

This quiz is open media. The questions and answers are based on two videos found on [this webpage](#).

"EEG basics part 2" watch 27 min 37 sec in through to the end

"EEG preprocessing and analysis" watch all of this one

1. Low pass and high pass frequency filters _____

let mostly low frequencies and mostly high frequencies get recorded respectively

let mostly high frequencies and mostly low frequencies get recorded respectively

filter out 100% of the frequencies they are intended to

cannot be used to remove artifacts

2. When would we NOT need to use a 60 Hz notch filter?

when electrical interference affects all electrodes equally

when there is 60 Hz frequencies affecting only a small number of electrodes

when there is 60 Hz frequencies affecting only a large number of electrodes

when we are only interested in frequencies way below or way above 60 Hz

3. Which of the following actions would change the way your data is displayed AND change the actual data used in your analysis?

increasing or decreasing the gain

using filters

changing how many epochs appear on the screen

a, b, and c above

none of the above

4. The first step in the EEG analysis process to create three subfolders under your name. Select the 3 from the list below.

raw data

import

export

history

syntax

SOS

5. How many EEG data files are created when you record EEG from a person?

1

2

3

4

6. To use the BrainVision Analysis software, you need _____

a dongle that we store in the lab

a password I will post in Canvas

an EEG training certificate

a ton of patience

7. The "primary tree" in BrainVision Analyzer shows you _____

the instructions for analyzing EEG

the validity and reliability of your analysis

everything you did to your data file

nothing important

8. The markers you entered during your experiment are shown on the status bar located at _____

the top of the screen

the bottom of the screen

to the left of the screen

to the right of the screen

9. We want to inspect our recorded EEG for anything weird or unusual _____

throughout the entire EEG recording

for the first 30 sec of each phase of the experiment

for the last 30 sec of each phase of the experiment

at the very end once the analysis is complete

10. What do you click on in the menu bar across the top to start cleaning your EEG data?

Export

Transformations

Solutions

Analyze

11. Whenever you do something to your data, _____

pat yourself on your back

save your progress

write down what you did in a notebook

note the change in the history tree

12. NEVER _____

change any settings in the analysis program unless I tell you to

change any settings in the analysis program unless you are sure this is what you want to do

discuss our lab procedures with others

never do what I tell you to do

13. If you "interpolate" an electrode, what does this mean?

you have removed it and then used neighboring electrodes to estimate what was going on at that electrode site

you have deleted that electrode and not replaced it

you are using the activity of all remaining electrodes to estimate the activity under one "misbehaving" electrode

you have messed up somewhere in your analysis

14. Which channel will you for sure remove in our music study?

Fp1 or Fp2 but not both

all the O channels

Fz

the photo sensor

15. What are we using as our new reference in our study?

Fz

Cz

Oz

the mean activity of all the electrodes

16. To segment an epoch means to _____

divide the epoch up into smaller pieces

multiply pieces of the epoch together

add together two or more epochs

confuse the beep out of someone

17. Why do we divide each 30 sec epoch we are interested in into 2 sec epochs and then overlap them by 75%?

I have no freaking clue!

this is by convention - everyone else does it

to remove noise from the data

to increase the amount of data points we have

18. For certain actions like "baseline correction" you ____

must start this from scratch for every epoch

can use the click and drag shortcut

can use it twice on every epoch

can ignore everything I said about it

19. For certain actions like "artifact rejection" you ____

must start this from scratch for every epoch

can use the click and drag shortcut

can use it twice on every epoch

can ignore everything I said about it

20. What does a Fast Fourier Transformation do to your data?

it puts time on the X-axis and power (in millivolts) on the Y-axis

it puts frequency on the X-axis and time on the Y-axis

it puts power (in millivolts) on the X-axis and frequency on the Y-axis

it puts frequency on the X-axis and power (in millivolts) on the Y-axis

21. When you go to export area information, you _____ (select all that apply)

need to use the printed checklist so you do not lose track of where you are and what you did

MUST make sure the name of the data you are exporting matches exactly the name you gave it in the history tree

do this eight times total

you MUST triple check everything you do!

22. Once you have exported all the data files, the next step is to _____

start all over again to make sure you get the same numbers as before

shut down the program, return the dongle to its hiding place and go home

enter the data into SPSS

convert each text file to an Excel file