

EEG

What is an EEG?

- EEG stands for **E**lectro**E**ncephalo**G**ram
- An EEG is:
 - Type of a test
 - Record of your brain waves
- The normal electricity of your brain is picked up from wires we put on your head and is then displayed on a computer
- Nothing goes into your head
- It does not hurt



Why do I have to stay up late the night before?

Sleep Deprivation Instructions

| Age | Go to bed | Wake Up | Total Sleep |
|--------------------|------------------|------------------------------------|--------------------------|
| Under 1 year | Normally | Stay awake 3 hours before the test | 3 hours less than normal |
| 1-3 years | 2 hours later | 2 hours earlier | 4 hours less than normal |
| Older than 3 years | Midnight (12 AM) | 5 AM | 5 hours less than normal |

- We need to record awake and sleepy brain waves
- This makes a complete test
- Sometimes abnormalities only show in sleep
- It is easier to fall asleep during the test if you are sleep deprived
- The amount of sleep you should get depends on your age

What to Bring

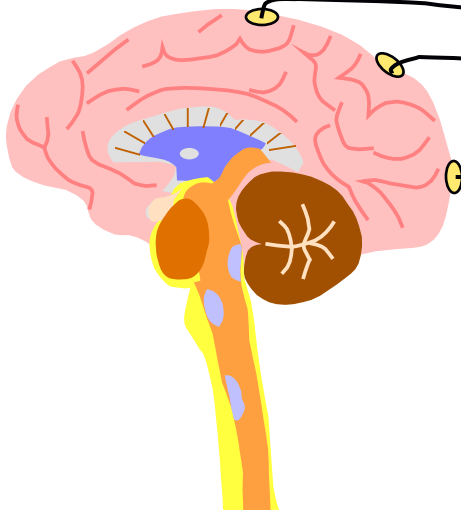
- Please bring along anything that helps you fall asleep, such as a blanket, pacifier, teddy, CD, sound machine, etc.
- Do not bottle or breastfeed babies before the test
- Although the test does not hurt, it may upset your child
- Feeding after setup helps calm upset children so they can fall asleep
- Please **DO NOT** nap in the car on the way to the test



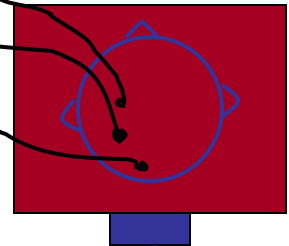


- A technologist will perform your test
- They will ask some questions about why you think your doctor requested this test

ELECTRODES –
record the activity



HEADBOX –
makes the activity bigger



COMPUTER –
displays the activity



Recording Brain Activity

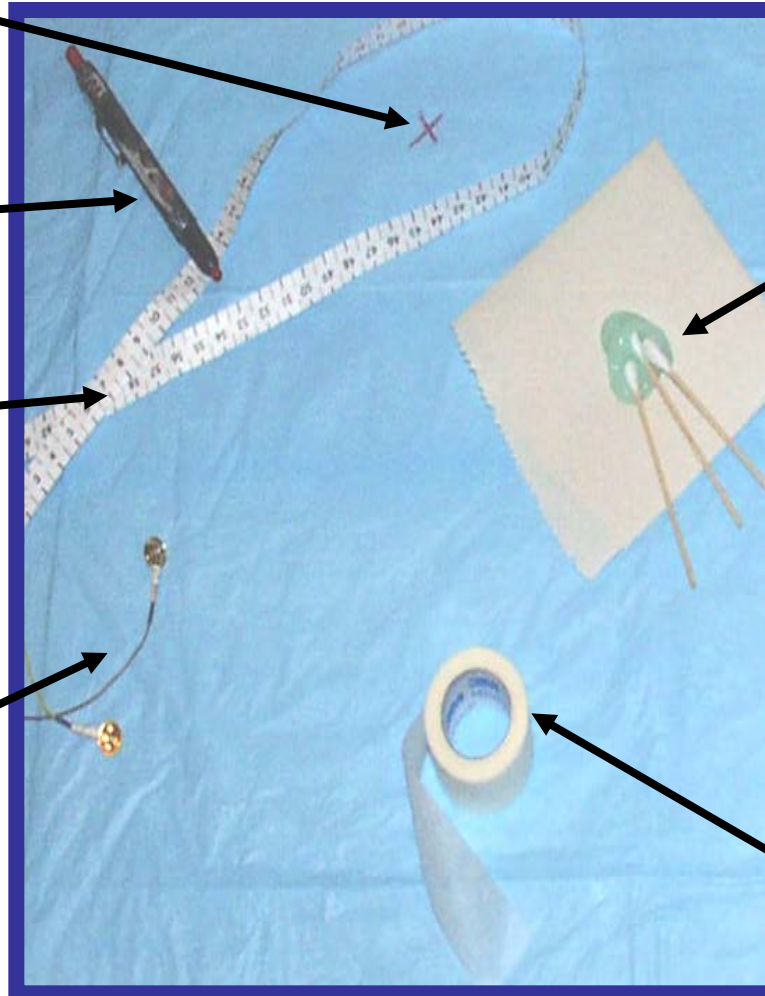
Equipment used

crayon mark

washable
crayon

tape
measure

electrodes

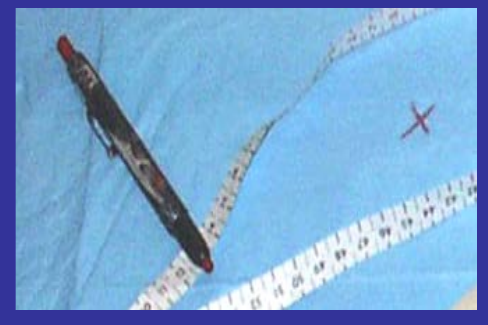


Q-tips & cleaner
(looks like toothpaste)

sticky paste



paper tape



Measure & Marking



- The tech will measure and mark your head with a wax crayon
- This is where the sensors or electrodes go on your head
- There are 25 electrodes
- We will wash the marks off before you leave

Cleaning Marks



- The tech needs the spots to be clean for the stickers to stick and pick up the brain waves.
- We clean with a Q-tip and stuff that looks like toothpaste
- Please have clean, dry hair for the test
- Do not put any gel or hair product in the day of the test



Brain Wave Sensors



- 25 gold plated electrodes
- Applied to head with a sticky paste and/or tape
- Long wire attached to the computer

Attaching Electrodes



- We use paper tape to put the electrodes on your ears, cheeks, forehead and chest
- We use a sticky paste for the ones in your hair
- The paste is water soluble and washes out easily





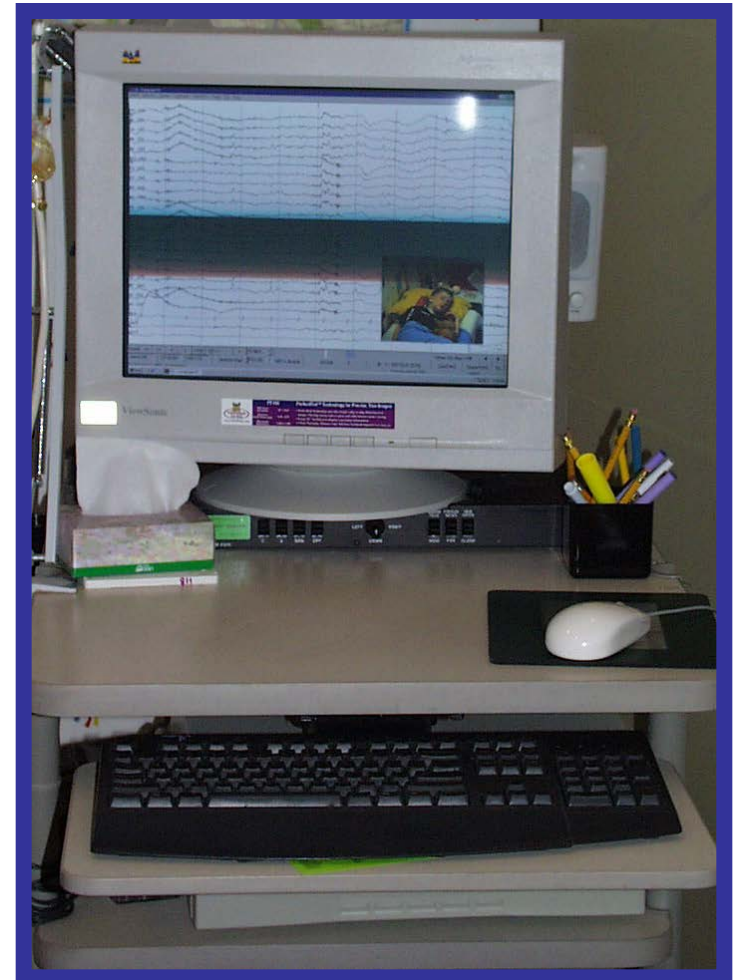
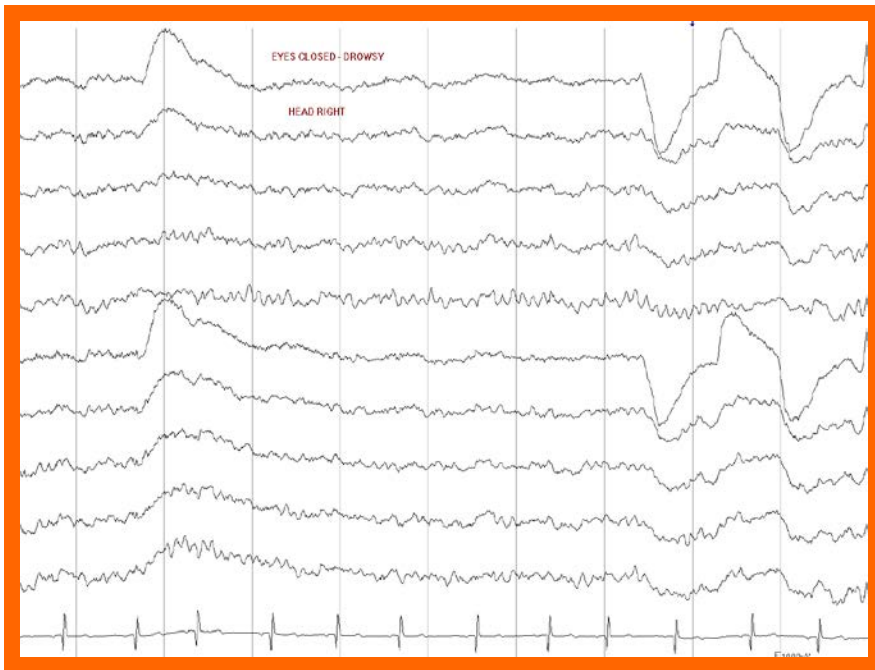
Ready, Set, GO!



- You are ready to start the test
- Younger children may have one adult stay with them
- Parents can leave and have a coffee for about 30 minutes
- Some children may not sleep with too many people in the room
- We will bring your child back to the waiting room when they are done

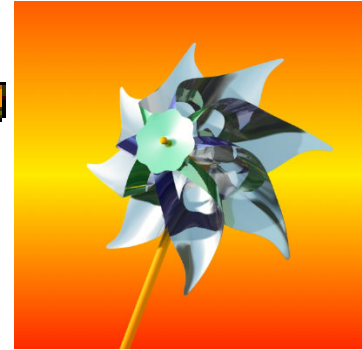
The EEG is recorded on a computer

Brain Waves

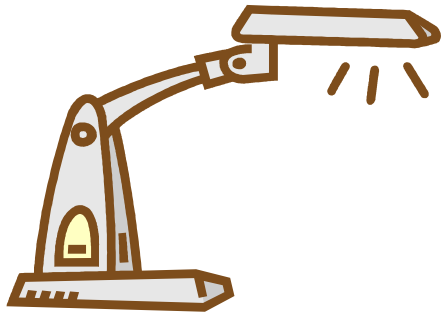




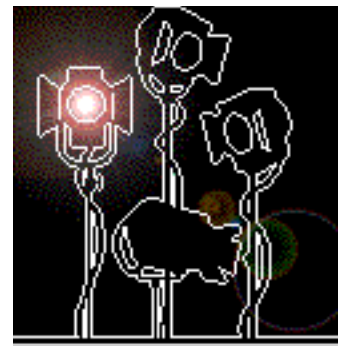
Blowing



- The tech will ask you do some deep breathing
- Emphasize on blowing out
- Imagine:
 - blowing up a balloon
 - blowing out birthday candles
 - blowing to cool hot chocolate
- You may be given a windmill to blow → just keep it spinning
- Blow constantly for 3 to 4 minutes
- Maybe even twice



Bright Flashing Light



- The tech will show you a strobe light
- It will not hurt you when it flashes
- Look in that direction
- The tech will tell you when to open and close your eyes
- Close eyes when light starts flashing
- You may see rainbow colours when your eyes are closed



Sleep



- Get comfortable
- Pretend you are in your bed at home
- You may sleep whichever way you normally do....left, right, on your back or tummy
- Close your eyes
- Pretend you are sleeping
- We will turn down the lights
- You may have a little nap
- If you can't go to sleep, just close your eyes and be still for just 10 minutes...

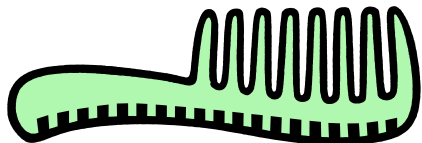




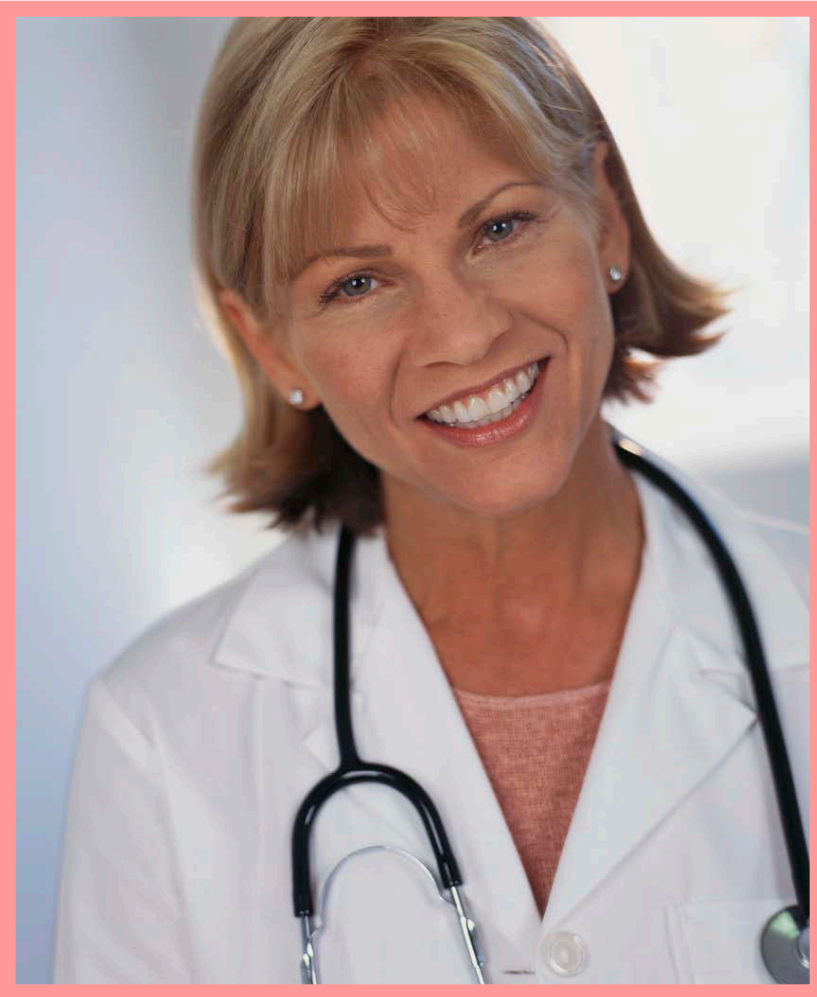
Wakeup & Cleanup



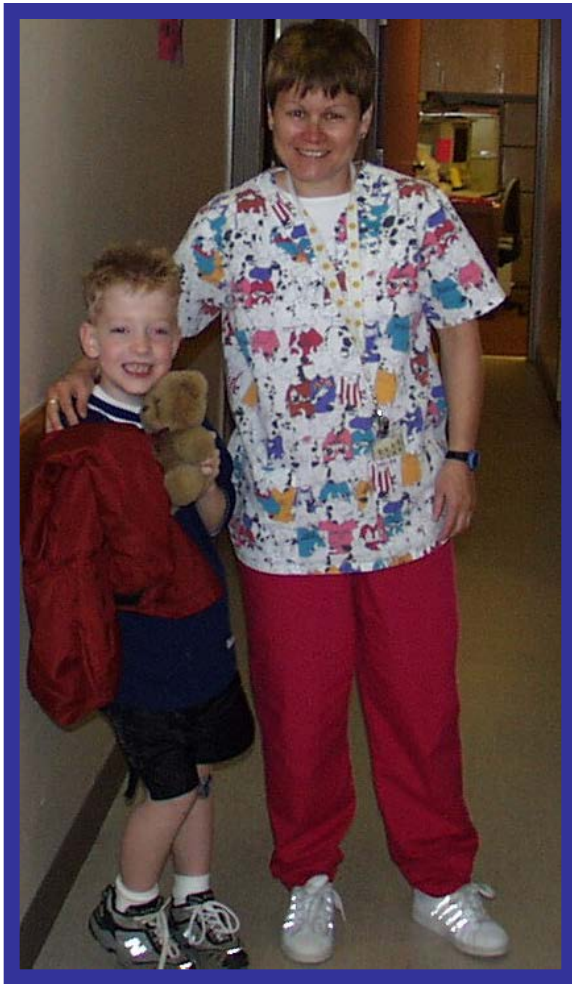
- The tech will wake you up if you have fallen asleep
- They will remove the wires and tape
- They will wash off the crayon and paste
- They may comb your hair to remove paste
- Your hair may be wet when you leave
- You just need a good shampoo at home



Test Results



- The EEG must be interpreted by a doctor (neurologist)
- A written report will be typed and sent to your referring doctor within a day or two
- The tech cannot give you results of your child's test
- Your doctor's office may request a verbal result




Thank You!



- Thank you for all of your help and patience with this test!
- We may see you again in the future
- Sometimes children may have to have the test repeated
- It is not harmful to have many EEGs

Please be on time for your appointment



- Plan to leave early
-  Parking takes time
 - There is a minimal amount of pay parking on site
 - It is important you be on time for your test; otherwise, it may compromise your child's results