



## ANS GET TO KNOW NUCLEAR PATCH:

### Nuclear Science Basics Worksheet

### ANSWER KEY

1. What are the basic building blocks of all matter? Atoms (but Quarks could also be a correct answer).

2. What are the three parts of an atom?

Protons \_\_\_\_\_, Neutrons \_\_\_\_\_, and Electrons \_\_\_\_\_.

3. What charge do neutrons have? No Charge (or Neutral) \_\_\_\_\_.

4. What table would I look on if I wanted to find information on the element carbon?

The Periodic \_\_\_\_\_ table.

5. What are atoms called that are the same element, but contain different numbers of neutrons in their nucleus? Isotopes \_\_\_\_\_.

6. When molecules, crystals, and compounds interact, they can form new compounds. What is this change from old to new compounds called? Chemical \_\_\_\_\_ reactions.

7. What does the field of nuclear science concern?

Nuclear Science concerns the interactions between Parts of Atoms \_\_\_\_\_.



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8. List three commonly found radioactive objects.

\_\_\_\_\_ **Use Necessary Judgment** \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

9. What are two types of radioactive decay?

Could be at least: **Gamma, Alpha, Beta, or Particle.** *In general, use necessary judgment* decay.

10. What nuclear process do nuclear power plants use to produce most of their power?

Nuclear **Fission**\_\_\_\_\_.

11. BONUS! Sketch what a nuclear fission chain reaction looks like.

