"What is in a cigarette?"
AKA the Big Cig

Request the Big Cig from the Tobacco Prevention Program by calling 701-355-1595.

Use the following supplies to create one Big Cig:

- Cardboard mailing tube with end caps
  Feel free to paint the filter area or add paper. You can also paint the end cap opposite of the filter for the look of the tobacco.

- Each of the following supplies will represent a product/ingredient in a cigarette:

Supply Needed	What it represents in a cigarette
Fingernail Polish (Empty Bottles)	Acetone
Mothballs	Napthalenes
Toy Mouse	Arsenic
Ammonia (empty bottle)	Ammonia
Small plastic cup with frog in it	Formaldehyde preserving a specimen)
Matchbox Car	Carbon monoxide, ingredients used in gasoline
Candle	Stearic Acid
Nickel/Lead Pencil	Metals
Lighter (leave in ziplock baggy)	Butane
Toy jet/Rocket	Hydrazine (jet and rocket fuel)
Battery	Cadmium
Toy Spider	Nicotine and DDT– Insecticides
Styrofoam	Styrene
Vinegar (empty bottle)	Acetic Acid
Rubber Cement	Benzene
Plastic Clips	Phenol
Garbage Bag	Vinyl Chloride
Film Canisters	Hydroquinone (photo developer)

Goal:
To learn what some of the 4700 harmful chemicals/toxic and cancer causing ingredients that are contained in cigarettes.

End Objective:
Participants will understand that tobacco contains many different harmful, toxic and cancer causing chemicals. Those that smoke, chew or exposed to second hand smoke ingest all or some of these chemicals.

Information for Creating the "Big Cig"

1. Lay out each prop and see list for what they represents
2. Some items will be in zip lock bag (see ingredient sheet). This is either for the protection of individuals handling the products, protection of the product or to prevent loss of an item due to its smaller size.
3. Use the script to create your own presentation.
4. Practice what each of you will say and how you will show the other students the ingredients while others speak.
5. Do not allow students to take items out of the zip lock bags
6. Know how many items you started with and count them as you put them back in the cigarette, so that nothing accidentally is left behind or lost.

How to conclude your presentation:

Summarize how many dangerous and cancer causing chemicals are present in tobacco (cigarettes and chewing tobacco).

Ask them to name a few of the ingredients.

Remind the class that those who are around second hand smoke are also exposed to these dangerous chemicals. Let them know that it is helpful for those to smoke outside, (away from doorways), to keep the smoke away from those they love. The theme for this is "Take it Outside Until You Quit".

Collect all your supplies (know how many you had), check to make sure bags are closed and lids in place. Put them in your Big Cig.

Thank the class for their time, attention, and participation. Give the teacher the **follow up sheet** I will need completed and then **thank the teacher** for allowing you to come into their classroom.

I thank all of you for your efforts to learn about the chemicals in cigarettes and other tobacco products and your willingness and abilities to teach others.

The follow up sheet you will give the teacher will have the following items on it. I would also like the presenters to input to the teacher that assisted them in their project.

Questions on the Follow Up sheet:

- Did the students like the project and learn from it?
- Did the students like having other students teach them?
- What other tobacco information would they like to have?
- What else can we do to help students learn and prevent use?
- Would they want to be part of a youth group that would help other students learn about the dangers of tobacco use, how to prevent that use and ways to encourage people to quit using?

The "Big Cig" Script

Say:

There are 4,700 chemicals contained in tobacco and 69 of them cause cancer. This model is 36'" long and the size represents the amount of toxic chemicals inhaled if you smoke one package of cigarettes each day for 7 months and 1 week. (A model that is 30" long would represent one year.) Many of the same toxic chemicals are found in spit tobacco too.

These chemicals occur naturally in the tobacco leaf are sprayed on it to kill pests (tobacco worms) or added by the tobacco companies in processing. Remember, the next time someone takes a dip of lights up, think about all of the harmful chemicals that are just as bad for you (and sometimes worse, since you don't have a filter, as you breathe the smoke in).

A way for young people to educate those around them that smoke and want to avoid exposure to secondhand smoke is to teach them that it is helpful for those to smoke outside (away from doorways). This is to keep the smoke away from those they love. The theme for this is "Take it outside until you quit". Secondhand smoke travels all over the house or building, not just the room the smoker is in.

It is important the know that each brand of cigarettes contain different levels of tar and nicotine. The higher the amount of tar and nicotine, the more toxic the cigarette.

Ask:

If you went to the store to buy cleaning products (ammonia, bleach) or sprays to kill bugs or plant diseases (make up your own list) would you put them on your skin, drink them, breathe them in?

(Answer is no). Ask the class what are some of the reasons they would not do that (should talk about how they would make you sick, might kill you, they aren't made for people to ingest or breathe in).

Then explain to them:

We have put together some of the household products and other items that represent harmful, dangerous, and toxic (poisonous) materials in a cigarette. We have them in our "BIG CIG" which is short for the "Big Cigarette". We are going to show you some of those ingredients that are in a cigarette and explain about some that we can't have here today like the chemicals that are illegal to purchase or possess because they are too dangerous.

See the ingredient sheet.

Ingredient Sheet for the "Big Cig" Display

Ingredient	Represents
Fingernail Polish Remover	Acetone—main ingredient in paint and polish remover
Mothballs	Napthalenes—used in explosives, mothballs, paint pigments
Mouse	Arsenic—used in mice and rat poison
Ammonia (empty bottle)	Ammonia—household cleaner
Frog in Cup	Formaldehyde – used to embalm dead bodies, used to preserve small animals in biology class.
Matchbox Car	Carbon Monoxide – poisonous gas found in car exhaust, as well as other sources
Candle	Stearic Acid – found in candle wax
Nickel	Used in Alloys, causes vomiting and diarrhea
Pencil	Lead - a highly poisonous metal that used to be found in some paints
Lighter	Butane – cigarette lighter fluid
Toy Jet/ Rocket	Hydrazine – used in jet and rocket fuels
Battery	Cadmium – found in batteries and artists' oil paint
Toy Spider	Nicotine and DDT – insecticide. Causes extreme nausea, vomiting, diarrhea, mental confusion, convulsions; 40 mg orally is fatal to a human beings. American made cigarettes have an average of 6-11mg of nicotine per cigarette.
Styrofoam	Styrene – found in insulation material (Styrofoam)
Vinegar	Acetic Acid – vinegar, hair dye and developer
Rubber Cement	Benzene – rubber cement, a solvent (extremely toxic)
Plastic	Phenol – used in disinfectants and plastics, a germicide
Garbage Bag	Vinyl Chloride – ingredient found in garbage bags
Fil Containers	Hydroquinone – used in photo developer

Chemicals Used in Cigarettes that we can't Purchase or Provide

Ingredient	Where is it found?
Acrolein	Used in chemical weapons
Carbon Dioxide	Carbonated drinks
Catechol	Antiseptic
Cholesterol	Blockage of arteries
Cyanide	Lethal gas used for capital punishment
Glycolic Acid	Used in processing textiles and leather
Hexamine	A major ingredient in barbecue lighter fluid
Hydrogen Cyanide	Chemical weapons
Lactic Acid	Causes muscles to hurt
Methylamine	Used in tanning leather
2-Napthlyamine	Causes tumors of the bladder
N-Nitrosamines	Cancer causing agents
Nitrogen Oxides	Component of smog
Particulate matter	pieces "particles" of the ingredients
PCDDs and PCDFs	Agent Orange - causes cancer, birth defects and miscarriages
Polonium-210	Nuclear waste, can cause lung cancer
Pyridine	Chemical solvent – causes CNS depression
Succinic acid	Plant growth retardant
Toluene	Poisonous industrial solvent
Uranium 235	Used in nuclear weapons
Zinc	Inhaling causes weakness and nausea