Atoms Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is an atom?
2. What is at the center of every atom?
3. The nucleus of an atom consists of what two parts?
4. Which two particles would be attracted to each other?
5. Which particles of the atom have approximately the same size and mass as each other?
6. Why are atoms invisible to visible light?
7. When using a scanning tunneling microscope, do we see atoms directly or only indirectly? Explain!
8. Fill out the table with the correct missing information.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particle | Symbol | Location | Charge | Relative Mass |
| Neutron |  |  |  |  |
| Proton |  |  |  |  |
| Electron |  |  |  |  |

1. What gives atoms its mass?
2. What gives atoms its volume?