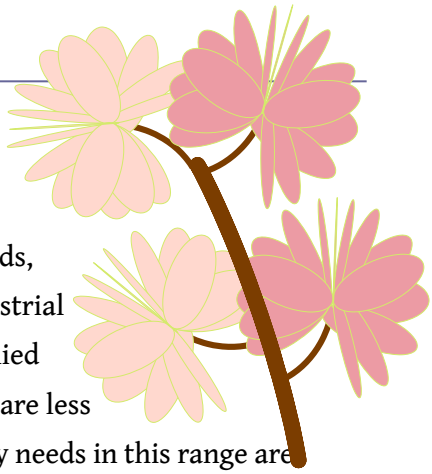
Chapter 15. Physical Matter



Latest revision: 2024-07-16

Word FAMILY ᒣ--- *K*--- represents a broad field titled “Arts and Sciences 1”, including Science Methods and Approaches, Elements and Common Compounds, Visible and Near-Visible Light, other types of Radiation, Types of Matter, Industrial and Building Materials, Organic and Polymer Chemistry; Theoretical and Applied Formal theory, Mathematics, Physics, and Chemistry. Words in the *K*--- family are less than 25% assigned as of 2024-07-16. NN awaits expert bodies whose vocabulary needs in this range are better defined.

Companion word FAMILY ᒣ--- *G*---. “Arts and Sciences 2”, is intended to represent Physical Interactions, Engineering Principles and Practice, Astronomy and Cosmology, Geography and Geology, Artistry, Literary Arts, Visual Arts, Decorative Arts, Auditory Arts and Instruments, Music, and Performing Arts. No words in this family have actually been assigned as of 2024-07-16.

This chapter discusses the two areas that have been completed: subatomic particles, elements, and common molecules.

15.1. Elementary and Subatomic Particles: *Kax-, Kas-*

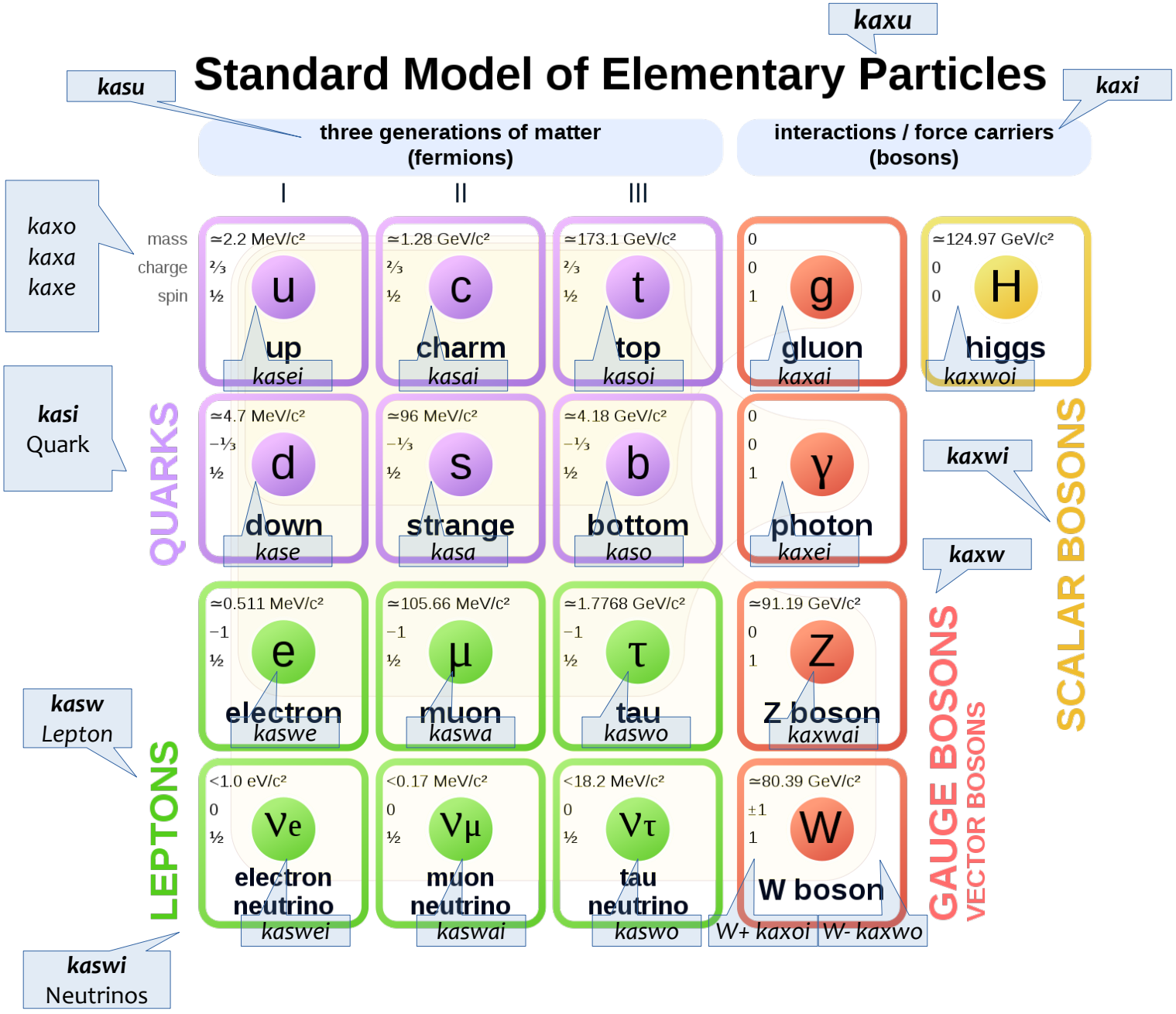
As of 2024, Nwehu Nuswei (NN) bases its elementary and subatomic particle vocaulary on the so-called “Standard Model of Elementary Particles”, as illustrated below.

SPECIES ᒣᒋᒪ– *Kax-* and ᒣᒋᒧ- *Kas-* express concepts of the “Standard Model”[18]. This SPECIES represents some basic concepts of particle physics together with bosons. Bosons (including gluons and photons) are expressed in the ᒣᒋᒪ - *Kax-* SPECIES. Bosons ᓀᒋᒪᑐ *kaxi* are force carriers in interactions between particles, particularly decay.

Fermions ᓀᒋᒧᑊ *kasu* (quarks and leptons) are represented in the ᒣᒋᒧ– *Kas-* SPECIES. Particles referenced here have all been observed with the exception of ᓀᒋᒧᔭ *kaswei* ‘graviton’ which, none the less, is much discussed.

Other particles under discussion but not observed (such as “superpartners”) are not represented at this time. ᒣᒋᒪᔭ *kaxwe* and ᓀᒋᒪᐢ *kaxwa* are unassigned.

18 https://en.wikipedia.org/wiki/Standard_Model, accessed 2023-09-15.



𝔇𝔭 15.1: Standard Model of Elementary Particles

Original "Standard Model of Elementary Particles" diagram by MissMJ, Cush - Own work by uploader, PBS NOVA [1], Fermilab, Office of Science, United States Department of Energy, Particle Data Group, Public Domain, https://commons.wikimedia.org/w/index.php?curid=4286964)

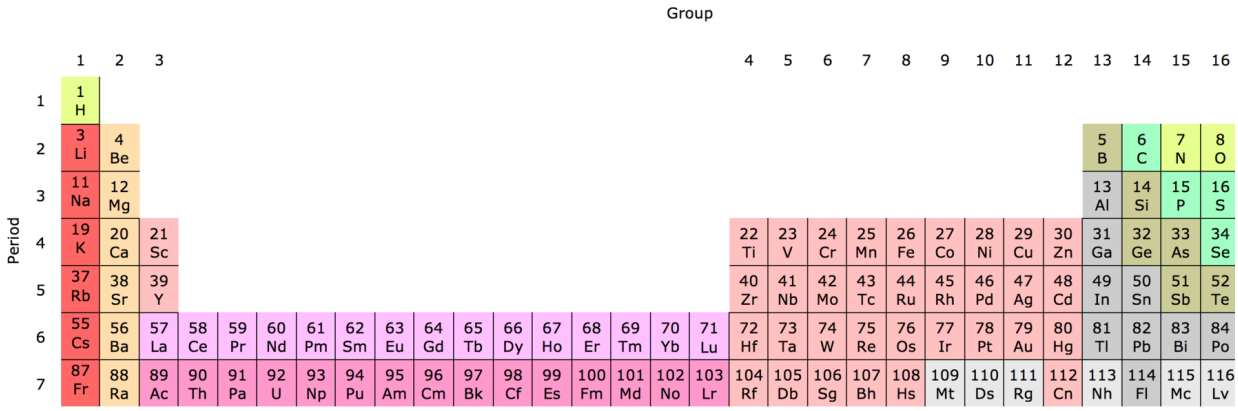
15.2. Atomic Elements and Common Compounds

Last revision: 2024-07-16

Nwehu Nuswei (NN) expresses the atomic elements – the building blocks of chemistry – in the ᛕᚳ– *Ki*-genus. After considering various ways to organize them, it seemed to match the basic principles of NN by assigning the second consonant to represent a "family" of elements, and the final vowel to represent an element's "group".

15.2.1. The Periodic Table

Physics and chemistry have long used a table[19], rather than a simple numeric list of elements, because a table shows graphically that elements have characteristics that repeat with a rhythm as the numbers climb. 𝔇ρ 15.2 shows the table:



𝔇ρ 15.2: Long-form Periodic Table. Credit: By Sandbh - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=55055463

In this long-form Periodic Table, each square represents an element, shown with its number and its abbreviation. Each row is a "**period**" of elements; the farther to the right and the farther down down the element, the heavier it is. Each column is a "**group**" of elements with similar chemical behavior and characteristics, due to the structure of their electrons' orbits. But elements can also be classified into "**families**", shown as in the example above with different colors in the table. These "families" are more comprehensive, but also more true to the characteristics of the elements, than "groups".

19 The first listing of elements in a tabluar form like the one we know today is usually attributed to Russian chemistry professor Dmitri Mendeleev and German chemist Julius Lothar Meyer, who independently worked out the arrangement and published it in 1869 and 1870.

15.2.2. Listing by Group

Since the periodic characteristics of elements appear to be more salient and observable than their family, it seemed more appropriate to express that with the more salient and observable word feature: the final vowel. This requires "rotating" the table so that members of the same Group (usually) end with the same (or related) vowels. The atomic numbers don't fit well into 16 groups, so the correspondence, unfortunately, is not exact.

15.2.3. Empty Spaces for Common Radicals

Listing by Group seems the best option, but a glance at the Periodic Table above shows that groups are not at all uniform in size. Assigning NN vocabulary space by group results in a large number of unassigned words, even after assigning NN names to all the hypothetical elements whose existence has not been verified (as of this writing).

Dr. Carol Day, when made aquainted with this problem, suggested using the empty spaces for common radicals. This has been done for a number of compounds, assigned to groups according to their primary atom (hydrogen flouride to the halogens, boric acid to the metaloids...). It is not clear whether all the deserving “common” compounds have received an apropriate place in the table, but there are still many unassigned places if more inorganic compounds present themselves as needing a NN name. Organic compounds are assigned their own SPECIES, ˥ȸ-- *Koi*--, although a few of the compounds in the ˥ᒐ-- *Ki*-- GENUS are organic.

The following is a detailed listing of elements and common compounds.

15.2.4. Chemical Vocabulary

15.2.4.1. Chemical Groups

Sixteen family groups are differentiated by the final vowel of the word.

Final Vowel			Chemical Group
Num	NN	Latin	
0	𐤕	*u*	Noble Gases
1	𐤋	*i*	Non-Metals Common non-metal compounds
2	𐤃	*e*	Alkaline Earth Metals Calcium compounds
3	𐤛	*ei*	Metaloids Boron and Silicon compounds
4	𐤓	*a*	Other Metals
5	𐤁	*ai*	Alkali Metals
6	𐤐	*o*	Halogens Halogen compounds
7	𐤝	*oi*	Transition Metals Period 4
8	𐤇	*w*	Transition Metals Period 5
9	𐤆	*wi*	Lanthanides
10	𐤄	*we*	Transition Metals Period 6
11	𐤚	*wei*	Actenides
12	𐤖	*wa*	Transition Metals Period 7
13	𐤘	*wai*	Hypothetical Elements 1
14	𐤗	*wo*	Hypothetical Elements 2
15	𐤜	*woi*	Hypothetical Elements 3

𝔇ₚ 15.3: Chemical Groups

15.2.4.2. Group – Noble Gasses: final ᵻ u

Hypothetical elements 164-172 are located in Period 1 (ϰᒐᒍᵻ - ϰᒐᒎᵻ *kinu – kidu*). This is because Period 1 contains the six "Noble Gasses", which by their nature can form no compounds. Rather than leave these words undefined, they have been assigned to the heaviest hypothetical elements NN has words for.

NN Word			Element or Compound		
NN Num	NN	Latin	Atomic Num	Symbol	Name
0	ϰᒐᒉᵻ	*kihu*	2	He	Helium
1	ϰᒐᒪᵻ	*kixu*	10	Ne	Neon
2	ϰᒐᒋᵻ	*kisu*	19	Ar	Argon
3	ϰᒐᒓᵻ	*kifu*	36	Kr	Krypton
4	ϰᒐᒥᵻ	*kiru*	54	Xe	Xenon
5	ϰᒐᒦᵻ	*kiyu*	86	Rn	Radon
6	ϰᒐᒍᵻ	*kinu*	164	Uhq	Unhexquadium
7	ϰᒐᒓᵻ	*kimu*	165	Uhp	Unhexpentium
8	ϰᒐϰᵻ	*kiku*	166	Uhh	Unhexhexium
9	ϰᒐᒪᵻ	*kicu*	167	Uhs	Unhexseptium
10	ϰᒐᒣᵻ	*kitu*	168	Uho	Unhexoctium
11	ϰᒐᒓᵻ	*kipu*	169	Uhe	Unhexennium
12	ϰᒐᒉᵻ	*kigu*	170	Usn	Unseptnilium
13	ϰᒐᒎᵻ	*kiju*	171	Usu	Unseptunium
14	ϰᒐᒍᵻ	*kidu*	172	Usb	Unseptbium
15	ϰᒐᒎᵻ	*kibu*	.	.	(unassigned)

Dp 15.4: Noble Gasses

15.2.4.3. Group: Non-Metals ᓚ i

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	ᓀᓚᐞᓚ	*kihi*	1	H	Hydrogen
1	ᓀᓚᒪᓚ	*kixi*	12	C	Carbon
2	ᓀᓚᔑᓚ	*kisi*	14	N	Nitrogen
3	ᓀᓚᔨᓚ	*kifi*	8	O	Oxygen
4	ᓀᓚᖁᓚ	*kiri*	15	P	Phosphorus
5	ᓀᓚᕀᓚ	*kiyi*	16	S	Sulfur
6	ᓀᓚᔪᓚ	*kini*	34	Se	Selenium
7	ᓀᓚᔦᓚ	*kimi*	10	H2O	Water
8	ᓀᓚᓀᓚ	*kiki*	20	CO	Carbon monoxide
9	ᓀᓚᒐᓚ	*kici*	28	CO2	Carbon dioxide
10	ᓀᓚᔕᓚ	*kiti*	78	C6H6	Benzene
11	ᓀᓚᔭᓚ	*kipi*	18	H2O2	Hydrogen peroxide
12	ᓀᓚᖃᓚ	*kigi*	18	H2S	Hydrogen sulfide
13	ᓀᓚᕮᓚ	*kiji*	45	C3OH	Methanol
14	ᓀᓚᔨᓚ	*kidi*	38	C2H5OH	Ethanol
15	ᓀᓚᐃᓚ	*kibi*	17	NH3	Ammonia

ᗤᑭ 15.5: Non-Metals

15.2.4.4. Group – Alkaline Earth Metals: final ᵈ e

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	ᵖᴵᴺᵈ	*kihe*	4	Be	Beryllium
1	ᵖᵀᴸᵈ	*kixe*	12	Mg	Magnesium
2	ᵖᴶᴶᵈ	*kise*	20	Ca	Calcium
3	ᵖᵀᴶᵈ	*kife*	38	Sr	Strontium
4	ᵖᴿᵈ	*kire*	56	Ba	Barium
5	ᵖᴱᵈ	*kiye*	88	Ra	Radium
6	ᵖᴶᵈ	*kine*	294	Be3Al2(sIO3)6	Beryl
7	ᵖᴶᵈ	*kime*	20	MgO	Magnesia
8	ᵖᴷᵈ	*kike*	30	Mg(OH)2	Magnesium hydroxide
9	ᵖᵀᴸᵈ	*kice*	60	MgSO4	Magnesium sulfate
10	ᵖᴷᴶᵈ	*kite*	(unassigned)		.
11	ᵖᵀᴶᵈ	*kipe*	(unassigned)		.
12	ᵖᵀᴿᵈ	*kige*	54	CaCO3	Calcium carbonate
13	ᵖᵀᵀᵈ	*kije*	(unassigned)		.
14	ᵖᵀᴶᵈ	*kide*	(unassigned)		.
15	ᵖᵀᴶᵈ	*kibe*	(unassigned)		.

Dp 15.6: Alkaline Earth Metals

15.2.4.5. Group – Metaloids: final 𐤄 ei

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	𐤊𐤉𐤄	*kihei*	11	B	Boron
1	𐤊𐤋𐤄	*kixei*	14	Si	Silicon
2	𐤊𐤎𐤄	*kisei*	32	Ge	Germanium
3	𐤊𐤐𐤄	*kifei*	33	As	Arsenic
4	𐤊𐤓𐤄	*kirei*	51	Sb	Antimony
5	𐤊𐤔𐤄	*kiyei*	52	Te	Tellurium
6	𐤊𐤕𐤄	*kinei*	84	Po	Polonium
7	𐤊𐤉𐤄	*kimei*	173	Ust	Unsepttrium
8	𐤊𐤊𐤄	*kikei*	(unassigned)		.
9	𐤊𐤋𐤄	*kicei*	38	H3BO3	Boric Acid
10	𐤊𐤍𐤄	*kitei*	30	SiO2	Silicon dioxide
11	𐤊𐤐𐤄	*kipei*	30	SiO2	Glass, fused silica
12	𐤊𐤒𐤄	*kigei*	(unassigned)		.
13	𐤊𐤓𐤄	*kijei*	36	Si-O-Si	Silicone compounds
14	𐤊𐤔𐤄	*kidei*	(unassigned)		.
15	𐤊𐤕𐤄	*kibei*	89	Na2BO7	Borax

𐤃𐤐 15.7: Metaloids

15.2.4.6. Group – Other Metals: final ᑭ a

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	ᖻᒪᐃᑭ	*kiha*	27	Al	Aluminum
1	ᖻᒪᒪᑭ	*kixa*	69	Ga	Gallium
2	ᖻᒪᔨᑭ	*kisa*	49	In	Indium
3	ᖻᒪᒧᑭ	*kifa*	50	Sn	Tin
4	ᖻᒪᖅᑭ	*kira*	81	Ti	Thallium
5	ᖻᒪᒥᑭ	*kiya*	82	Pb	Lead
6	ᖻᒪᔪᑭ	*kina*	83	Bi	Bismuth
7	ᖻᒪᒧᑭ	*kima*		.	(unassigned)
8	ᖻᒪᖃᑭ	*kika*		.	(unassigned)
9	ᖻᒪᒐᑭ	*kica*		.	(unassigned)
10	ᖻᒪᔭᑭ	*kita*		.	(unassigned)
11	ᖻᒪᒍᑭ	*kipa*		.	(unassigned)
12	ᖻᒪᕆᑭ	*kiga*		.	(unassigned)
13	ᖻᒪᒡᑭ	*kija*		.	(unassigned)
14	ᖻᒪᔫᑭ	*kida*		.	(unassigned)
15	ᖻᒪᒍᑭ	*kiba*		.	(unassigned)

Dp 15.8: Other Metals

15.2.4.7. Group – Alkalai Metals: final 𐤃 *ai*

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	𐤊𐤉𐤃	*kihai*	3	Li	Lithium
1	𐤊𐤋𐤃	*kixai*	11	Na	Sodium
2	𐤊𐤎𐤃	*kisai*	19	K	Potassium
3	𐤊𐤋𐤃	*kifai*	37	Rb	Rubidium
4	𐤊𐤓𐤃	*kirai*	55	Cs	Cesium
5	𐤊𐤃𐤃	*kiyai*	87	Fr	Francium
6	𐤊𐤍𐤃	*kinai*		.	(unassigned)
7	𐤊𐤌𐤃	*kimai*		.	(unassigned)
8	𐤊𐤊𐤃	*kikai*		.	(unassigned)
9	𐤊𐤂𐤃	*kicai*		.	(unassigned)
10	𐤊𐤕𐤃	*kitai*		.	(unassigned)
11	𐤊𐤐𐤃	*kipai*		.	(unassigned)
12	𐤊𐤒𐤃	*kigai*		.	(unassigned)
13	𐤊𐤙𐤃	*kijai*		.	(unassigned)
14	𐤊𐤃𐤃	*kidai*		.	(unassigned)
15	𐤊𐤁𐤃	*kibai*		.	(unassigned)

𐤃𐤐 15.9: Alkalai Metals

15.2.4.8. Group – Halogens: final ᓀ o

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	ᓱᑊᓀ	*kiho*	9	F	Fluorine
1	ᓱᑕᓀ	*kixo*	17	Cl	Chlorine
2	ᓱᑐᓀ	*kiso*	35	Br	Bromine
3	ᓱᑎᓀ	*kifo*	53	I	Iodine
4	ᓱᑭᓀ	*kiro*	85	At	Astatine
5	ᓱᑖᓀ	*kiyo*	7	HF	Hydrogen flouride
6	ᓱᑐᓀ	*kino*	18	Hcl	Hydrogen chloride
7	ᓱᑎᓀ	*kimo*	36	Hbr	Hydrogen bromide
8	ᓱᑊᓱᓀ	*kiko*	54	HI	Hydrogen iodide
9	ᓱᑊᒪᓀ	*kico*	20	NaF	Sodium Flouride
10	ᓱᑊᔑᓀ	*kito*	28	NaCl	Sodium Chloride
11	ᓱᑊᒧᓀ	*kipo*	46	NaBr	Sodium Bromide
12	ᓱᑊᕆᓀ	*kigo*	64	NaI	Sodium Iodide
13	ᓱᑊᒥᓀ	*kijo*	651	C15H12I3NO4	triiodothyronine
14	ᓱᑊᐧᓀ	*kido*	variable	(C2H3Cl)n	Polyvinyl Chloride
15	ᓱᑊᒧᓀ	*kibo*	family	DLCs	Dioxins

Dp 15.10: Halogens

15.2.4.9. Group – Transition Metals Period 4: final 𝒹 oi

NN Word			Element or Compound		
NN Num	NN	Latin	Atomic Num	Symbol	Name
0	ᓀᑊᐞ	*kihoi*	21	Sc	Scandium
1	ᓀᑌᐞ	*kixoi*	22	Ti	Titanium
2	ᓀᑋᐞ	*kisoi*	23	V	Vanadium
3	ᓀᑎᐞ	*kifoi*	24	Cr	Chromium
4	ᓀᑐᐞ	*kiroi*	25	Mn	Manganese
5	ᓀᑏᐞ	*kiyoi*	26	Fe	Iron
6	ᓀᑊᐞ	*kinoi*	27	Co	Cobalt
7	ᓀᑌᐞ	*kimoi*	28	Ni	Nickel
8	ᓀᑫᐞ	*kikoi*	29	Cu	Copper
9	ᓀᑫᐞ	*kicoi*	30	Zn	Zinc
10	ᓀᑋᐞ	*kitoi*		.	(unassigned)
11	ᓀᑌᐞ	*kipoi*		.	(unassigned)
12	ᓀᑎᐞ	*kigoi*		.	(unassigned)
13	ᓀᑫᐞ	*kijoi*		.	(unassigned)
14	ᓀᑊᐞ	*kidoi*		.	(unassigned)
15	ᓀᑌᐞ	*kiboi*		.	(unassigned)

𝐷ₚ 15.11: Transition Metals Period 4

15.2.4.10. Group – Transition Metals Period 5: final [illegible] w

NN Word			**Element or Compound**		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	[illegible]	*kihw*	39	Y	Yttrium
1	[illegible]	*kixw*	40	Zr	Zirconium
2	[illegible]	*kisw*	41	Nb	Niobium
3	[illegible]	*kifw*	42	Mo	Molybdenum
4	[illegible]	*kirw*	43	Tc	Technetium
5	[illegible]	*kiyw*	44	Ru	Ruthenium
6	[illegible]	*kinw*	45	Rh	Rhodium
7	[illegible]	*kimw*	46	Pd	Palladium
8	[illegible]	*kikw*	47	Ag	Silver
9	[illegible]	*kicw*	48	Cd	Cadmium
10	[illegible]	*kitw*		.	(unassigned)
11	[illegible]	*kipw*		.	(unassigned)
12	[illegible]	*kigw*		.	(unassigned)
13	[illegible]	*kijw*		.	(unassigned)
14	[illegible]	*kidw*		.	(unassigned)
15	[illegible]	*kibw*		.	(unassigned)

Dp 15.12: Transition Metals Period 5

15.2.4.11. Group – Lanthanide Rare Earths: final ᓀ wi

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	ᓱᑌᐦᓀ	*kihwi*	57	La	Lanthanum
1	ᓱᑌᒪᓀ	*kixwi*	58	Ce	Cerium
2	ᓱᑌᔑᓀ	*kiswi*	59	Pr	Praseodymium
3	ᓱᑌᒧᓀ	*kifwi*	60	Nd	Neodymium
4	ᓱᑌᖇᓀ	*kirwi*	61	Pm	Promethium
5	ᓱᑌᕮᓀ	*kiywi*	62	Sm	Samarium
6	ᓱᑌᔐᓀ	*kinwi*	63	Eu	Europium
7	ᓱᑌᒥᓀ	*kimwi*	64	Gd	Gadolinium
8	ᓱᑌᓱᓀ	*kikwi*	65	Tb	Terbium
9	ᓱᑌᒐᓀ	*kicwi*	66	Dy	Dysprosium
10	ᓱᑌᔑᓀ	*kitwi*	67	Ho	Holmium
11	ᓱᑌᒣᓀ	*kipwi*	68	Er	Erbium
12	ᓱᑌᖅᓀ	*kigwi*	69	Tm	Thulium
13	ᓱᑌᒋᓀ	*kijwi*	70	Yb	Ytterbium
14	ᓱᑌᔐᓀ	*kidwi*	71	Lu	Lutetium
15	ᓱᑌᒋᓀ	*kibwi*		.	(unassigned)

Dp 15.13: Lanthanide Rare Earths

15.2.4.12. *Group – Transition Metals Period 6: final 𑍈 we*

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	𑍈𑍇𑍈	*kihwe*	72	Hf	Hafnium
1	𑍈𑍇𑍉	*kixwe*	73	Ta	Tantalum
2	𑍈𑍇𑍊	*kiswe*	74	W	Tungsten
3	𑍈𑍇𑍋	*kifwe*	75	Re	Rhenium
4	𑍈𑍇𑍌	*kirwe*	76	Os	Osmium
5	𑍈𑍇𑍍	*kiywe*	77	Ir	Iridium
6	𑍈𑍇𑍎	*kinwe*	78	Pt	Platinum
7	𑍈𑍇𑍏	*kimwe*	79	Au	Gold
8	𑍈𑍇𑍐	*kikwe*	80	Hg	Mercury
9	𑍈𑍇𑍑	*kicwe*		.	(unassigned)
10	𑍈𑍇𑍒	*kitwe*		.	(unassigned)
11	𑍈𑍇𑍓	*kipwe*		.	(unassigned)
12	𑍈𑍇𑍔	*kigwe*		.	(unassigned)
13	𑍈𑍇𑍕	*kijwe*		.	(unassigned)
14	𑍈𑍇𑍖	*kidwe*		.	(unassigned)
15	𑍈𑍌	*kibwe*		.	(unassigned)

𝘋𝘱 15.14: Transition Metals Period 6

15.2.4.13. Group – Actinoids: final 𖼨 wei

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	𖼜𖼨	kihwei	89	Ac	Actinium
1	𖼜𖼩	kixwei	90	Th	Thorium
2	𖼜𖼪	kiswei	91	Pa	Protactinium
3	𖼜𖼫	kifwei	92	U	Uranium
4	𖼜𖼬	kirwei	93	Np	Neptunium
5	𖼜𖼭	kiywei	94	Pu	Plutonium
6	𖼜𖼮	kinwei	95	Am	Americium
7	𖼜𖼯	kimwei	96	Cm	Curium
8	𖼜𖼰	kikwei	97	Bk	Berkelium
9	𖼜𖼱	kicwei	98	Cf	Californium
10	𖼜𖼲	kitwei	99	Es	Einsteinium
11	𖼜𖼳	kipwei	100	Fm	Fermium
12	𖼜𖼴	kigwei	101	Md	Mendelevium
13	𖼜𖼵	kijwei	102	No	Nobelium
14	𖼜𖼶	kidwei	103	Lr	Lawrencium
15	𖼜𖼷	kibwei		.	(unassigned)

𝔇ₚ 15.15: Actinoids

15.2.4.14. Group – Transition Metals Period 7: final ᔭ wa

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	ᓴᒪᐞᔭ	*kihwa*	104	Rf	Rutherfordium
1	ᓴᒪᒪᔭ	*kixwa*	105	Db	Dubnium
2	ᓴᒪᔑᔭ	*kiswa*	106	Sg	Seaborgium
3	ᓴᒪᔨᔭ	*kifwa*	107	Bh	Bohrium
4	ᓴᒪᒥᔭ	*kirwa*	108	Hs	Hassium
5	ᓴᒪᒉᔭ	*kiywa*	109	Mt	Meitnerium
6	ᓴᒪᔐᔭ	*kinwa*	110	Ds	Darmstadtium
7	ᓴᒪᔕᔭ	*kimwa*	111	Rg	Roentgenium
8	ᓴᒪᓴᔭ	*kikwa*	112	Cn	Copernicium
9	ᓴᒪᒐᔭ	*kicwa*	113	Nh	Nihonium
10	ᓴᒪᔑᔭ	*kitwa*	114	Fl	Flerovium
11	ᓴᒪᔓᔭ	*kipwa*	115	Mc	Moscovium
12	ᓴᒪᖅᔭ	*kigwa*	116	Lv	Livermorium
13	ᓴᒪᒋᔭ	*kijwa*	117	Ts	Tennessine
14	ᓴᒪᔦᔭ	*kidwa*	118	Og	Oganesson
15	ᓴᒪᔪᔭ	*kibwa*		.	(unassigned)

Dᵽ 15.16: Transition Metals Period 7

"The element with the highest atomic number known is oganesson (Z = 118), which completes the seventh period (row) in the periodic table. All elements in the eighth period and beyond thus remain purely hypothetical... Despite many searches, no elements in this region have been synthesized or discovered in nature." [20]

NN provides vocabulary space for elements up to Z = 172 to facilitate research discussion, and also because vocabulary spance would not otherwise be filled according to the principles of NN.

20 (https://en.wikipedia.org/wiki/Extended_periodic_table, accessed 2024-01-02)

15.2.4.15. Group – Hypothetical Elements 1: final ᕒ wai

	NN Word			**Element or Compound**	
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	ᓀᒪᐞᕒ	*kihwai*	119	Uue	Ununennium
1	ᓀᒪᒐᕒ	*kixwai*	120	Ubn	Unbinilium
2	ᓀᒪᔑᕒ	*kiswai*	121	Ubu	Unbiunium
3	ᓀᒪᒉᕒ	*kifwai*	122	Ubb	Unbibium
4	ᓀᒪᒥᕒ	*kirwai*	123	Ubt	Unbitrium
5	ᓀᒪᒡᕒ	*kiywai*	124	Ubq	Unbiquadium
6	ᓀᒪᔑᕒ	*kinwai*	125	Ubp	Unbipentium
7	ᓀᒪᒋᕒ	*kimwai*	126	Ubh	Unbihexium
8	ᓀᒪᓀᕒ	*kikwai*	127	Ubs	Unbiseptium
9	ᓀᒪᒐᕒ	*kicwai*	128	Ubo	Unbioctium
10	ᓀᒪᔐᕒ	*kitwai*	129	Ube	Unbiennium
11	ᓀᒪᒉᕒ	*kipwai*	130	Utn	Untrinilium
12	ᓀᒪᖅᕒ	*kigwai*	131	Utu	Untriunium
13	ᓀᒪᒉᕒ	*kijwai*	132	Utb	Untribium
14	ᓀᒪᔑᕒ	*kidwai*	133	Utt	Untritrium
15	ᓀᒪᒋᕒ	*kibwai*		.	(unassigned)

Dp 15.17: Hypothetical Elements 1

15.2.4.16. *Group – Hypothetical Elements 2: final [illegible] wo*

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	[illegible]	*kihwo*	134	Utq	Untriquadium
1	[illegible]	*kixwo*	135	Utp	Untripentium
2	[illegible]	*kiswo*	136	Uth	Untrihexium
3	[illegible]	*kifwo*	137	Uts	Untriseptium
4	[illegible]	*kirwo*	138	Uto	Untrioctium
5	[illegible]	*kiywo*	139	Ute	Untriennium
6	[illegible]	*kinwo*	140	Uqn	Unquadnilium
7	[illegible]	*kimwo*	141	Uqu	Unquadunium
8	[illegible]	*kikwo*	142	Uqb	Unquadbium
9	[illegible]	*kicwo*	143	Uqt	Unquadtrium
10	[illegible]	*kitwo*	144	Uqq	Unquadquadium
11	[illegible]	*kipwo*	145	Uqp	Unquadpentium
12	[illegible]	*kigwo*	146	Uqh	Unquadhexium
13	[illegible]	*kijwo*	147	Uqs	Unquadseptium
14	[illegible]	*kidwo*	148	Uqo	Unquadoctium
15	[illegible]	*kibwo*		.	(unassigned)

15.18: Hypothetical Elements 2

15.2.4.17. *Group – Hypothetical Elements 3: final woi*

NN Word			**Element or Compound**		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0		*kihwoi*	149	Uqe	Unquadennium
1		*kixwoi*	150	Upn	Unpentnilium
2		*kiswoi*	151	Upu	Unpentunium
3		*kifwoi*	152	Upb	Unpentbium
4		*kirwoi*	153	Upt	Unpenttrium
5		*kiywoi*	154	Upq	Unpentquadium
6		*kinwoi*	155	Upp	Unpentpentium
7		*kimwoi*	156	Uph	Unpenthexium
8		*kikwoi*	157	Ups	Unpentseptium
9		*kicwoi*	158	Upo	Unpentoctium
10		*kitwoi*	159	Upe	Unpentennium
11		*kipwoi*	160	Uhn	Unhexnilium
12		*kigwoi*	161	Uhu	Unhexunium
13		*kijwoi*	162	Uhb	Unhexbium
14		*kidwoi*	163	Uht	Unhextrium
15		*kibwoi*		.	(unassigned)

Dp 15.19: Hypothetical Elements 3

As noted above (§15.2.4.2) "Hypothetical elements 164-172 are located in Period 1 (- *kinu – kidu*). This is because Period 1 contains the six "Noble Gasses", which by their nature can form no compounds. Rather than leave these words undefined, they have been assigned to the heaviest hypothetical elements NN has words for."

If elements 173 and beyond are discussed, NN will use the atomic number following the word for "element": for example, 'Element 173' would be *kafu 173.*