

# Activity 1:

## The Brain

After reading about neural connections in the brain, now you get to try making some on your own! You will break up into teams or pairs, your instructor will give you a bag filled with random items such as rubber bands, paper clips, Styrofoam packing popcorn, feathers, or whatever creative items they have in mind. Your team will then have 15 minutes to create a neuron just like the one in the picture on the upper left on this page. You can use only the items given to you in the bag. Good luck and have fun building neurons!

### Materials:

- Random objects such as paper clips, rubber bands, packing popcorn, feathers, hair nets, pipe cleaners, straws, balloons, etc.
- Tape
- Scissors
- Glue sticks
- Copies of this page to look at
- Enough supplies so that each group has the same amount of supplies
- Bags to put each group's supplies in



## brain cells — neurons

### view of one neuron



Both the cerebral cortex and the limbic system are made up of many, many cells. Your brain has over two billion cells called neurons. You can never grow more brain cells. All drugs kill brain cells, so you need to protect the brain cells you have.

**Color the neuron beautiful colors. Your neurons make you think! Appreciate them.**

### the end of a neuron— the button



The very end of a brain cell is called a button. It releases chemicals called neurotransmitters which cause the button to "fire" or send an electrical current to the button of another neuron. Endorphins are a natural neurotransmitter that create "natural highs". You can "exercise" your brain to manufacture endorphins. Endorphins are in the limbic system and make the pleasure pathway "fire". Remember, running, walking, dancing, hiking, playing sports, and singing create natural highs.

# Activity 4

## Substance Abuse Bingo

On your own or with a partner, read about the following drugs and their physical effects. Try to remember as much as you can so you can win at substance abuse bingo in the next section!

drug	physical effects
Inhalants	Breathable vapors that cause mind-altering effects. Can cause hearing loss, bone marrow damage, liver or kidney damage, cancer, body spasms, and even death.
Alcohol	Alcohol use is a leading cause of death, including motor vehicle crashes, alcoholism, liver disease, suicide, and homicides. Alcohol is toxic to unborn babies.
Methamphetamines Crystal Crack	Some people get addicted on the 1st or 2nd use. It causes people to be paranoid, nervous, lose weight, become psychotic, damages the brain and can lead to death.
Cocaine Crack	Cocaine can create paranoid behavior, depression, confusion, anxiety, and loss of interest in food. You can get HIV or hepatitis by injecting cocaine.
Tobacco	Nicotine makes you feel up and then very sleepy or depressed. Smoking causes lung cancer, emphysema, frequent colds, and smoker's cough.
Marijuana	The chemical that affects the brain is THC. THC changes how we see, hear, and feel. Marijuana use destroys brain cells and causes memory loss.
LSD Acid	LSD changes mood in a dramatic way. The senses "cross over" so a person hears a color or sees a sound. Some people become permanently crazy after use.
Heroin	Heroin is highly addictive. Heroin users will eventually die from addiction. Needle use can cause AIDS and hepatitis.



### Case Study 3

You are talking to your friends after school. There is a dance on Friday.

One of your friends is saying, "You have to come up with some money. We are going to pool our money and buy cigarettes and beer for the dance."

You say, "I don't have any money. I can't get any."

Your friend gets in your face and says, "You need to help us out, what's the matter? Are you afraid to steal from your parents?"



What do you do?

#### Chart to Brainstorm on How to Use SODAS

Stop How do you delay?	
Options What are your choices?	
Decide What will you do?	
Act How do you do it?	
Self Praise How will you praise or reward yourself?	

### Case Study 4

You've had a bad day. You tried to turn some work in and your teacher wouldn't let you. Your teacher said it was too late.

The principal asked you whether one of your friends was a gang member. You didn't understand an assignment and you didn't want the teacher to know that you didn't understand.

You've been trying to make your life work, stay in school, not smoke dope, take acid or drink beer. You go home and find that one of your parents is drunk.

You think, "It's natural to drink. Why am I trying to be different?"

You feel very depressed. What do you do?

#### Chart to Brainstorm on How to Use SODAS

Stop How do you delay?	
Options What are your choices?	
Decide What will you do?	
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Self Praise How will you praise or reward yourself?	

