**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Isotopes WS**

**Directions:** Fill in the missing blanks for each example by using the information provided.

*Assume a neutral element for each example in the table below.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Element** | **Atomic #** | **Mass #** | **# of Protons** | **# of Neutrons** | **# of Electrons** | **Symbol** |
| 1. | Oxygen | 8 | 16 | 8 |  |  |  |
| 2. |  | 3 | 7 |  |  | 3 |  |
| 3. |  |  | 40 |  | 20 |  |  |
| 4. |  |  |  | 16 | 16 |  |  |
| 5. |  | 18 |  |  |  |  |  |
| 6. | Carbon |  | 12 |  |  |  |  |
| 7. |  | 19 |  |  | 20 |  |  |
| 8. |  |  | 4 | 2 |  | 2 |  |
| 9. |  |  | 27 | 13 |  |  |  |
| 10. |  | 1 | 1 |  |  |  |  |
| 11. |  |  | 9 |  |  |  |  |
| 12. | Fluorine |  |  |  | 10 |  |  |
| 13. |  | 7 | 14 |  |  |  |  |
| 14. | Arsenic |  | 75 |  |  |  |  |
| 15. |  |  | 209 | 83 |  |  |  |
| 16. |  |  |  |  |  |  |  |
| 17. | Ruthenium |  |  |  |  |  |  |
| 18. |  | 78 |  |  | 117 |  |  |
| 19. |  |  |  | 32 | 41 |  |  |
| 20. | Scandium |  |  |  |  |  |  |