

Name _____ Date _____ Per _____

THE POWER OF THE PERIODIC CHART VIDEO GUIDE

1. Dimitri Mendeleev created the _____.
2. There are 7 rows in the periodic chart. These rows are called _____.
3. The first element in the period is always a very active _____.
4. The more you go to the right the elements get _____ active until you end up with a non-reactive _____.
5. The **Alkali Metal Family** is in column number _____.
6. **Lithium** is used in the _____ of cell phones.
7. The **atomic #** identifies the # of _____ in the atom of an element.
8. **Protons** are the _____ charged particle found in the _____ of an atom.
9. **Electrons** are the _____ charged particle found in _____ outside the nucleus.
10. No 2 elements can have the same _____.
11. **Atomic mass** is the _____ mass of all the isotopes of an element.
12. **Isotopes** are atoms of the same element that have the same # of _____ but different # of _____.
13. The **alkali metals** are the most _____ metals in the table and they have _____ valence electron.
14. **Alkali metals** can be very _____ with oxygen or water.
15. Elements in the same family share the same # of _____ electrons.
16. The **Transition** _____ are in the middle of the table.
17. Metals can have 1, 2, 3 or 4 _____.
18. Transition metals usually give away _____.
19. Of the 109* known elements _____ are metals. (* actually 118 as of 4/01)

20. The 1st physical property of all metals is _____.
21. **Ductile** means that metal can be drawn into thin _____.
22. **Malleable** means that metals can be hammered into _____.
23. Most metals allow heat and _____ to flow through them.
24. **Valence electrons** are electrons on the _____ energy level.
25. **Valence** electrons can be gained or lost when elements _____ with each other.
26. **Non-metals** are dull and they don't conduct _____ or electricity.
27. **Nitrogen** makes up _____ of the earth's atmosphere.
28. **Non-metals have** __, __, __ **or** __ valence electrons. They tend to _____ electrons.
29. Elements with 8 electrons tend to be non-_____.
30. _____ is the only element in family 18 that does not have 8 valence electrons.
31. **Metalloids** can be found on either side of the _____ line.
32. **Metalloids** share properties of both metals and _____. They conduct heat and electricity better than _____.
33. **Halogens** are in family 17. They have _____ valence electrons.
34. **Halogens** react easily with elements in family 1 like _____.
35. Whenever halogens bond with the elements in family 1 they form a _____.
36. Family 18 are non-metals and have _____ valence electrons, except helium.
37. _____ are also called "inert gases."