

# Periodic Table Poster Project

7<sup>th</sup> Physical Science

Name \_\_\_\_\_ Class \_\_\_\_\_

Due Date: \_\_\_\_\_

hydrogen 1 H 1.0079																	helium 2 He 4.0026						
lithium 3 Li 6.941	beryllium 4 Be 9.0122																	boron 5 B 10.811	carbon 6 C 12.011	nitrogen 7 N 14.007	oxygen 8 O 15.999	fluorine 9 F 18.998	neon 10 Ne 20.180
sodium 11 Na 22.990	magnesium 12 Mg 24.305																	aluminum 13 Al 26.982	silicon 14 Si 28.086	phosphorus 15 P 30.974	sulfur 16 S 32.065	chlorine 17 Cl 35.453	argon 18 Ar 39.948
potassium 19 K 39.098	calcium 20 Ca 40.078	scandium 21 Sc 44.956	titanium 22 Ti 47.867	vanadium 23 V 50.942	chromium 24 Cr 51.996	manganese 25 Mn 54.938	iron 26 Fe 55.845	cobalt 27 Co 58.933	nickel 28 Ni 58.693	copper 29 Cu 63.546	zinc 30 Zn 65.39	gallium 31 Ga 69.723	germanium 32 Ge 72.61	arsenic 33 As 74.922	selecnium 34 Se 78.96	bromine 35 Br 79.904	krypton 36 Kr 83.80						
rubidium 37 Rb 85.468	strontium 38 Sr 87.62	yttrium 39 Y 88.906	zirconium 40 Zr 91.224	niobium 41 Nb 92.906	molybdenum 42 Mo 95.94	technetium 43 Tc [98]	ruthenium 44 Ru 101.07	rhodium 45 Rh 101.07	paladium 46 Pd 106.42	silver 47 Ag 107.87	cadmium 48 Cd 112.41	indium 49 In 114.82	tin 50 Sn 118.71	antimony 51 Sb 121.76	tellurium 52 Te 127.60	iodine 53 I 126.90	xenon 54 Xe 131.29						
cesium 55 Cs 132.91	barium 56 Ba 137.33	lanthanum 57-70 * [89-102]	lutetium 71 Lu 174.97	hafnium 72 Hf 178.49	tantalum 73 Ta 180.95	wolfram 74 W 183.84	reynoldsium 75 Re 186.21	osmium 76 Os 190.23	iridium 77 Ir 192.22	platinum 78 Pt 195.08	gold 79 Au 196.97	mercury 80 Hg 200.59	thallium 81 Tl 204.38	lead 82 Pb 207.2	bismuth 83 Bi 208.98	polonium 84 Po [209]	astatine 85 At [210]	radon 86 Rn [222]					
francium 87 Fr [223]	radium 88 Ra [226]	actinium 89-102 * * [89-102]	thorium 90 Th [232]	protactinium 91 Pa [231]	uranium 92 U [238]	neptunium 93 Np [237]	plutonium 94 Pu [244]	americium 95 Am [243]	curium 96 Cm [247]	berkelium 97 Bk [247]	californium 98 Cf [251]	esboium 99 Es [252]	fermium 100 Fm [257]	mendelevium 101 Md [258]	nobelium 102 No [259]			unbinilium 114 Uuq [288]					

\* Lanthanide series

lanthanum 57 La 138.91	cerium 58 Ce 140.12	praseodymium 59 Pr 140.91	neodymium 60 Nd 144.24	promethium 61 Pm [145]	samarium 62 Sm 150.36	europium 63 Eu 151.96	gadolinium 64 Gd 157.25	terbium 65 Tb 158.93	dysprosium 66 Dy 162.50	holmium 67 Ho 164.93	erbium 68 Er 167.26	thulium 69 Tm 168.93	ytterbium 70 Yb 173.04
actinium 89 Ac [227]	thorium 90 Th 232.04	protactinium 91 Pa 231.04	uranium 92 U 238.03	neptunium 93 Np [237]	plutonium 94 Pu [244]	americium 95 Am [243]	curium 96 Cm [247]	berkelium 97 Bk [247]	californium 98 Cf [251]	esboium 99 Es [252]	fermium 100 Fm [257]	mendelevium 101 Md [258]	nobelium 102 No [259]

\* Actinide series

**Purpose:** To demonstrate understanding of the arrangement of the periodic table of elements by creating a new table based on properties and characteristic of objects.

## Requirements:

1. Create a periodic table out of everyday objects. You may use pictures from magazines, catalogs, clipart, photographs, or actual small objects. (no real candy or food) You can use pictures of candy or food.
2. Glue the pictures or objects to the board.
3. Use your notes and textbook, to help with understanding and the organization of your periodic table.
4. The table must have a minimum of 5 periods (rows) and 8 families (columns)
5. Include a title on the top of your poster (The Periodic Table of \_\_\_\_\_), your name, teacher and official class.
6. The groups or families:
  - must be named (you can use the name or a characteristic of the actual items)
  - must have a common property
7. The Periods:
  - must change from left to right in some way similar to the Periodic Table of Elements, except for the 1<sup>st</sup> period which is different from all the others like hydrogen and helium
  - the first period has only 2 objects or items
  - periods 2-5 need to have 8 objects or items
  - must change from left to right in a logical way (increase in some format)
8. Make a key/legend (**see rubric**) to explain how the table is arranged. Be sure to include names of each group or family, which properties they have in common, and explain how the periods change from left to right. Compare your table to Mendeleev's Table. Your key/legend should be on a separate page and should be approximately two paragraphs.
9. Make sure to refer to the rubric. Use it to be sure you have included all requirements.

# Grading Rubric- Periodic Table Poster Project

	4	3	2	1
Number of families and periods	Contains 8 Families and 5 periods	Contains 7 Families or 4 periods	Contains 6 Families or 3 periods	Contains less than 6 Families or less than 3 periods
Organization of families	8 Families are numbered, all related	Families not numbered or, 1-2 items not related	Families not numbered, 3-4 items are not related	Items within the families have no relation to each other
Organization of periods	5 periods are numbered and named, all related, change from left to right in a logical way	Periods not numbered or named, 1 item does not change logically	Periods not numbered or named, 2-3 items do not change logically	Items within the periods have no relation to each other
Key/Legend	explains similar properties of families  explains how items increase in periods  explains how periods change  explains why 1 <sup>st</sup> period is different	Missing 1 of the requirement	Missing 2 of the requirements	Key missing or missing more than 3 requirements
Mechanics/Organization	contains no grammatical/spelling errors  effort is evident  Periodic Table organization makes sense  neat /organized	contains 1-2 grammatical/spelling errors  some effort evident  Periodic Table is somewhat neat/organized	contains 3-4 grammatical/spelling errors  minimum effort put forth  Periodic Table is not organized	contains more than 4 grammatical/spelling errors  no organization nor effort  sloppy