

**Noun Ending Rules**

1. Stems ending in α or η are in the 1st declension "A class", stems ending in ο are in the 2nd declension "O class", and consonantal stems are in the 3rd declension.
2. Neuter nouns have the same form in the nominative and the accusative.
3. Almost all neuter words end in α in the nominative and accusative plural.
4. In the dative singular, the τ subscript if possible. (Because an ι can only subscript under a vowel--in which case the vowel lengthens--it subscripts only in the 1st & 2nd declensions).
5. Vowels can often change their length ("ablaut").
6. In the genitive and dative, the masculine and neuter will always be identical.
7. The Square of Stops
8. A τ cannot stand at the end of a word and will drop off.
9. 1st Declension nouns that end in ε, ι, or ρ will have an α instead of an η in the singulars. For other forms see Mounce 345-6.

**Square of Stops Plus**

	Unvoiced	Voiced	Aspirate	+ σ	+ θ
<b>Labial</b>	π	β	φ	ψ	φ
<b>Velar</b>	κ	γ	χ	ξ	χ
<b>Dental</b>	τ	δ	θ	σ	σ

Class	Definite Articles			Noun Endings				
	M	F	N	M	F	N	M/F	N
	O/2	A/1	O/2	O	A	O	Cons. + ι, υ	
Nom. Sg.	ὁ	ἡ	τό	ς		ν	ς /	
Gen. Sg.	τοῦ	τῆς	τοῦ	υ	ς	υ	ος	ος
Dat. Sg.	τῷ	τῇ	τῷ	ι	ι	ι	ι	ι
Acc. Sg.	τόν	τήν	τό	ν	ν	ν	α/ν	
Nom. Pl.	οἱ	αἱ	τά	ι	ι	α	ες	α
Gen. Pl.	τῶν	τῶν	τῶν	ων	ων	ων	ων	ων
Dat. Pl.	τοῖς	ταῖς	τοῖς	ις	ις	ις	σι(ν)	σι(ν)
Acc. Pl.	τούς	τάς	τά	υς	ς	α	ας	α

**Vowel and Diphthong Contraction Chart Combined with Lengthenings**  
Lengthenings have filled cells. Where the lengthened form differs from the contraction, the cell is split.

	α	αι	αυ	ε	ει <sup>1</sup>	ευ <sup>2</sup>	η	ηι	ι	ο	οι	ου	υ	ω	ωι
α	α	α		α	α/α		α	α	αι	ω	η	ω	αυ	ω	ω
ε	η	η	ηυ	ει	ει	η	ηυ/ευ	η	ηι	οι	ω	ου	ευ	υ	ω
η	η	η		η	η		η	η		ω	η		ηυ	ω	ω
ο	ω	ω		ου	οι/ου		ω	οι	οι	ου	οι	ου	ου	ω	ω
ω	ω			ω			ω	ω	ω				ωυ	ω	

<sup>1</sup>In the case of α and οι, they are formed when the ending has a diphthong in its natural state. The alternate endings of α and ου are formed when the ει is formed by contraction.  
<sup>2</sup>At times, this form does not augment.

**The Signator**

- As Part of the Stem**  
→ Before μ or ν, σ disappears and the vowel before it lengthens. εσ+μ = εμι.  
→ Two σ brought together by inflection become one σ. τελεσ+σαι = τελεσαι.
- As Part of the Noun Ending**  
→ ντ, νδ, νθ + σ = νσσ → νσ → ν then ν drops out and the vowel preceding it is lengthened. So also ν, τ, δ, θ. Cf. τιν, παντ, εν, χαριτ, φωτ, ελλιδ, πενυματ  
→ σ as one of the noun endings does not drop out even when intervocalic.
- As Part of the Verb Ending**  
→ ν drops out because of the σ & the preceding vowel is lengthened: ε+ο=ου; α/ο+ο=ω  
→ As part of the verb endings in non-liquid verbs, σ only drops out in the 2SM/P forms ofσαι & σο.
- As Part of the Tense Formative**  
→ The σ drops out in the Perfect, Active, Feminine Participle because it is intervocalic.  
→ **Liquid limners λ μ ν ρ + εσ (liquid Futures) or + σ (1st Aorist) causes the σ to disappear.**  
→ The only stop that can stand before σ is π or κ. Hence, β, φ become π; γ, χ become κ. γραφ+σ = γραπσω.
- Metamorphosis**  
→ A dental stop (τ, δ, θ) before another dental stop becomes a σ: ιδ+τε = ιστε.  
→ A dental stop (τ, δ, θ) before μ often becomes σ: πεφραδ+μαι = πεφρασμαι.

Personal Pronouns			Near & Far Demonstrative Pronouns	
1st	2nd	3rd 2-1-2(2b)	Near	Far
ἐγώ	σὺ	αὐτ-ος η ο	2-1-2(2b)	2-1-2(2b)
ἐμοῦ	σοῦ		οὔτ-ος αὔτ-η τοῦτ-ο	ἐκεῖν-ος η ο
ἐμοί	σοι		Masculine and Feminine nominatives begin with the vowels and rough breathing marks. However, their other forms have τ.	
ἐμε	σε			
ἡμεῖς	ὑμεῖς			
ἡμῶν	ὑμῶν			
ἡμῖν	ὑμῖν			
ἡμᾶς	ὑμᾶς			
Short forms, μου, μοι, με				

**Attributive/Predicate Rules**

- A+A+N=A Adjective+Article +Noun=Attributive
  - A-A+N=P Adjective-Article+Noun=Predicate
  - A-N=S Adjective-Noun=Substantive
  - A+N-As=I Adjective+Noun-Articles=Independent
- Aὐτός-A+N=P αὐτός -Article+Noun=Predicate.  
 1 αὐτός does not have the article in its Predicate position.  
 2 When used reflexively, it is usually nominative and modifying a noun 3 When used as the identical adjective it is usually attributive.

**Indicative and Non-Indicative of εἰμί**

Present	Imperfect	Future	Subjunctive	Imperative	Infinitive
εἰμί <sup>1</sup>	ἦμην	ἔσομαι	ῶ		εἶναι
εἶ	ἦς	ἔσῃ	ῆς	ἴσθι	
ἔστί(ν)	ἦν	ἔσται	ῆς	ἔστω	
ἔσμέν	ἦμεν, ἦμεθα	ἔσόμεθα	ῶμεν		
ἔστέ	ἦτε	ἔσεσθε	ῆτε	ἔστε	
εἰσί(ν)	ἦσαν	ἔσονται	ῶσι(ν)	ἔστωσαν	

<sup>1</sup>The root for εἰμί is εσ. Normally, the σ drops out before μ and the preceding vowel is lengthened (Smyth §105). Development of the **Indicative**: εσ-μι → ε-μι → εμι; εσ-σι → εσι → εἶ; εσ-τι(ν); retains the original τι ending; (σ-)εντι → εισι. The **Subjunctive**: εσ-ω → εω → ῶ. The **Optative**: εσ-τη-ν → ετην; εσ-ι-μεν → ειμεν. The **Infinitive**: εσ-ναι → ειναι. The **Participle**: εσ-ων → εων → ων (Smyth §770).

**Consonantal Reduplication**

- With a single consonant, repeat the consonant, add epsilon: λέλυκα
- If the consonant is φ, χ, θ then you get the hardened form π, κ, τ. πεφα... κεχα... τεθε...
- In Compound Verbs the reduplication takes place before the verb in the same way augmentation does. εκβέβληκα
- Contract Verbs lengthen their contract vowels. γεγέννηκα or λελάληκα

**Vocalic Reduplication**

- Vowels or diphthongs, the vowel lengthens as with the Imperfect. αγαπάω to ἡγάπηκα αἰτέω to ἤτηκα
- Verbs beginning with two consonants will usually have vocalic reduplication. γνω becomes ἔγνωκα

**Attic Reduplication**

- Some verbs whose themes begin with α, ε or ο followed by a single consonant, reduplicate by repeating the initial vowel and the consonant and by lengthening α and ε to η, and ο to ω. ἀκούω becomes ἀκήκουα for ἀκηκο(υ)α ἀγώ has ἀγήοχα for ἀγη(γ)οχα

**Conditional Sentences**

Class	Protasis	Apodosis
1st	εἰ + any tense Indicative; negated by οὐ	any mood or tense
2nd	εἰ + past tense Indicative; negated by μὴ	ἄν + same tense Indicative as the protasis
3rd	εἴ + Subjunctive negated by μὴ	any mood and tense
4th	εἰ + Optative	ἄν + optative

This verb chart reflects the actual verb endings, not simply paradigm endings. The shaded cells are NOT actual endings but the result of morphology. The actual ending is listed in the cell to the immediate left separated by a lightly dashed line and a footnote explains the change. The cells with **bold** outlines are  $\mu\iota$  verb endings which will be helpful to know but not formally covered until the end of the book. Memorizing this chart drastically reduces the amount of memorization required. My adaptation is best to learn because it forces you to learn rules of contraction but also shows you the results of the contraction. Red letters are contract verb imperatives.

Verb Endings for the Indicative, Subjunctive, Optative, and Imperative Moods						
	PRIMARY		SECONDARY		IMPERATIVE	
	Active	Middle	Active	Middle	Active	Middle
1S	— ω <sup>1</sup>	<b>μ</b> ι	μα	ι	ν	None
2S	ζ <sup>2</sup>	σ αι <sup>6</sup> η/α/οι	ς	σ ο <sup>9</sup> ου/ω	— ε <sup>10</sup> ι ν	α
					η θι	ς
3S	σ ι(ν)	ι <sup>3</sup>	ει <sup>4</sup>	τα	ι	ε(ν) <sup>8</sup>
1PI	μεν	μεθα	μεν	μεθα	None	
2PI	τε	σθε	τε	σθε	τε*	σθε
3PI	ν σ ι(ν)	ου σ ι(ν) <sup>5</sup>	ν τ αι	ν	σ α ν <sup>12</sup>	ν τ ο
	α σ ι(ν)					τ ω σ α ν*
						*Aor. pass. θη

### Verb Footnotes

<sup>1</sup>Technically there is no ending. Instead there is an o connecting vowel. Because there is no ending, the o lengthens to an ω (Smyth §463a).

<sup>2</sup>The connecting vowel here is ε but it has apparently lengthened to ει. Mounce and Smyth disagree on this matter. Smyth supposes it is λῦε-σι, which contracts to λῦει and he imagines that a ζ has been added to give us λυεζ (Smyth §463b). Mounce agrees with the development but thinks that the original sigma has switched places with the iota, a process known as metathesis (Mounce p. 134 fn 11).

<sup>3</sup>The original ending was τι but the τ dropped out. The original can be seen in εσ τι(ν) (Mounce p. 133, fn 8).

<sup>4</sup>For our purposes, the ει ending is formed from the ε connecting vowel and the ι ending, although in the Perfect there is no ι only a moveable ν. There is no good technical explanation for how ει is formed since τι to σι would render η not ει (Mounce,

MBG p. 80 n5; Smyth §463 c; Funk §3670.2).

<sup>5</sup>Written as οσσι, technically the ending is νσι but the ν drops out because of the σ. The connecting vowel, which would have been ο before a ν, has lengthened to ου to compensate (Mounce p. 128 fn 8). Additionally, a moveable nu may be added to the end of both ουσ ι(ν) and α σ ι(ν).

<sup>6</sup>Except for the Perfect M/P, the 1st Aorist M, and the M/P μι verbs, the sigma drops out and the vowels contract. Contracted forms may be η, α, οι. Some charts list -ει as an alternate ending. Smyth (§628) mentions that it is an alternate spelling of the Present and Future M/P and the Future Perfect passive. It is an Attic spelling (EI for ηοι ηι). In the NT, this form occurs only in Lk. 22:42 (βούλει) a deponent verb. It, along with οἶει and ὄφει only have this form. All other 2S verbs in the NT ending this way are active Imperatives of contract verbs ending in ε.

<sup>7</sup>Smyth explains that the α/ν ending actually is a μ which converts to a ν when preceded by a vowel or to an α when preceded by a consonant. The μ is one of the "sonant nasals" λ, μ, ν, ρ. The 1<sup>st</sup> Aorist ἐλύ+σ+μ became ἐλυσα and the α grew into use in all the 1<sup>st</sup> Aorist forms except the 3 sg. which gives us the so-called σα tense formative (Smyth §464a & 666).

<sup>8</sup>Technically, there is no ending here. Instead, the connecting vowel ε stands alone or with a moveable nu ε(ν). In the Secondary Active it may be that the ε is held over from the Perfect tense

Participle Morphemes						
	Present		Aorist		Perfect	
	M/N	Fem.	M/N	Fem.	M/N	Fem.
Active	ντ	ουσα	ντ	σα	οτ	υια
M/P	μεν	μεν	μεν	μεν	μεν	μεν
Passive			ντ	σα		

Infinitives			
	Present	1 <sup>st</sup> Aorist	2 <sup>nd</sup> Aorist
Active	ειν*	σαι	ειν*
M/P	σθαι	σασθαι	σθαι
Passive		θηναι	ηναι

\*Technically the ending is εν which contracts with the connecting vowel ε.

Stem Things
τζω αζω stems usually end in a dental, e.g. δ
ασσω stems usually end in a velar, e.g. χ. γ
but σ was added to form the present.
σκ ισκ are added to some roots to form the present tense.

Athematic (μι verb) Rules
1. Reduplicate with ι in the Present & Imperfect.
2. Normally, no connecting vowel (thematic).
3. The stem vowel can lengthen, shorten, or drop out.
4. Most use κα as the Aorist & Perfect tense formative.
5. Reduplicates with ε in the Perfect.

form of the verb (cf. Smyth §464c). That is not the same as with the Imperative Active. With the Aorist and Future Passives, no ending is used, simply the eta from the tense formative.

<sup>9</sup>Technically, σο is the ending but the σ drops out when it is intervocalic and the ο contracts with the connecting vowel, either ε or ο and the result is lengthening to ου or ω respectively. In some μι verbs σ remains. A σ between vowels is due to phonetic change (Smyth §120).

<sup>10</sup>Technically, there is no ending here. Instead, the connecting vowel ε stands alone or with a moveable nu ε(ν). In the Active second singular of liquids, such as the 1st Aorist, ον is the ending instead. The ο replaces α (Smyth §669). With Contract verbs, the contract vowel lengthens to either α, ει, ω, or ου. Additionally, Athematic verbs may have η.

<sup>11</sup>Technically, σο is the ending but the σ drops out when it is intervocalic (Smyth §120) and the ο contracts with the connecting vowel, either ε or ο and the result is lengthening to ου or ω respectively. In the Middle of liquid verbs, such as the 1st Aorist, the ending switches to αι (Smyth §669). However, σο does appear as an ending in the Athematic and some Thematic verbs.

<sup>12</sup>This is only used in thematic verbs as a 1st or 2nd Aorist Passive Indicative; in athematic verbs as Imperfect & Second Aorist Active Indicative.

Indicative Mood Verbs			
Tense	Active	M/P	Passive
Present	● <sup>ο</sup> / <sub>ε</sub> +Pae	● <sup>ο</sup> / <sub>ε</sub> +Pmpe	
1st Future	□ σ <sup>ο</sup> / <sub>ε</sub> +Pae	□ σ <sup>ο</sup> / <sub>ε</sub> +Pme	□ θ η <sup>ο</sup> / <sub>ε</sub> +Pmpe
2nd Future	▲ <sup>ο</sup> / <sub>ε</sub> εσ +Pae	▲ εσ <sup>ο</sup> / <sub>ε</sub> +Pmpe	▲ ησ <sup>ο</sup> / <sub>ε</sub> +Pmpe
Liquid Future	□ εσ <sup>ο</sup> / <sub>ε</sub> +Pae	□ εσ <sup>ο</sup> / <sub>ε</sub> +Pmpe	
Imperfect	ε ● <sup>ο</sup> / <sub>ε</sub> +Sae	ε ● <sup>ο</sup> / <sub>ε</sub> +Smpe	
2nd Aorist	ε ▲ <sup>ο</sup> / <sub>ε</sub> +Sae	ε ▲ <sup>ο</sup> / <sub>ε</sub> +Sme	ε ▲ η +Sae
1st Aorist	ε ○ σ α +Sae	ε ○ σ α +Sae	ε ○ θ η +Sae
Liquid Aorist	ε ○ α +Sae	ε ○ α +Sme	
1st Perfect	RE ♦ κ α +Pae	RE ♦ +Pmpe	
2nd Perfect	RE ♦ α +Pae	RE ♦ α +Pmpe	
1st Pluperfect	ε RE ♦ κ ει +Sae	ε RE ♦ +Smpe	
2nd Pluperfect	ε RE ♦ ει +Sae	ε RE ♦ +Smpe	

Subjunctive Mood Verbs			
Tense	Active	M/P	Passive
Present	● <sup>ω</sup> / <sub>η</sub> +Pae	● <sup>ω</sup> / <sub>η</sub> +Pmpe	
1st Aorist	○ σ <sup>ω</sup> / <sub>η</sub> +Pae	○ σ <sup>ω</sup> / <sub>η</sub> +Pme	○ θ <sup>ω</sup> / <sub>η</sub> +Pae
2nd Aorist	▲ <sup>ω</sup> / <sub>η</sub> +Pae	▲ <sup>ω</sup> / <sub>η</sub> +Pme	▲ η +Pae

Optative Mood Verbs			
Tense	Active	M/P	Passive
Present	● οι +Sae	● οι +Sm/pe	
Future	□ σ ο ι +Sae	□ σ ο ι +Sme	□ θ η σ ο ι +Sae
1st Aorist	○ σ α ι +Sae	○ σ α ι +Sme	○ θ ει +Sae
2nd Aorist	▲ ο ι +Sae	▲ ο ι +Sme	▲ ει +Sae

- Shapes represent verb stems. Present & Imperfect use the same stem.
- Contract verbs end in α, ε, or ο.
- Bold outlined forms take secondary endings.
- ① The Connecting Vowel is ο before μ or ν, otherwise ε.
- ② Imperfects & Aorists augment, Perfects reduplicate. Augmentation ceases outside of the Indicative mood.
- ③ The Indicative mood is negated by ου, ουκ, and ουχ; everything else by μη. The strongest form of negation is ου μη.
- ④ In questions, ου expects a yes answer, μη no.
- ⑤ Possible Subjunctive Clue words: ἵνα, εἰάν (εἰ + ἄν), ὅταν (ὄτε + ἄν), ὅς ἄν, ὅπου ἄν, ἕως, ἕως ἄν.

Indicative Mood Verb Tense Formatives					
Future		Aorist		Perfect	
Act	Pas	Act	Pas	Act	Act
σ, εσ	θησ, ησ	σα, α	θη, η	κα, α	κει, ει