

Study Guide ANSWER KEY Sight and Sounds of Greek Words (Module B) Phonology (Part 4)

Exercise One: Short Answer. Briefly answer the following questions.

1. What are the two major phonetic classifications of consonants?

Stops and Continuants

2. What are the nine "stop" consonants?

Gamma, delta, bēta, kappa, tau, pī, chī, thēta, and phī.

3. What constitutes a "stop" consonant?

A stop consonant is formed by the slowing down or abruptly stopping the flow of air through the mouth before being released with an expulsion of breath and sound.

4. Classify the following stop consonants according their class and order.

а. Кк-	palatal, unvoiced	f. Ππ-	labial, unvoiced
b. Γγ-	palatal, voiced	g. Θθ-	dental, aspirate
с. Тт-	dental, unvoiced	h. Φφ-	labial, aspirate
d. Χχ-	palatal, aspirate	i. Δδ-	dental, voiced
e . Ββ-	labial, voiced		

5. What determines whether a consonant is "voiced" or "unvoiced"?

The vocal cords vibrate when saying a voiced consonant; vocal cords do not vibrate when saying an unvoiced consonant.

6. What constitutes a "palatal stop" and how many are there?

A consonant formed in back of the throat by the closure of the tongue with the soft palate in the oral cavity. The three palatal stops are gamma, kappa, and chī.

7. What constitutes a "dental stop" and how many are there?

A dental stop is formed with the tip of the tongue behind the upper teeth or placed against the alveolar ridge. The three dental stops are delta, tau, and thēta.

8. What constitutes a "labial stop" and how many are there?

A labial stop is formed by closing or nearly closing during the rounding of the lips. The three labial stops are bēta, pī, and phī.

9. Gamma coordinates with what other voiced stops?

Delta and beta

10. Kappa coordinates with what other unvoiced stops?

Tau and pī

11. Chī coordinates with what other aspirated stops?

Thēta and phī

12. *Chī* is cognate with what other palatal stops?

Kappa and gamma

13. Theta is cognate with what other dental stops?

Delta and tau

14. Phī is cognate with what other labial stops?

Bēta and pī

15. Fill in the following chart with the appropriate consonants. This chart is commonly called the "Square of Stops".

	Palatal	Dental	Labial
Voiced	Γγ	<mark>Δ δ</mark>	Ββ
Unvoiced	<mark>К к</mark>	Tτ	<mark>Π π</mark>
Aspirate	<mark>χ</mark> Χ	Θθ	<mark>Φ φ</mark>

16. What does "aspiration" indicate in connection with pronouncing an aspirated consonant and to which English sound does it correspond?

Aspiration denotes the consonant's pronunciation is accompanied with a strong emission of breath. It corresponds to the English "h" sound.

17. What makes a consonant a continuant consonant?

The passage of air is restricted (but not stopped), causing friction while the sound continues.

18. What are the five-continuant subcategories consonants?

Sibilant, compound, nasal, liquid, and the semi-consonants

19. What consonant is the only pure sibilant in Greek? Why?

Sigma is the only pure sibilant. The compound consonants *zeta*, *xsī*, and *psī* have an additional sound which does not make a "hissing" sound.

20. What are the three compound consonants?

<mark>Zēta, xsī, and psī</mark>

- 21. Before the three palatal stops (γ , κ , χ) and ξ , the *gamma* undergoes a phonemic change. How are these combinations pronounced?
 - a. γγ ng "thing", "king" or "finger"
 - b. γκ nch "anchor"
 - c. $\gamma \chi$ like $\gamma \kappa$ but with more breath (the χ is an aspirated stop)
 - d. $\gamma\xi$ nks "inks", "oinks" or the "nx" as in "lynx"
- 22. Fill in the following chart with the appropriate consonants.

		sses are the e positions of	C	LASSES		The nine "stops" are divided into three "classes" and three "orders".
S		ath closure.	Palatal	Dental	Labial	
T O	0	(voiced)	Γγ	<mark>Δ δ</mark>	<mark>Ββ</mark>	The orders express both the degree of the vibration in the vocal cords
Ρ	d	(unvoiced)	<mark>К к</mark>	Tτ	<mark>Π π</mark>	and force in the expiratory breath. Sound is formed by slowing down
S	e r s	(aspirate)	<mark>χ Χ</mark>	Θθ	<mark>Φ φ</mark>	or briefly stopping the flow of air through the mouth.

C O	Sibilant (voiced) (unvoiced)		<mark>Σ σ</mark> Σ σ		A sibilant is a hissing sound when the breath in the mouth is narrowed. Voiced $\Sigma \sigma$ has the ζ sound as the "s" in "is"; if unvoiced, $\Sigma \sigma$ is the "s" sound as in "sit".
N T	Compound (voiced)		<mark>Ζζ</mark>		Compounds are a combination of a guttural, dental or labial + σ . Like sigma above, notice that Z ζ is both
N U	(unvoiced)	<mark>Ξ ξ</mark>	<mark>Ζζ</mark>	Ψψ	voiced and unvoiced. When voiced, $Z \zeta$ is pronounced as "dz".
A N	Nasal (voiced)	Γγ	<mark>N ע</mark>	<mark>Μ μ</mark>	The sound of nasal continuants is forced up toward the nasal cavity
T S	Liquid (voiced)	Λλ Ρρ		ρ	The liquids fall between the classes and the air passage is mostly open.
	Semi- (voiced) consonants	<mark>l ı</mark>	<mark>Ρ</mark> ρ	<mark>ץ ט</mark>	These letters serve at times as a vowel or a consonant.

23. What are the three nasal consonants and why are they called "nasals"?

The three nasal consonants are *gamma-nasal, nu-nasal* and *mu-nasal*. Their sound is forced up into the nasal cavity and released through the nose.

Exercise Two: True or False Questions. Choose whether the statement is true or false.

- 1. All consonants may be classified as either a stop or continuant consonant. There are NO exceptions. False
- 2. The stop consonants are subdivided according to the nature of their sound and vocal organs used in producing them. True
- 3. *Gamma* may be classified as either a voiced palatal stop, or as a voiced nasal continuant. True
- 4. The two liquid voiced continuants are *lambda* and *rho*. True
- 5. The three aspirate stop consonants are *phī*, *chī*, and *xsī*. False
- 6. The three palatal stop consonants are gamma, kappa, and chī. True
- 7. The three labial stop consonants are *beta*, *pī*, and *theta*. False
- 8. The three nasal voiced continuant consonants are *gamma*, *mū* and *nū*. True
- 9. A cognate consonant is associated with a particular order. False
- 10. A coordinate consonant is associated with a particular order. **True**
- 11. The three orders are voiced, unvoiced, and aspirate. **True**
- 12. The three classes are palatal, dental, and aspirate. False
- 13. *Gamma* belongs to the same voiced order and is coordinate with the stop consonants *delta* and *beta*. True

- 14. *Kappa* belongs to the same unvoiced order and is coordinate with the stop consonants *tau* and $p\bar{r}$. True
- Chī belongs to the same aspirated order and is coordinate with thēta and phī. True
- 16. A stop consonant pronounced with the aid of the vocal cords is called "unvoiced". False
- 17. A stop consonant pronounced with a strong emission of breath is called "aspirate". True
- The palatal consonant stops belong to the same class because they are formed in back of the throat by the closure of the tongue near or touching the hard palate in the oral cavity. True
- 19. *Gamma* may be either a voiced consonant stop, or a nasal continuant. True
- 20. Because Greek consonants undergo phonemic changes, some consonants are not pronounced ("silent consonants"). False

Exercise Three: Multiple Choice. Choose the best answer.

1. Which consonant has a final form (*i.e.*, when it ends a word)?

a.	kappa	C.	<mark>sigma</mark>
b.	phī	d.	gamma

2. Which of the following belong to the stop consonants?

a.	Гγ	Θθ	Pρ	c . Φ φ	Кκ	Λλ
b.	Ππ	Γγ	Tτ	d. Aα	Δδ	Вβ

3. With what sound is aspiration associated?

a.	a strong emission of breath	С.	the palate
b.	the lips	d.	the teeth

- 4. Which of the following are the three orders?
 - a. voiced, unvoiced, and aspirate c. palatal, dental, and labial

d. aspirate, sibilant, and voiced

- b. nasal, sibilant, compound
- 5. *Kappa* belongs to the same unvoiced order and is coordinate with which consonants?

а. Тт	Θθ	ς.Δδ Ττ
b. Θθ	Φφ	d. <mark>Ππ Ττ</mark>

6. *Theta* belongs to the same aspirated order and is coordinate with which consonants?

a. <mark>Χ χ</mark>	Φ _φ	c.	δΔ	Bβ
b.Ττ	Ππ	d.	Φφ	Τт

7. *Beta* belongs to the same voiced order and is coordinate with which consonants?

а.КкПп	ς.ΘθΓγ
b. <mark>Γγ Δδ</mark>	d. XχΦφ

- 8. Compound consonants belong to which consonant classification?
 - a. liquidb. continuantsc. nasald. stops
- 9. What are the three semi-consonant continuant consonants?

a.	Ιι Ρρ Υ	<mark>ับ</mark>	C.	Гγ	Nν	Mμ
b.	Χχ Θθ	Φφ	d.	Ξξ	Zζ	Ψψ

10. What are the independent and indispensable sounds in speech?

a.	nasal	C.	consonants
b.	vowels	d.	breathing marks

11. Which example is an illustration of an *iōta* adscript?

a . αι	c. <mark>αδη_S = ΑΙΔΗΣ</mark>
b. φ	d. τιμα = ΤΙΜΑ

12. Which of the following are diphthongs?

a.	۱٤	88	αε	00	C.	αι	81	ευ	ຖບ
b.	οι	ບເ	۱٤	ЗО	d.	00	88	٤١	ευ

13. Which word has a diaeresis?

a . τιμα	c. <mark>Μωϋσης</mark>
b. ΤΩΙ	d. none of these

Exercise Four: Transposition of letters. Transpose the following Greek capital letters into their corresponding small letters, and the small letters into their corresponding capital letters.

1. ΠΟΙΗΣΟΥΣΙΝ <mark>ποιησουσιν</mark>	7. επειτα <mark>ΕΠΕΙΤΑ</mark>
2. αδαμ <mark>ΑΔΑΜ</mark>	8. ΚΑΙ <mark>και</mark>
3. εσμεν <mark>ΕΣΜΕΝ</mark>	9. ΑΔΕΛΦΟΙ <mark>αδελφοι</mark>
4. ΠΛΕΙΟΝΕΣ <mark>πλειονες</mark>	10. κυριου <mark>ΚΥΡΙΟΥ</mark>
5. ΜΑΤΑΙΑ <mark>ματαια</mark>	11. προφητη <i>ς</i> <mark>ΠΡΟΦΗΤΗΣ</mark>
6. ΑΝΘΡΩΠΩΝ <mark>ανθρωπων</mark>	12. ΚΩΛΥΕΤΕ <mark>κωλυετε</mark>