$\qquad$ Date: $\qquad$

## atoms

|  | V | 0 | C | L | T | Q | L | F | C | $V$ | B | Z | N | N | N | Z | A | W | 0 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Z | K | F | B | A | K | U | U | 0 | X | S | X | K | P | U | $J$ | X | X | S | H |  |  |  | L |
| M | X | K | Q | T | R | A | R | R | X | D | X | Q | G | Z | M | T | D | A | $J$ |  |  |  | S |
| D | X | D | A | 1 | $V$ | N | E | B | T | H | E | B |  | G | P | J | D | V | Q |  |  | E | F |
| U | W | D | Z | B | Y | T | P | P | A | T | B | K | 0 | Q | W | W | J | M | T |  |  | $\checkmark$ | X |
| 0 | B | E | L | R | U | U | L | D | 0 | T | S | K | W | H | 1 | S | U | Q | E |  |  | E | G |
| L | B | M | X | 0 | W | M | U | J | Q | T | S | T | C | C | R | Q | A | L | K |  |  | L | R |
| C | F | 0 | F | R | H | M | M | R | W | R | 0 | D | K | L | R | M | E | R | L |  |  | Y | E |
| N | G | C | 0 | A | Y | E | P | R | A | $J$ | N | S | K | L | F | C | 0 | W | P |  |  | G | G |
| 0 | A | R | Y | G | A | C | U | D | T | W | 0 | $J$ | 1 | Y | T | L | H | D | M |  |  | R | N |
| R | V | 1 | L | K | F | H | D | R | 0 | S | S | F | U | R | M | M | N | W | E |  |  | E | I |
| T | N | T | 0 | T | $J$ | A | D | 0 | M | Q | M | T | 0 | D | 1 | M | M | P | N |  |  | N | D |
| C | 0 | U | Q | 1 | N | N | 1 | F | 1 | X | 0 | N | A | E | D | W | V | U | Y |  |  | E | 0 |
| E | T | S | Y | V | G | 1 | N | R | C | L | H | E | D | N | N | T | C | R | N |  |  | A | R |
| L | 0 | Q | X | F | C | C | G | E | N | V | T | H | P | C | F | L | N | U | X |  |  | U | H |
| E | R | B | $V$ | N | C | A | M | H | U | Z | J | Z | 0 | V | E | U | G | E | Q |  |  |  | C |
| 0 | P | G | B | Y | R | L | 0 | T | M | 0 | J | $J$ | Z | A | 1 | 1 | S | H | Y |  |  | L | S |
| V | B | 0 | C | $J$ | P | M | D | U | B | U | R | K | R | M | $J$ | P | Y | H | U |  |  | N | T |
| V | P | 0 | K | U | B | 0 | E | R | E | A | H | M | C | B | N | T | Z | E | T |  |  | 0 | I |
| S | M | Z | H | R | H | D | L | G | R | M | 0 | K | 1 | D | 1 | V | D | A | 1 |  |  | R | A |
| R | S | Q | B | R | Z | E | W | B | H | D | D | Z | B | B | $J$ | U | L | Z | E |  |  | T | T |
| F | $J$ | A | E | F | B | L | E | K | E | R | 0 | A | R | Y | C | H | A | R | G |  |  | J | E |
| D | Z | V | M | T | F | Z | S | L | L | $J$ | F | 0 | D | N | B | N | T | F | B |  |  | E |  |
| H | Z | A | T | 0 | M | R | A | W | A | B | K | V | Z | L | R | 1 | 0 | W | B |  |  | N |  |


| Quantum Mechanical model | subatomic particles <br> atomic number | plum pudding model |
| :--- | :--- | :--- |
| electron cloud | Nuclear model |  |
| energy level | Schrodinger | Bohr model |
| Rutherford | JJ Thomson | Democritus |
| Chadwick | electron | isotope |
| orbital | neutron | charge |
| Dalton | proton | orbit |
| mass | Bohr | atom |

