## **Costly Choices** What's In A Cigarette?



You will be learning about some of the chemicals used to manufacture cigarettes. Use the information from the article to complete your graphic organizer. Be ready to discuss your new learning.

## WHAT'S IN A CIGARETTE?

It's just one cigarette...but wow! That little thing has over 4,000 chemicals in it! You may already know that cigarettes contain *nicotine*, but did you know that nicotine is also used in bug spray?

Let's find out what other chemicals are in a cigarette:

**TAR:** This ingredient, which gives cigarettes their flavour, is the same thick black substance used to pave roads and driveways!

**FORMALDEHYDE:** This is the same chemical used to preserve dead animals, like the frogs dissected in some biology labs.

CYANIDE: This chemical is also a main ingredient in rat poison.

LEAD: This can be found in some kinds of paint.

ACETONE: This is a common ingredient in paint and nail polish remover.

AMMONIA: This chemical can be found in many household cleaners.

**CARBON MONOXIDE:** This common pollutant is the same stuff that escapes from the exhaust in cars.

HYDRAZINE: This is a chemical used in jets and rocket fuel!

To give you an idea of how harmful these substances can be, picture the thick gooeyness of tar. The average person who smokes inhales about one cup of tar a year! The chemicals in cigarettes are what cause the teeth of people who smoke to change colour (they begin to look yellow and brown over time). These same chemicals also cause people who smoke to have bad breath and may change the way food tastes.

The lungs of people who smoke often don't work as well as they should. The tar may stick and stay in the lungs for a long time. Tar also hurts the tiny hairs called "cilia" in a person's airway, which protect the lungs by sweeping out mucus and germs. Tar, like many of the other chemicals in cigarettes, can cause long-term diseases related to how we breathe, like **emphysema and bronchitis**.