

Atomic and Nuclear Structure  
Questions

Name \_\_\_\_\_  
Period \_\_\_\_\_  
Date \_\_\_\_\_

1. What holds the protons and neutrons together in the nucleus?
2. How effective is the nuclear force?
3. What do scientists agree on?
4. List and explain the two broad classes of subatomic particles.
5. What is the name of the antiparticle for the electron? How does this particle differ from the electron?
6. What is the name of the particle that is its own antiparticle?
7. Name three more leptons and compare their masses to that of the electron.
8. What are the two groups of hadrons? Which group does protons and neutrons belong in?
9. What is the name of the smaller particles that make up hadrons?
10. List the six kinds of quarks.
11. Each quark comes in three colors, what does the color label tell us about the quark?
12. How many quarks are baryons composed of? How many quarks are mesons composed of?
13. How do quarks hold together?