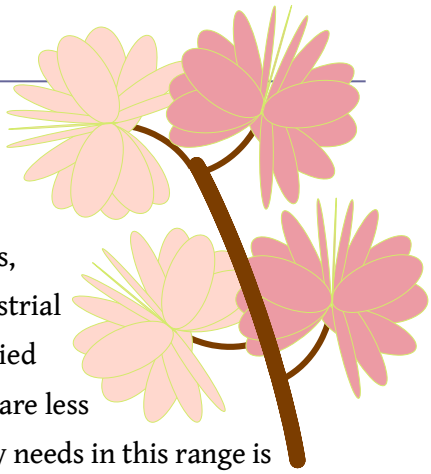
Chapter 15. Physical Matter



Latest revision: 2024-07-16

Word FAMILY ϒ--- *K---* represents a broad field titled "Arts and Sciences 1", including Science Methods and Approaches, Elements and Common Compunds, 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 is better defined.

Companion word FAMILY ϒ--- *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-*

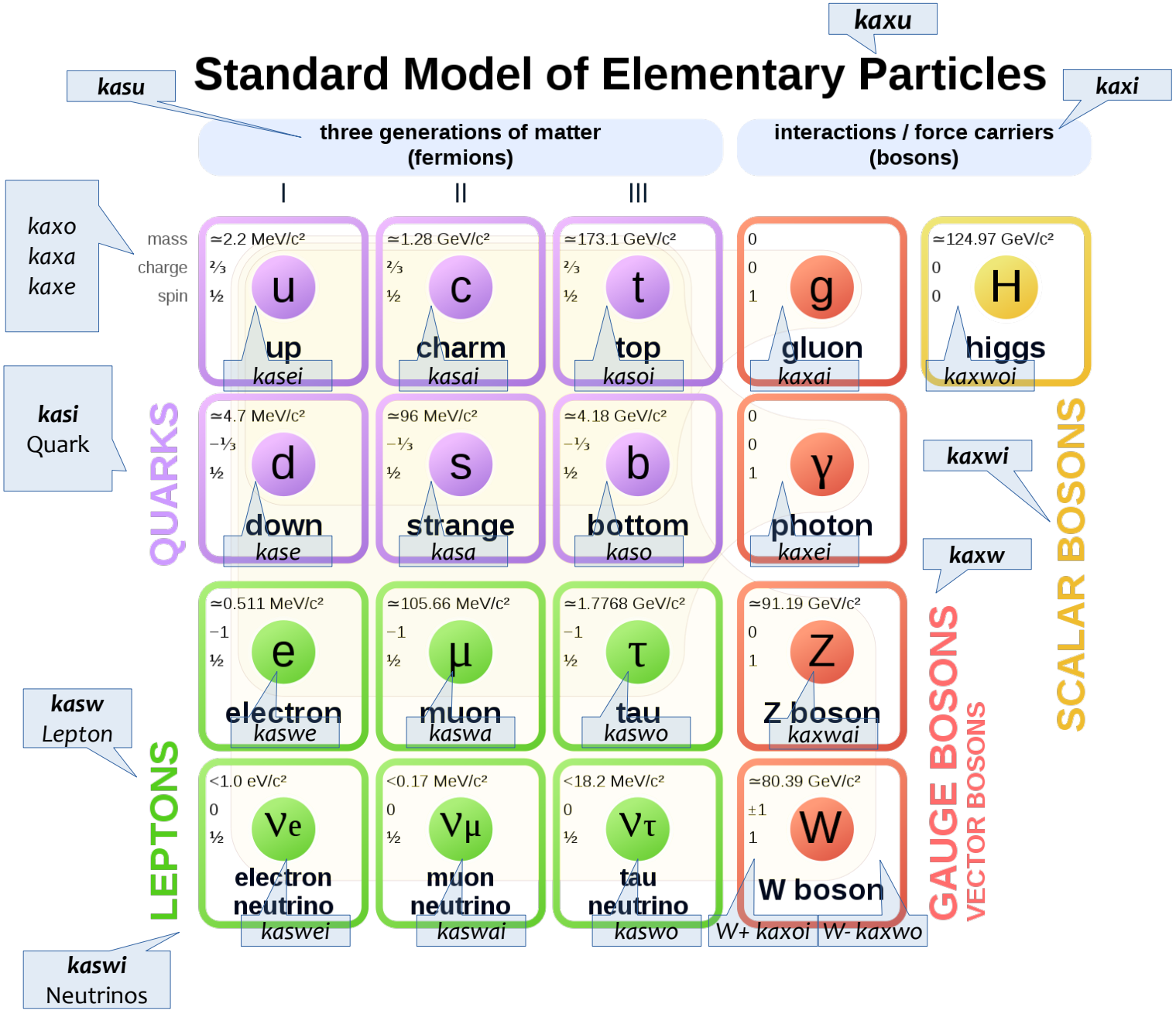
As of 2024, Nwehu Nuswei (NN) bases its elementary and subatomic particle vocaulary on the so-called "Standard Model of Elementary Particles", as illustrated below.

SPECIES ϒᒧᒪ- *Kax-* and ϒᒧᔑ- *Kas-* express concepts of the "Standard Model"[15]. This SPECIES represents some basic concepts of particle physics together with bosons. Bosons (including gluons and photons) are expressed in the ϒᒧᒪ - *Kax-* SPECIES. Bosons ᔕᒧᒪᑌ *kaxi* are force carriers in interactions between particles, particularly decay.

Fermions ᔕᒧᔑᑊ *kasu* (quarks and leptons) are represented in the ϒᒧᔑ- *Kas-* SPECIES. Particles referenced here have all been observed with the exception of ᔕᒧᔑᔭ *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. ϒᒧᒪᔭ *kaxwe* and ᔕᒧᒪᑭ *kaxwa* are unassigned.

15 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

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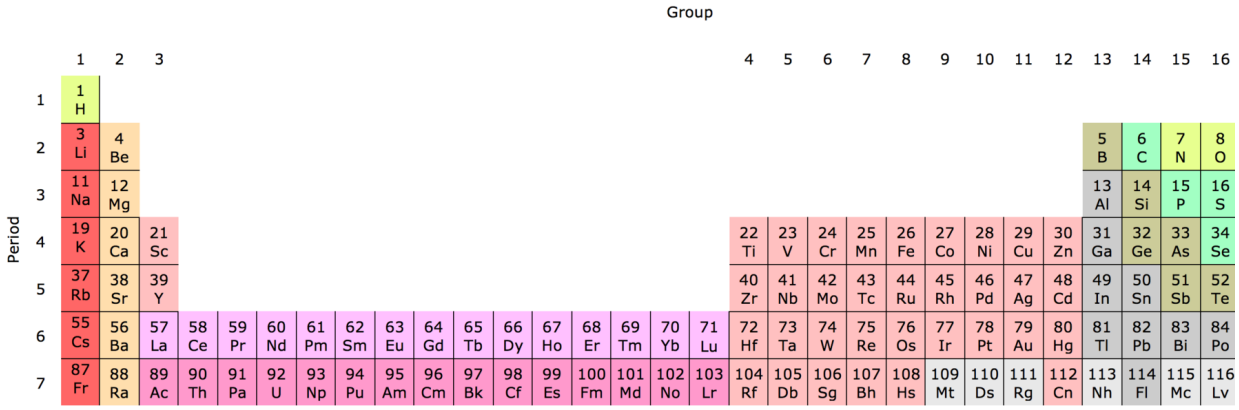
Nwehu Nuswei (NN) expresses the atomic elements – the building blocks of chemistry – in the ꓘꓶ– *Ki-* genus. After considering various ways to organize them, it seemed to match the basic principles of NN by assigning the second consonant to represent a "family" of elements, and the final vowel to represent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

15.2.1. The Periodic Table

Physics and chemistry have long used a table[16], 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".

16 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, ꓘꓰ-- *Koi*--, although a few of the compounds in the ꓘꓲ-- *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	𐤘	*we*	Transition Metals Period 6
11	𐤚	*wei*	Actenides
12	𐤦	*wa*	Transition Metals Period 7
13	𐤨	*wai*	Hypothetical Elements 1
14	𐤮	*wo*	Hypothetical Elements 2
15	𐤲	*woi*	Hypothetical Elements 3

𝔇ₚ 15.3: Chemical Groups

15.2.4.2. Group – Noble Gasses: final 𐤕 *u*

Hypothetical elements 164-172 are located in Period 1 (𐤍𐤋𐤊𐤕 - 𐤍𐤋𐤒𐤕 *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	𐤍𐤋𐤉𐤕	*kihu*	2	He	Helium
1	𐤍𐤋𐤋𐤕	*kixu*	10	Ne	Neon
2	𐤍𐤋𐤊𐤕	*kisu*	19	Ar	Argon
3	𐤍𐤋𐤋𐤕	*kifu*	36	Kr	Krypton
4	𐤍𐤋𐤓𐤕	*kiru*	54	Xe	Xenon
5	𐤍𐤋𐤔𐤕	*kiyu*	86	Rn	Radon
6	𐤍𐤋𐤊𐤕	*kinu*	164	Uhq	Unhexquadium
7	𐤍𐤋𐤊𐤕	*kimu*	165	Uhp	Unhexpentium
8	𐤍𐤋𐤍𐤕	*kiku*	166	Uhh	Unhexhexium
9	𐤍𐤋𐤏𐤕	*kicu*	167	Uhs	Unhexseptium
10	𐤍𐤋𐤒𐤕	*kitu*	168	Uho	Unhexoctium
11	𐤍𐤋𐤋𐤕	*kipu*	169	Uhe	Unhexennium
12	𐤍𐤋𐤕𐤕	*kigu*	170	Usn	Unseptnilium
13	𐤍𐤋𐤖𐤕	*kiju*	171	Usu	Unseptunium
14	𐤍𐤋𐤒𐤕	*kidu*	172	Usb	Unseptbium
15	𐤍𐤋𐤒𐤕	*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	ᔦᓚᐞᓚ	*kihi*	1	H	Hydrogen
1	ᔦᓚᒪᓚ	*kixi*	12	C	Carbon
2	ᔦᓚᔕᓚ	*kisi*	14	N	Nitrogen
3	ᔦᓚᔨᓚ	*kifi*	8	O	Oxygen
4	ᔦᓚᖀᓚ	*kiri*	15	P	Phosphorus
5	ᔦᓚᕮᓚ	*kiyi*	16	S	Sulfur
6	ᔦᓚᔪᖅᓚ	*kini*	34	Se	Selenium
7	ᔦᓚᔨᕮᓚ	*kimi*	10	H2O	Water
8	ᔦᓚᔦᓚ	*kiki*	20	CO	Carbon monoxide
9	ᔦᓚᕆᓚ	*kici*	28	CO2	Carbon dioxide
10	ᔦᓚᘐᓚ	*kiti*	78	C6H6	Benzene
11	ᔦᓚᘏᓚ	*kipi*	18	H2O2	Hydrogen peroxide
12	ᔦᓚᕀᖅᓚ	*kigi*	18	H2S	Hydrogen sulfide
13	ᔦᓚᕆᕮᓚ	*kiji*	45	C3OH	Methanol
14	ᔦᓚᘐᖅᓚ	*kidi*	38	C2H5OH	Ethanol
15	ᔦᓚᘏᕮᓚ	*kibi*	17	NH3	Ammonia

ᗫᑭ 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	ᴺᵑᴵᵈ	*kihe*	4	Be	Beryllium
1	ᴺᵑᴸᵈ	*kixe*	12	Mg	Magnesium
2	ᴺᵑᵡᵈ	*kise*	20	Ca	Calcium
3	ᴺᵑᵡᴸᵈ	*kife*	38	Sr	Strontium
4	ᴺᵑᴿᵈ	*kire*	56	Ba	Barium
5	ᴺᵑᴱᵈ	*kiye*	88	Ra	Radium
6	ᴺᵑᵡᴿᵈ	*kine*	294	Be3Al2(sIO3)6	Beryl
7	ᴺᵑᵡᴱᵈ	*kime*	20	MgO	Magnesia
8	ᴺᵑᴺᵈ	*kike*	30	Mg(OH)2	Magnesium hydroxide
9	ᴺᵑᴺᴸᵈ	*kice*	60	MgSO4	Magnesium sulfate
10	ᴺᵑᴷᵈ	*kite*	(unassigned)		.
11	ᴺᵑᴷᴸᵈ	*kipe*	(unassigned)		.
12	ᴺᵑᵛᵈ	*kige*	54	CaCO3	Calcium carbonate
13	ᴺᵑᵛᴱᵈ	*kije*	(unassigned)		.
14	ᴺᵑᵡᴿᵈ	*kide*	(unassigned)		.
15	ᴺᵑᵡᴱᵈ	*kibe*	(unassigned)		.

Dp 15.6: Alkaline Earth Metals

15.2.4.5. Group – Metaloids: final ᓀ ei

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	ᓄᑌᐞᓀ	*kihei*	11	B	Boron
1	ᓄᑌᒪᓀ	*kixei*	14	Si	Silicon
2	ᓄᑌᔨᓀ	*kisei*	32	Ge	Germanium
3	ᓄᑌᔭᓀ	*kifei*	33	As	Arsenic
4	ᓄᑌᒥᓀ	*kirei*	51	Sb	Antimony
5	ᓄᑌᒉᓀ	*kiyei*	52	Te	Tellurium
6	ᓄᑌᔾᓀ	*kinei*	84	Po	Polonium
7	ᓄᑌᕒᓀ	*kimei*	173	Ust	Unsepttrium
8	ᓄᑌᓄᓀ	*kikei*	(unassigned)		.
9	ᓄᑌᓱᓀ	*kicei*	38	H3BO3	Boric Acid
10	ᓄᑌᐦᓀ	*kitei*	30	SiO2	Silicon dioxide
11	ᓄᑌᐳᓀ	*kipei*	30	SiO2	Glass, fused silica
12	ᓄᑌᕀᓀ	*kigei*	(unassigned)		.
13	ᓄᑌᒐᓀ	*kijei*	36	Si-O-Si	Silicone compounds
14	ᓄᑌᐧᓀ	*kidei*	(unassigned)		.
15	ᓄᑌᐸᓀ	*kibei*	89	Na2BO7	Borax

Dp 15.7: Metaloids

15.2.4.6. Group – Other Metals: final ᚹ a

NN Num	NN Word NN	Latin	Atomic Num	Element or Compound Symbol	Name
0	ᚴᚼᛁᚹ	*kiha*	27	Al	Aluminum
1	ᚴᚼᛚᚹ	*kixa*	69	Ga	Gallium
2	ᚴᚼᛦᚹ	*kisa*	49	In	Indium
3	ᚴᚼᛇᚹ	*kifa*	50	Sn	Tin
4	ᚴᚼᚴᚹ	*kira*	81	Ti	Thallium
5	ᚴᚼᛈᚹ	*kiya*	82	Pb	Lead
6	ᚴᚼᛇᚹ	*kina*	83	Bi	Bismuth
7	ᚴᚼᛇᚹ	*kima*		.	(unassigned)
8	ᚴᚼᚴᚹ	*kika*		.	(unassigned)
9	ᚴᚼᛊᚹ	*kica*		.	(unassigned)
10	ᚴᚼᛯᚹ	*kita*		.	(unassigned)
11	ᚴᚼᛝᚹ	*kipa*		.	(unassigned)
12	ᚴᚼᛜᚹ	*kiga*		.	(unassigned)
13	ᚴᚼᛞᚹ	*kija*		.	(unassigned)
14	ᚴᚼᛟᚹ	*kida*		.	(unassigned)
15	ᚴᚼᛠᚹ	*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	𐤊𐤇𐤃	*kisai*	19	K	Potassium
3	𐤊𐤋𐤃	*kifai*	37	Rb	Rubidium
4	𐤊𐤓𐤃	*kirai*	55	Cs	Cesium
5	𐤊𐤃𐤃	*kiyai*	87	Fr	Francium
6	𐤊𐤇𐤃	*kinai*		.	(unassigned)
7	𐤊𐤆𐤃	*kimai*		.	(unassigned)
8	𐤊𐤊𐤃	*kikai*		.	(unassigned)
9	𐤊𐤊𐤃	*kicai*		.	(unassigned)
10	𐤊𐤊𐤃	*kitai*		.	(unassigned)
11	𐤊𐤋𐤃	*kipai*		.	(unassigned)
12	𐤊𐤕𐤃	*kigai*		.	(unassigned)
13	𐤊𐤔𐤃	*kijai*		.	(unassigned)
14	𐤊𐤋𐤃	*kidai*		.	(unassigned)
15	𐤊𐤋𐤃	*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	ᔪᑊᐤᓀ	*kiho*	9	F	Fluorine
1	ᔪᑊᒪᓀ	*kixo*	17	Cl	Chlorine
2	ᔪᑊᐢᓀ	*kiso*	35	Br	Bromine
3	ᔪᑊᓭᓀ	*kifo*	53	I	Iodine
4	ᔪᑊᖇᓀ	*kiro*	85	At	Astatine
5	ᔪᑊᑐᓀ	*kiyo*	7	HF	Hydrogen flouride
6	ᔪᑊᓯᓀ	*kino*	18	Hcl	Hydrogen chloride
7	ᔪᑊᓰᓀ	*kimo*	36	Hbr	Hydrogen bromide
8	ᔪᑊᔪᓀ	*kiko*	54	HI	Hydrogen iodide
9	ᔪᑊᒉᓀ	*kico*	20	NaF	Sodium Flouride
10	ᔪᑊᐦᓀ	*kito*	28	NaCl	Sodium Chloride
11	ᔪᑊᒧᓀ	*kipo*	46	NaBr	Sodium Bromide
12	ᔪᑊᕝᓀ	*kigo*	64	NaI	Sodium Iodide
13	ᔪᑊᒉᓀ	*kijo*	651	$C_{15}H_{12}I_3NO_4$	triiodothyronine
14	ᔪᑊᔦᓀ	*kido*	variable	$(C_2H_3Cl)_n$	Polyvinyl Chloride
15	ᔪᑊᔨᓀ	*kibo*	family	DLCs	Dioxins

Ɒᵽ 15.10: Halogens

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

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	𐑙𐑦𐑜	*kihoi*	21	Sc	Scandium
1	𐑙𐑤𐑜	*kixoi*	22	Ti	Titanium
2	𐑙𐑰𐑜	*kisoi*	23	V	Vanadium
3	𐑙𐑤𐑜	*kifoi*	24	Cr	Chromium
4	𐑙𐑮𐑜	*kiroi*	25	Mn	Manganese
5	𐑙𐑣𐑜	*kiyoi*	26	Fe	Iron
6	𐑙𐑯𐑜	*kinoi*	27	Co	Cobalt
7	𐑙𐑥𐑜	*kimoi*	28	Ni	Nickel
8	𐑙𐑒𐑜	*kikoi*	29	Cu	Copper
9	𐑙𐑖𐑜	*kicoi*	30	Zn	Zinc
10	𐑙𐑑𐑜	*kitoi*		.	(unassigned)
11	𐑙𐑐𐑜	*kipoi*		.	(unassigned)
12	𐑙𐑜𐑜	*kigoi*		.	(unassigned)
13	𐑙𐑡𐑜	*kijoi*		.	(unassigned)
14	𐑙𐑛𐑜	*kidoi*		.	(unassigned)
15	𐑙𐑚𐑜	*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 ᓭ wi

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	ᓀᒪᐞᓭ	*kihwi*	57	La	Lanthanum
1	ᓀᒪᒪᓭ	*kixwi*	58	Ce	Cerium
2	ᓀᒪᐟᓭ	*kiswi*	59	Pr	Praseodymium
3	ᓀᒪᐦᒪᓭ	*kifwi*	60	Nd	Neodymium
4	ᓀᒪᒥᓭ	*kirwi*	61	Pm	Promethium
5	ᓀᒪᒉᓭ	*kiywi*	62	Sm	Samarium
6	ᓀᒪᐢᓭ	*kinwi*	63	Eu	Europium
7	ᓀᒪᐦᒉᓭ	*kimwi*	64	Gd	Gadolinium
8	ᓀᒪᓀᓭ	*kikwi*	65	Tb	Terbium
9	ᓀᒪᒋᓭ	*kicwi*	66	Dy	Dysprosium
10	ᓀᒪᐳᓭ	*kitwi*	67	Ho	Holmium
11	ᓀᒪᐯᓭ	*kipwi*	68	Er	Erbium
12	ᓀᒪᕀᓭ	*kigwi*	69	Tm	Thulium
13	ᓀᒪᒣᓭ	*kijwi*	70	Yb	Ytterbium
14	ᓀᒪᐳᓭ	*kidwi*	71	Lu	Lutetium
15	ᓀᒪᐯᓭ	*kibwi*		.	(unassigned)

Dp 15.13: Lanthanide Rare Earths

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

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

Dp 15.14: Transition Metals Period 6

15.2.4.13. *Group – Actinoids: final [illegible] wei*

NN Word			Element or Compound		
NN Num	**NN**	**Latin**	**Atomic Num**	**Symbol**	**Name**
0	[illegible]	kihwei	89	Ac	Actinium
1	[illegible]	kixwei	90	Th	Thorium
2	[illegible]	kiswei	91	Pa	Protactinium
3	[illegible]	kifwei	92	U	Uranium
4	[illegible]	kirwei	93	Np	Neptunium
5	[illegible]	kiywei	94	Pu	Plutonium
6	[illegible]	kinwei	95	Am	Americium
7	[illegible]	kimwei	96	Cm	Curium
8	[illegible]	kikwei	97	Bk	Berkelium
9	[illegible]	kicwei	98	Cf	Californium
10	[illegible]	kitwei	99	Es	Einsteinium
11	[illegible]	kipwei	100	Fm	Fermium
12	[illegible]	kigwei	101	Md	Mendelevium
13	[illegible]	kijwei	102	No	Nobelium
14	[illegible]	kidwei	103	Lr	Lawrencium
15	[illegible]	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	ᔦᒪᐞᔭ	*kihwa*	104	Rf	Rutherfordium
1	ᔦᒪᒪᔭ	*kixwa*	105	Db	Dubnium
2	ᔦᒪᔨᔭ	*kiswa*	106	Sg	Seaborgium
3	ᔦᒪᔨᒪᔭ	*kifwa*	107	Bh	Bohrium
4	ᔦᒪᒥᔭ	*kirwa*	108	Hs	Hassium
5	ᔦᒪᒣᔭ	*kiywa*	109	Mt	Meitnerium
6	ᔦᒪᔨᔭ	*kinwa*	110	Ds	Darmstadtium
7	ᔦᒪᔨᒣᔭ	*kimwa*	111	Rg	Roentgenium
8	ᔦᒪᔦᔭ	*kikwa*	112	Cn	Copernicium
9	ᔦᒪᐯᔭ	*kicwa*	113	Nh	Nihonium
10	ᔦᒪᐳᔭ	*kitwa*	114	Fl	Flerovium
11	ᔦᒪᐱᔭ	*kipwa*	115	Mc	Moscovium
12	ᔦᒪᕀᔭ	*kigwa*	116	Lv	Livermorium
13	ᔦᒪᐯᔭ	*kijwa*	117	Ts	Tennessine
14	ᔦᒪᐳᔭ	*kidwa*	118	Og	Oganesson
15	ᔦᒪᐯᔭ	*kibwa*		.	(unassigned)

Dᑭ 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." [17]

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.

17 (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	ᔦᒪᐞᕒ	*kihwai*	119	Uue	Ununennium
1	ᔦᒪᒪᕒ	*kixwai*	120	Ubn	Unbinilium
2	ᔦᒪᔑᕒ	*kiswai*	121	Ubu	Unbiunium
3	ᔦᒪᔨᕒ	*kifwai*	122	Ubb	Unbibium
4	ᔦᒪᒥᕒ	*kirwai*	123	Ubt	Unbitrium
5	ᔦᒪᒉᕒ	*kiywai*	124	Ubq	Unbiquadium
6	ᔦᒪᔑᕒ	*kinwai*	125	Ubp	Unbipentium
7	ᔦᒪᔪᕒ	*kimwai*	126	Ubh	Unbihexium
8	ᔦᒪᔦᕒ	*kikwai*	127	Ubs	Unbiseptium
9	ᔦᒪᔭᕒ	*kicwai*	128	Ubo	Unbioctium
10	ᔦᒪᘻᕒ	*kitwai*	129	Ube	Unbiennium
11	ᔦᒪᘐᕒ	*kipwai*	130	Utn	Untrinilium
12	ᔦᒪᕀᕒ	*kigwai*	131	Utu	Untriunium
13	ᔦᒪᕉᕒ	*kijwai*	132	Utb	Untribium
14	ᔦᒪᘻᕒ	*kidwai*	133	Utt	Untritrium
15	ᔦᒪᘉᕒ	*kibwai*		.	(unassigned)

Dp 15.17: Hypothetical Elements 1

15.2.4.16. *Group – Hypothetical Elements 2: final ᔭ wo*

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

Dp 15.18: Hypothetical Elements 2

15.2.4.17. Group – Hypothetical Elements 3: final ᚸ woi

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

Dp 15.19: Hypothetical Elements 3

As noted above (§15.2.4.2) "Hypothetical elements 164-172 are located in Period 1 (ᓄᒪᓀᐟ - ᓄᒪᐧᐟ *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 ᓅᑭᐟ ᓇᓂᓇ *kafu 173.*