Reading Greek

The Greek alphabet is familiar to most college students because of its use in fraternity and sorority names, but to read Greek it's necessary to do more than name the letters. Fortunately, it's not too hard to learn enough to pronounce any word one comes on, and that will suffice for our uses (Greek grammar is difficult, but Greek spelling is very regular). If you can **pronounce** a Greek word, you can get a surprising distance toward understanding its meaning, just by looking for cognates.

The difficult part for Americans is getting used to the lower-case letters. The ancient Greeks didn't have to worry about them — they're a medieval invention, like Latin lower-case — but modern sources always cite Greek in lowercase, so we have to learn it, willy-nilly. Unfortunately, most of the lower-case Greek letters don't resemble their upper-case allographs very much.

Starting with the vowels is simplest. There are **seven** vowels in Greek. Actually, there were more vowel phonèmes than that, since there were 5 short vowels and 7 long ones, but the alphabet only had special letters for two of the long vowels. We won't bother about vowel length in general; you can always look it up, and it would normally only matter to another ancient Greek. The familiar 5 vowels are:

A	α	**Alpha,**	representing both long and short /a/
E	ε	**Epsilon,**	representing the short vowel /ɛ/
I	ι	**Iota,**	representing both long and short /i/
O	ο	**Omicron,**	representing the short vowel /ɔ/
Y	υ	**Upsilon,**	representing both long and short /u/

A couple of things are worth noting about these letters: first, the shape of the capital Upsilon is the same as our letter "**Y**"; this letter was borrowed by the Romans to spell Greek words, and this is why the Spanish name for the letter is "**I griego**" ("**Greek I**"), and the German name is "**Ypsilon**". Upsilon should normally be transliterated by **"Y"**, because most English vowel Y's come from this source. The lower-case form is much closer in shape to our "**u**", however, and that is how it was pronounced in Homeric times. Later in Greek history it became a front vowel, and that's why it's associated with the vowels **I** and **Y**, both high front in English; but in ancient Greek it was a high back vowel. To remember this, keep in mind the first letter of its English name: **Upsilon**, pronounced as a long /**u**/.

Second, note the name of **Omicron**; it actually means "little o" (as in **micro**scope or **micro**economics). This refers to the fact that it's short. The long open / ɔ̄/ was represented by a different letter, **Omega** ("big o", as in **mega**ton or **megalo**maniac). The other long vowel that had a special letter was **Eta**, which represented the long open / ɛ̄/ .

Η	η	**Eta**,	representing the long vowel /ɛ̄/
Ω	ω	**Omega**,	representing the long vowel /ɔ̄/

Note here that the capital Eta is the same shape as our letter **H**. Greek didn't have a special letter for the /h/ sound, which occurred only at the beginning of words, and when Latin needed one, it used the Eta symbol, for which it didn't have a corresponding vowel. On the other hand, Greek does have a couple of marks for "breathings": the "rough breathing", marked by a reversed apostrophe ‘ over an initial vowel, was equivalent to our /**h**/ phoneme. The "smooth breathing", on the other hand, is a normal apostrophe ’ over the vowel, and can be ignored. We mark only the rough (/h/) breathings here.

There were also diphthongs. Some, like ει (epsilon-iota, representing a long tense / ē/), and ου (omicron-upsilon, representing a long tense / ō/), were just spelling ways to represent certain long vowels, the way we use "ow" to represent the "long" /o/ phoneme in English. Others, like ευ (epsilon-upsilon) and οι (omicron-iota) were true diphthongs that consisted of a sequence of two distinct vowels.

Phonetically, the vowels can be arranged in the following fashion:

	Front	Central	Back	
High	[i] ι		υ [u]	(both short and long)
Mid (Closed)	[e] ει		ου [o]	(long only)
Mid (Open)	[ɛ] ε / η		ο / ω [ɔ]	(short / long)
Low		α [a]		(both short and long)

It's easy to see the symmetry of this system. This kind of symmetry is utterly typical of Indo-European languages. Note particularly that:

(1) what happens to front vowels is very likely to happen in parallel to back vowels, and

(2) the most variable and complex things happen to the mid vowels.

The consonants are a more complex system, because there are more of them. Ancient Greek, like Indo-European, had three kinds of stops: **voiced, voiceless,** and **aspirated.** The voiced stops are much like those in English; voiced **/b, d, g/** in both languages would sound essentially the same (though in Modern Greek the original voiced stop sounds have become fricatives).

In English, however, there are two kinds of pronunciation for the voiceless stops **/p, t, k/**. We can pronounce them either with or without a puff of air (called **aspiration** from the Latin word for *breath* and represented when necessary by an **h** following the stop symbol). But this difference isn't optional — it's quite automatic and unconscious; so much so that native speakers don't notice the difference until it's called to their attention. We automatically pronounce voiceless stops **with** aspiration when they come first in a stressed syllable and **without** it elsewhere.

Ancient Greek had different letters for each of these stops, and they were as distinct to the speakers as /b/ and /p/ are to us. We are all familiar with the spellings **ph**, **th**, and **ch** that have come to us from Greek, and you may have wondered at some point in your life why English had to have two ways to spell **f**. The answer is that **ph** wasn't originally pronounced like **f**; it really meant aspirated **p** — a **p** accompanied by an **h** — and the same is true of **th** and **ch**, which meant aspirated **t** and **k** (represented in Latin by **c**), respectively. By the time the Romans borrowed the spellings to represent Greek words, though, the aspirated sounds had changed to fricatives in Greek, and so they have remained.

There was also a set of three letters that were useful in Greek because of its grammar. So many words (like the "sigmatic aorist stem", for instance) had forms ending in **s** that Greek developed special letters for stops followed by **s**. There was one of these affricated stops for each stop series. These weren't really separate phonemes, but rather clusters of **stop + /s/**. The velar affricate **Xi** [Ξ, ξ] was later borrowed into Latin, for similar reasons, and became Latin **X**, which still has the sound **/k s/** in English. The labial **Psi** [Ψ, ψ] never made it out of Greek, but it did have the sound **/p s/**.

Reading Greek

The dental **Zeta** [Z, ζ] also started off as an affricate, but by classical times it had undergone several changes. The original /ts/ was voiced to /dz/, and thence, by a process similar to what happened to /ts/ clusters in Latin, to a plain /z/ fricative. The only other fricative in Classical Greek was **Sigma** [Σ, σ, (ς at the end of a word)], which had the sound /s/. The resonants were a lateral **Lambda** [Λ, λ], an apical **Rho** [P, ρ], and two nasals: bilabial **Mu** [M, μ], and dental **Nu** [N, ν], all of which are pronounced essentially as in English.

The consonant system of Ancient Greek therefore looks like this:

	Labial	Dental	Velar
Voiced stop	Β β (Beta)	Δ δ (Delta)	Γ γ (Gamma)
Voiceless plain stop	Π π (Pi)	Τ τ (Tau)	Κ κ (Kappa)
Voiceless aspirated stop	Φ φ (Phi)	Θ θ (Theta)	Χ χ (Chi)
Voiceless affricated stop	Ψ ψ (Psi)		Ξ ξ (Xi)
Voiced fricative		Ζ ζ (Zeta)	
Voiceless fricative		Σ σ (ς =[word-final Sigma]) (Sigma)	
Voiced nasal resonant	Μ μ (Mu)	Ν ν (Nu)	
Voiced resonant		Ρ ρ (Rho)	Λ λ (Lambda)

Reading Greek

It is probably easiest for English speakers to pronounce the aspirated stops as fricatives, since that is the Classical and Koiné pronunciation, and since we are lucky as English speakers in being able to pronounce the [θ] sound rather easily; it's the **th** sound of ***thin***. The only one that gives trouble is the [x] sound. If you went to Hebrew school, this is the same sound as "**chet**"; if you know German, it's the same as the **ch** in ***doch***; if Russian, it's the initial sound in ***khorosho***. It's not at all an unusual sound, but it doesn't happen to occur in English.

A few other idiosyncracies: Greek is typically written with accents. There are several of them: an acute (é), a grave (ò), which could go over any vowel, and a circumflex (ô or õ), which could only be written over **long** vowels; we can and will ignore them; they do nothing for pronunciation except indicate where the accent falls. The velar nasal [ŋ] (which always occurred before velar consonants /k/, /g/, and /x/) was written with a gamma γ, producing the consonant clusters γκ, γξ, γγ, and γχ for /ŋk/, /ŋks/, /ŋg/, and /ŋx/, transliterated as ***nk***, ***nx***, ***ng***, and ***nch***, respectively. Finally, the sigma (Σ, σ) has a third form ς, the source of our modern *S*, that appears only at the end of a word.

Thus we can look at a Greek word and transliterate it into something reasonably pronounceable that's usually within shouting distance of its probable English cognates. To transliterate, just substitute the equivalent letter. Some other transliterational equivalents are: ***h*** for an initial "rough breathing" ῾, and ***rh*** for an initial ῥ with a rough breathing over it, ***ph*** for φ, ***th*** for θ, ***ch*** for χ, ***y*** for υ (sometimes; other times ***u*** or ***v*** — try them all), ***x*** for ξ, ***ps*** for ψ, ***e*** for both η and ε, ***o*** for both ω and ο, and frequently ***e*** for αι or οι.

Below are some examples, transliterated with some added dashes to separate compounded roots, with their English cognates and their original meanings.

Greek	Transliteration	Cognate	Meaning
στηθοσκοπια	***stetho-skopia***	*stethoscope*	'chest' + 'look'
αναισθητικη	***an-aisthetike***	*anesthetic*	'no' + 'sensation'
οικονομια	***oiko-nomia***	*economics*	'home' + 'law'
ευαγγελιον	***eu-angelion***	*evangelic*	'good' + 'news'
ψυχολογια	***psycho-logia***	*psychology*	'soul' + 'study'
ὑπερβολη	***hyper-bole***	*hyperbola*	'above' + 'throw'

Some Greek Words

(with Selected Glosses)

ΓΝΩΘΙ ΣΕ ΑΥΤΟΝ
"Know thyself"

Πολυ δε μεγιστον το μεταφορικον ειναι
"The greatest thing by far is metaphor." - Aristotle

ξενος	ανθροπος human being	ἱστορια
οινος wine	αριθμος number	πορφυρα purple
Ουρανος Heaven	ατμος breath	σοφια
λυκος wolf	βιος	σφαιρα
νεκρος	φωνη	ὑστερα womb
ἡλιος sun	τεχνη art	φιλος friend
θανατος death	θερμη heat	γλωσσα tongue
ὡρα	εκκλησια church	δοξα opinion
θαλασσα sea	ακμη point	αραχνη
βοτανη	γραφη	ληθη forgetfulness
μηχανε	μνημη memory	μορφη shape
σεληνη moon	κριτης judge	γη earth
λογος	αργυρος silver	βρογχος
δακτυλος finger	δημος town	ζεφυρος wind
ἵππος	καρκινος	κυκλος circle
λιθος	στενος short	παθος
αρχω rule, order	παν	μελαινα black
γλυκυς sweet	ετυμος true	ξηρος dry
παλαιος	στερεος	χλωρος green
λευκος white	πτερον	ανθραξ coal
δενδρον tree	ηλεκτρον amber	θηριον animal
σημα sign	σωμα	παιδος child
ποδος	ἁιμα blood	γονατος knee
γαλακτος milk	φωτος	χρωμα

Transliterate each word, fill in the missing glosses, and give an English word derived for each.

Some Greek (and Latin) Prepositions (and Prefixes)

Greek	Latin	Gloss
αμφι	**circum, ambi-***	both, around
ανα	**per, super**	up, again, back (opp. of κατα)
αντι	**contra, pro**	against
απο	**a, ab***	from
δια	**per**	across, between, among
εξ	**e, ex***	out, from, away
εν	**in***	in(side (of))
επι	**in**	on (top (of)), over, after
κατα	**per, ad**	down, below
μετα	**inter, post, trans**	further, between, after
παρα	**apud**	against, opposed to, joined to
περι	**per*, circum**	around, about
προ	**prae, pro***	before, in front of, for
προς	**ad**	toward, up to
συν	**cum**	with, together
ὑπερ	**super***	above, over, more
ὑπο	**sub***	below, under, less

Prefixes

α–, αν–	**in-***	negative, un-
δυσ–	**dis-***	dis-
ἡμι–	**semi-*, sesqui-**	half, middle
ἐυ–		good
τηλε–		far

Exercise: Transliterate the Greek forms, and find English words derived from each of the forms above.

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* This Latin form is cognate to the Greek form.

Proöemium to The *Iliad* (Lines 1-7) Parsed.

Μῆνιν[1] ἄειδε[2], θεά[3], Πηληιάδεω[4] Ἀχιλῆος[5]
οὐλομένην[6], ἣ[7] μυρί'[8] Ἀχαιοῖς[9] ἄλγε'[10] ἔθηκεν[11],
πολλὰς[12] δ'[13] ἰφθίμους[14] ψυχὰς[15] Ἄιδι[16] προΐαψεν[17]
ἡρώων[18], αὐτοὺς[19] δὲ[13] ἑλώρια[20] τεῦχε[21] κύνεσσιν[22]
οἰωνοῖσί[23] τε[24] δαῖτα[25], Διὸς[26] δ'[13] ἐτελείετο[27] βουλή[28],
ἐξ[29] οὗ[30] δὴ[31] τὰ[32] πρῶτα[33] διαστήτην[34] ἐρίσαντε[35]
Ἀτρεΐδης[36] τε[24] ἄναξ[37] ἀνδρῶν[38] καὶ[39] δῖος[40] Ἀχιλλεύς[5].

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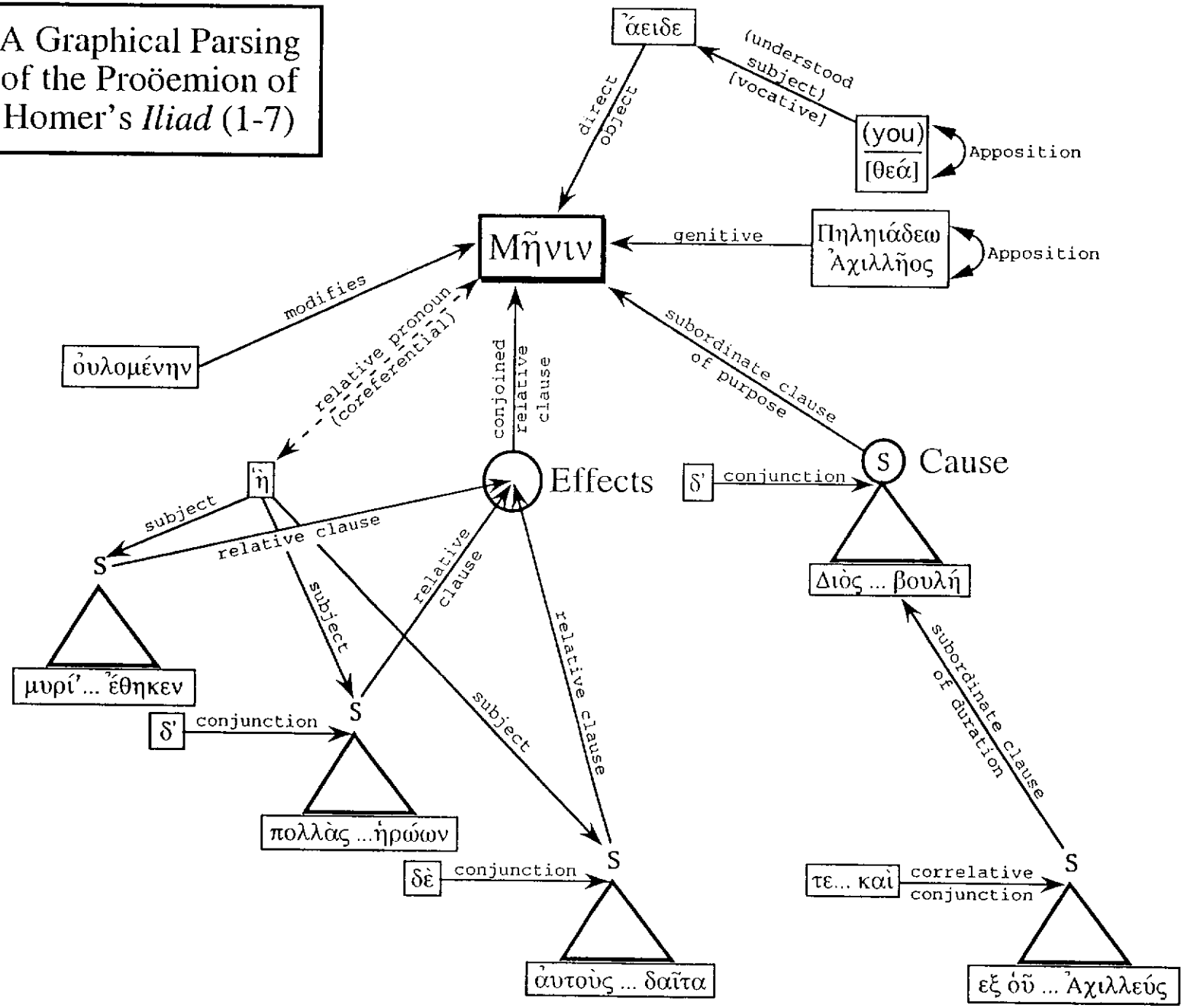
1. Accusative singular of Μῆνις, *wrath*. Direct object of next word. The first word of the poem announces its theme.
2. Singular imperative of ἀείδω, *sing (of), hymn, chant*. Addressed to the muse (see next word).
3. Vocative singular. θεᾱ́ *goddess*, is the feminine stem of θεός, *god*.
4. Genitive Singular of Πηληιάδης, *Son of Peleus* (i.e, *Achilles*). Modifies Μῆνιν.
5. A proper name Ἀχιλλεύς [nominative], Ἀχιλῆος [genitive], *Achilles*.
6. Accusative Singular of οὐλόμενος, *accursed, destructive, deadly*. Modifies Μῆνιν. Note position at beginning of line, far from but parallel to the word it modifies.
7. Feminine singular nominative of the relative pronoun ὅς, ἥ, ὅ. Refers to Μῆνιν. Subject of ἔθηκεν, προΐαψεν, and τεῦχε.
8. Accusative plural neuter (contracted) of μυρία, *countless, innumerable* (this is in fact the numeral for 10,000; cf *myriad*) Modifies ἄλγε', the direct object of ἔθηκεν.
9. Genitive plural of the name the Greeks called themselves; the conventional English spelling is *Achaean*.
10. Accusative plural (contracted) of ἄλγος, *grief, pain, woe, trouble*. cf *neuralgia*, etc. Direct object of ἔθηκεν.
11. Aorist third person singular of τίθημι, *put, place, cause*.
12. Accusative plural feminine of πολλός, *much, many, numerous*; cf *poly-*. Modifies ἰφθίμους ψυχὰς.
13. Postpositive conjunction, often contracted; *and, but, for, so*. Follows the first word in a clause or phrase that it connects, instead of preceding it as in English.
14. Accusative plural feminine of ἰφθῑ́μος, *brave, mighty, valiant, stout-hearted*. Modifies ψυχὰς.
15. Accusative singular of ψῡχή, *soul, life, breath, spirit*. Cf *psyche, psycho-*. Direct object of προΐαψεν.

16. Dative singular of Ἅιδος, ***Hades***, the god of the underworld.
17. Aorist third person singular of προϊάπτω, ***hurl forward, send forth***. Ultimately, like ἔθηκεν and τεῦχε, the subject of this verb is really Μῆνιν.
18. Genitive plural of ἥρως; ***[of] hero[es]***. Modifies πολλὰς ἰφθίμους ψυχὰς. Note placement at beginning of line and end of clause.
19. Accusative plural masculine of αὐτός, the reflexive pronoun (= English ***__self/selves***); cf ***automotive***, etc. In this case, it refers to the bodies of the slain heroes (their souls were consigned to Hades in the preceding line – **all** the dead went to Hades; the Greeks had no conception of any desirable afterlife). If the bodies of the dead were not buried with appropriate rites, their souls could not obtain rest in Hades.
20. Accusative plural of ἑλώριον, ***booty, spoils, prey***. In apposition with αὐτοὺς.
21. Aorist third person singular of τεύχω, ***do, make, perform, cause, fashion, prepare***.
22. Dative plural of κύων, κυνός, ***[to the] dog[s]***. Cf. ***cynic***, etc.
23. Dative plural of οἰωνός, ***vulture, bird (of prey), omen***. In conjunction with κύνεσσιν.
24. Postclitic conjunction meaning ***and***. Follows the last of a series of conjoined words. Here it forms the conjoined phrase κύνεσσιν οἰωνοῖσί τε, ***[to the] dogs and vultures***.
25. Accusative singular of δαίς, ***feast, banquet, portion***.
26. Genitive singular of Ζεύς, ***Zeus['s]***. Modifies βουλή. Note the Latin cognate *deus*.
27. Imperfect passive of τελείω, ***[was being] accomplish[ed], fulfill[ed], perform[ed]***.
28. Nominative singular (subject of ἐτελείετο), ***plan, will, wish, purpose, counsel***. Modified by Διὸς.
29. Preposition ***out of, (away) from***. Note identity with Latin cognate *ex*.
30. Relative pronoun (a different form of the pronoun in note 7), here indicating time: ***when, the time (when)***.
31. Emphatic particle: ***indeed, truly, forsooth, now***.
32. Neuter accusative plural of the personal pronoun ὅ, ἥ, τό, ***the; this, that; he, she, it; who, which, what***. Modifies πρῶτα.
33. Neuter plural of πρῶτος, ***first, foremost, chief***. cf *proto-*; τὰ πρῶτα means ***(at) first***.
34. Second aorist third person dual of δι–ίστημι, ***[they two] st[ood] apart, separate[d]***. The whole next line is in apposition, identifying the subject pair.
35. Aorist active participle, nominative dual, of ερίζω, ***[they two having] quarrel[ed]***. Modifies the subject of διαστήτην, which is expressed only in the suffix.
36. ***Son of Atreus***, i.e, ***Agamemnon***. Commander-in-chief of the Greek expedition sent to Troy to retrieve Helen, his brother's wife.
37. ***King***. In apposition with Ἀτρεΐδης.
38. Genitive plural of ἀνήρ, ἀνδρός, ***(real) man, warrior, hero***. Modifies ἄναξ, making Agamemnon's epithet *King of Men*. ἀνήρ refers only to the masculine sense of *man*. Cf. *android*, etc. The sense of *human being* is translated by ἄνθρωπος; cf *anthropology*, etc.
39. Conjunction (goes between conjuncts): ***and***.
40. Adjective ***divine, godlike, glorious, heavenly***. Derived from Ζεύς; modifies Ἀχιλλεύς. Achilles was a descendant of Zeus (and knew it). Much of the tragedy in the *Iliad* is the result of his pride.

A Graphical Parsing of the Proöemion of Homer's *Iliad* (1-7)



Sample Greek Quiz Name_____

Directions: This quiz is about 9 English compound words that come from Greek roots. Below are the Greek roots; first, transliterate them. Then match the numbers in the three columns below. The last word is done for you as an illustration.

1. ορνιθος + πτερον _____ + _____
2. ιχθυς + λογος _____ + _____
3. ανθροπος + φαγειν _____ + _____
4. παλαιος + δενδρον _____ + _____
5. περι + ἡλιος _____ + _____
6. ῥινος + πλαστος _____ + _____
7. μεγα + θηριον _____ + _____
8. μονος + γαμος _____ + _____
9. ἡμι + σφαιρα hemi + sphaira

Compound Glosses	English Words
_____ big + animal	_____ ichthyology
_____ around + sun	9 hemisphere
_____ human + eat	_____ perihelion
9 half + sphere	_____ anthropophagy
_____ one + marriage	_____ ornithopter
_____ nose + restored	_____ megatherium
_____ bird + wing	_____ paleodendron
_____ fish + word	_____ monogamy
_____ ancient + tree	_____ rhinoplasty

Meanings of English Words

9 a solid figure produced by bisecting a sphere
_____ the scientific study of fish
_____ that point in an orbit which is closest to the sun
_____ cannibalism
_____ a type of flying machine with wings that flap
_____ a species of large extinct mammal
_____ a species of extinct tree
_____ reconstructive nasal surgery
_____ the state of having only one mate

Greek Quiz b Name_____

Directions: This quiz is about 10 English compound words that come from Greek roots. Below are the Greek roots; first, **transliterate** them. Then match the numbers in the three columns below.

1. γυνη + φοβος _____ + _____
2. πολυς + ανδρος _____ + _____
3. φιλος + αδελφος _____ + _____
4. κρυπτω + γραφη _____ + _____
5. περι + ἡλιος _____ + _____
6. ὑστερον + τομος _____ + _____
7. κακος + φωνη _____ + _____
8. θαλασσα + ἁιμα _____ + _____
9. μυς + οψις _____ + _____
10. ἐξ + δακτυλος _____ + _____

Compound Glosses

_____bad + voice
_____many + man
_____sea + blood
_____around + sun
_____friend + brother
_____womb + cut
_____six + finger
_____woman + fear
_____hide + writing
_____mouse + vision

English Words

_____polyandry
_____thalassemia
_____Philadelphia
_____hexadactyly
_____myopia
_____cacophony
_____gynophobe
_____cryptography
_____hysterectomy
_____perihelion

Meanings of English Words

_____condition of having six digits on one appendage
_____writing in secret code
_____a loud unpleasant sound
_____state of having more than one husband
_____that point in an orbit which is closest to the sun
_____someone who fears or dislikes women
_____nearsightedness
_____the City of Brotherly Love
_____surgical excision of the uterus
_____hereditary blood disease common in Mediterranean area