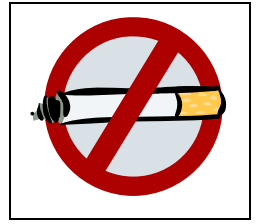


## Drug Awareness WebQuest

### Alarming Smoking Statistics and Related Activities



1. Each year in the United States, smoking related illnesses kill 440,000 people. 140,000 of these people die from lung cancer alone. If these statistics remain constant over the next 20 years, how many people will die from smoking?

Use the calculator on the computer and find the answer and write the answer in the space provided below.

Lung Cancer-

Smoking related illnesses-

2. Cigarettes cost approximately \$3.16 per pack. If a person smokes two packs a day, how much will they spend on cigarettes in a year?  
(year=365 days)

Use this number to figure out how much they will spend over the course of a lifetime. When figuring out lifetime cost, assume the smoker smokes for 50 years.

Yearly cost of smoking?

Lifetime cost of smoking?

3. Nicotine, alcohol, cocaine, marijuana, and ecstasy are the most readily available drugs throughout the country, as well in Wyoming. Each one of them negatively affects the nervous system. Using this [link](#), investigate three drugs and their effect on the nervous system. Using Word create a mini-table with this information. Make sure your name is on your table, print it and attach it to your worksheets.

4. Match the Question with the appropriate Web resource(s).

Questions	Web Site Resource Links
1. John has a friend who has had difficulty with drinking. One night, John's friend has a problem and needs help. Where can John call to get him help?	a. <a href="http://www.bernielorenzrecovery.org/">http://www.bernielorenzrecovery.org/</a>
2. Bill has a father who is an alcoholic. Where can Bill go for support?	b. <a href="http://www.aa-iowa.org/">http://www.aa-iowa.org/</a>
3. Sally had a problem with alcohol and wants to find a support group to attend. What group could Sally join?	c. <a href="http://www.f2online.org/">http://www.f2online.org/</a>
4. Rachel does not know much about tobacco use, but would like to be educated on this topic. Which website will help her?	d. <a href="http://www.area76wyaa.org/">http://www.area76wyaa.org/</a>
5. Evan is under 18 and uses tobacco but doesn't know the laws about it. Where should he go to learn more?	e. <a href="http://idph.state.ia.us/tobacco/quitline">http://idph.state.ia.us/tobacco/quitline</a>
6. Molly is addicted to drugs and her family needs to send her to a recovery center. Which organization should her family look into?	f. <a href="http://www.mediacampaign.org/">http://www.mediacampaign.org/</a>
7. What organization fights drug addictions by providing the public with information?	g. <a href="http://www.tobaccofreepartnership.com">http://www.tobaccofreepartnership.com</a>
8. Which organization focuses on young adults to prevent illicit drug use?	h. <a href="http://www.freeandtrue.com/">http://www.freeandtrue.com/</a>
9. One of Mark's friends has mentioned suicide, which site lists suicide prevention as a service?	i. <a href="http://www.4therapy.com/centers/wyoming-drug-rehab.html">http://www.4therapy.com/centers/wyoming-drug-rehab.html</a>
	j. <a href="http://www.drugs-addiction.org/">http://www.drugs-addiction.org/</a>
	k. <a href="http://wdh.state.wy.us/main/search.asp">http://wdh.state.wy.us/main/search.asp</a>
	l. <a href="http://www.whrn.org/quit_tobacco.htm">http://www.whrn.org/quit_tobacco.htm</a>

10. Suzie's parents are looking for a support group dealing with teen drug problems? Which site would help?	m. <a href="http://www.al-anon.alateen.org/">http://www.al-anon.alateen.org/</a>
11. Jack's parents found marijuana in his backpack. What site has information about marijuana?	n. <a href="http://www.ncadd.org/index.html">http://www.ncadd.org/index.html</a>

## Brain Map Activity

Drugs and alcohol affect different parts of a person's brain in different ways. The brain is divided into different sections, or lobes, each of which perform different functions. Below is a list of the basic functions of each lobe.

### Frontal:

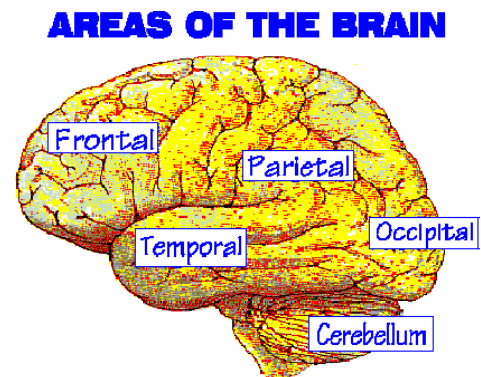
- short-term storage site
- controls voluntary movement
- transforms thoughts into words
- goal-directed behavior, concentration
- emotional control and temperament --aggression
- motor projection and association areas
- coordinate messages from other lobes
- problem-solving

### Parietal:

- receive information about temperature, taste, touch, and movement from the rest of the body
- controls reading
- controls arithmetic
- sensory projection and association areas
- visual/spatial abilities

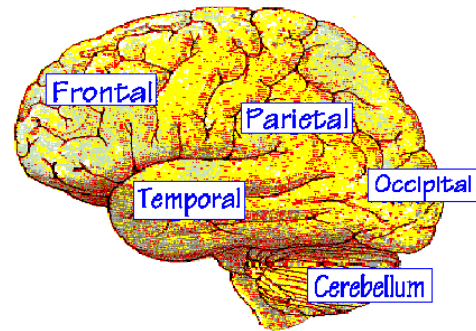
### Occipital:

- processes images from the eye
- links information from images to images in memory
- receives and processes visual information



<http://library.thinkquest.org/11799/data/brain2.html>

## AREAS OF THE BRAIN



### **Temporal:**

- receives information from the ears
- forms and retrieves memories, including musical memories
- integrates memories and senses, like taste, touch, sight, and sound
- complex vision
- balance and equilibrium
- emotions and motivations
- some language comprehension

### **Cerebellum:**

- controls body's vital functions, like respiration and heart rate
- coordinates movement in learned rote movements, reflexes (e.g., balance)

5. Next, your task is to complete the chart below, filling in the missing information. Some information may be true to several drugs. Some of the drugs and lobes will be used more than once. Fill in the Drug Effects column with the effect that matches the drug and the lobe that is affected by the drug.

Use these links for this activity:

[NIDA for Teens Facts on Drugs- Brain & Addiction](#)

[Brain Basics – Know Your Brain](#)

[Brain on Drugs](#)

[A Guide to the Drugs and the Brain](#)

**Alcohol**  
**Frontal**

**Tobacco**  
**Temporal**

**Marijuana**  
**Parietal**

**Cocaine**  
**Occipital**

**Methamphetamine**  
**Cerebellum**

Substance:	Drug Effects:	Lobe affected by Drugs:
1.	impaired balance and coordination	Frontal
2. Marijuana		Temporal
3. Methamphetamine	aggression, violence	
4. Cocaine		Parietal
5. <b>Tobacco</b>	irritability due to addiction	Parietal
6. Alcohol	slowed thinking and reaction time	
7.	Chest pain, respiratory failure	Cerebellum
8. Marijuana	Increased heart rate, anxiety	
9. Tobacco	impaired sense of taste and smell	
10. Methamphetamine		Occipital

6. Create a digital poster for "Students Against Drug Abuse". Use information you have gained on this WebQuest and come up with a 'catchy' slogan. Create your poster using, Word, PowerPoint, or Publisher.

7. See the Video Clip at [Drug Free Wave](#).

8. First of all, play [Sara's Quest](#). Sara's Quest has been developed for use in schools or in the home for children to learn about the effects of drugs on their brain and body. If you choose continue in this web site and try [Space Wrangler Game](#), [Dr. Nida's Challenge](#). Or the [HIV, Aids and Drug Abuse Game](#).

## Resources:

- [NIDA for Teens Facts on Drugs- Brain & Addiction](#)
- [Brain Basics – Know Your Brain](#)
- [Brain on Drugs](#)
- [A Guide to the Drugs and the Brain](#)
- [Drug Free Wave](#)
- <http://staff.washington.edu/chudler/introb.html#drug>
- <http://www.uni.edu/schneidj/webquests/fall04/drugs/process.html>
- <http://academics.uww.edu/cni/webquest/Fall02/AODA/Index.htm>

## Wyoming State Health Standards Addressed in this project:

4840. **Access Health Information, Products, and Services**  
Students demonstrate the ability to access valid health information and health-promoting products and services.
4841. **Self Management**  
Students demonstrate the ability to practice health-enhancing behaviors and reduce health risks.
4842. **Influence of Culture, Media and Technology**  
Students analyze the influence of culture, media, technology, and other factors on health.
4844. **Goal-Setting and Decision-Making Skills**  
Students demonstrate the ability to use goal-setting and decision-making skills to enhance health.
4845. **Advocating for Health**  
Students demonstrate the ability to advocate for personal, family, and community health.