2.5 Spectrum Scan

1. Spectrum scanning is a technique that collects radio emissions to analyze _____characteristics.
2. In spectrum mode Smiley separates the incoming radio waves into a _____
3. (like a prism) and takes data on a single part of the spectrum. This is like finding a specific radio station on the stereo.
4. Signal intensity is based on 0-10 scale. 0 being the _____ intensity and 10 being the highest.
5. Steps for Scanning:
    1) Step One: Select a Target/Source by using one of the three methods learned in the previous PARIPod, manual, dropdown menu, or_____.
    2) Step Two: Enter the spectrum control room by choosing the spectrum tab on the screen.
    3) Step Three: Select IF Gain.
    4) Step Four: Adjust Plot Rate if needed, Plot Rate determines the rate at which Smiley collects and is then collected.
    5) Step Five: Spectrum Parameters should be set to the base frequency of 1.42 for Neutral Hydrogen. Finally, Frequency range must be entered in KHz.
6. Frequency range determines the _____ for the scan.
7. Frequency offset and Intensity displays the current data during a scan. Nothing needs to be entered here.
8. Once you click Begin Scan, Smiley will begin taking data.
9. After a several seconds you should see _____ points being plotted on the graph.
10. Run the scan to the time required by the lab or by the teacher.
11. As you are observing, notice the changes in slopes, especially as the line approaches and passes the base frequency.
12. Hit Stop Scan to stop the data collection.
13. Useful Scan data file should be _____.
14. Once Scanned, refer to Analyzing Smiley Data (2.8).

Notes:_____

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