yes
 - No
8. One pound of mercury or two tablespoons is enough to contaminate how many pounds of fish?
 - a. One pound
 - b. 100 pounds
 - c. Two million pounds
9. What percentage of all air deposited mercury in the U.S. comes from international sources?
 - a. 0.5%
 - b. 6.0%
 - c. 33%

Facts:

Mercury is a naturally occurring element that is present throughout the environment.

Mercury fever thermometers are a significant source of mercury to the environment, and if a broken mercury thermometer isn't cleaned up properly, the mercury can get into the air and pose a health risk in the user's home.

There are several good, environmentally-friendly alternatives to mercury thermometers.

For more information contact:
The University of Georgia
Cooperative Extension Service
College of Family and Consumer Sciences
Housing & Environment Program
www.fcs.uga.edu/housing

Mercury Quiz Show

You Can Help

1. Should a vacuum cleaner be used to clean up a mercury spill?
 - Yes
 - No
2. Mercury thermometers can be replaced with which of the following?
 - a. Alcohol thermometers
 - b. Digital thermometers
 - c. All of the above
3. What are common sources of mercury in a home?
 - a. Thermometers
 - b. Thermostats
 - c. Maze toys
 - d. Chemistry sets
 - e. Vials of mercury or necklaces
 - f. Fluorescent lights
 - g. All of the above
4. How do you dispose of mercury thermometers?
 - a. Contact your local hazardous waste collection program
 - b. Contact your local county environmental professionals
 - c. Either method can be used
5. What are common sources of mercury in a school?
 - a. Blood pressure cuffs
 - b. Mercury in jars or vials
 - c. Thermometers
 - d. Barometers
 - e. Batteries (some)
 - f. All of the above
6. When conducting a school audit, which of these are good places to look for mercury?
 - a. Science Laboratory
 - b. Chemistry Laboratory
 - c. Biology Laboratory
 - d. Physics Laboratory
 - e. Nurse's office
 - f. All of the Above
7. Should mercury contaminated clothing be heated in a clothes dryer?
 - Yes
 - No

Facts:

Mercury is a naturally occurring element that is present throughout the environment.

Mercury concentrations in air are usually low and of little direct concern.

But when mercury enters water, biological processes transform it to a highly toxic form that builds up in fish and animals that eat fish.

People are exposed to mercury primarily by eating fish.

For more information contact:
The University of Georgia
Cooperative Extension Service
College of Family and Consumer Sciences
Housing & Environment Program
www.fcs.uga.edu/housing

Mercury Quiz Show

Answer Key

Historic

1. b
2. a
3. c
4. b
5. a
6. d

Qualities

1. a
2. c
3. d
4. Yes
5. e
6. a
7. d

Health Effects

1. Yes
2. Yes
3. e
4. d
5. d
6. b
7. b

Potpourri

1. a
2. No
3. a
4. c
5. a
6. a
7. Yes
8. c
9. c

You Can Help

1. No
2. c
3. g
4. c
5. f
6. f
7. No

Middle School