

CONCEPT: PERIODIC TABLE: REPRESENTATIVE ELEMENTS & TRANSITION METALS

- The Groups themselves can be broken down into the **Transition Metals** and **Representative Elements**.
 - **Transition Metals**: The elements found in Groups 3 to 12 with their name symbolizing their varying _____.
 - They are sometimes referred to as the Group _____ Elements.
 - **Representative Elements**: The remaining elements not found in the Groups 3 to 12.
 - They are sometimes referred to as the Group _____ Elements or _____ Group Elements.

| | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|--------------|----|----|------|------|------|------|------|------|------|----|
| | (1) | | | | | | | | | | | | | | | | (18) | |
| 1 | H | (2) | | | | | | | | | | | (13) | (14) | (15) | (16) | (17) | He |
| 2 | Li | Be | | | | | | | | | | | B | C | N | O | F | Ne |
| 3 | Na | Mg | (3) | (4) | (5) | (6) | (7) | (8) (9) (10) | | | (11) | (12) | Al | Si | P | S | Cl | Ar |
| 4 | K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Kr |
| 5 | Rb | Sr | Y | Zr | Nb | Mo | Tc | Ru | Rh | Pd | Ag | Cd | In | Sn | Sb | Te | I | Xe |
| 6 | Cs | Ba | La | Hf | Ta | W | Re | Os | Ir | Pt | Au | Hg | Tl | Pb | Bi | Po | At | Rn |
| 7 | Fr | Ra | Ac | Rf | Db | Sg | Bh | Hs | Mt | Ds | Rg | Cn | Nh | Fl | Mc | Lv | Ts | Og |

Transition Metals

| | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Ce | Pr | Nd | Pm | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu |
| Th | Pa | U | Np | Pu | Am | Cm | Bk | Cf | Es | Fm | Md | No | Lr |

EXAMPLE: Which of the following is a transition metal in the 5th Period with similar chemical properties to copper, Cu?

- a) Titanium, Ti b) Cerium, Ce c) Silver, Ag d) Oxygen, O e) Zinc, Zn

PRACTICE: Which of the following is a representative element, found in the 3rd Period, that is also a pnictogen?

- a) Na b) P c) Ar d) Mg e) S

PRACTICE: State the element symbol found in the 6th Period and Group 7A.

- a) Rb b) W c) Br d) Kr e) At