

Chapter 2: Phonetics

1. a) fish, huff, tough, phantom : the underlined letters in each word are pronounced [f].
 b) art [a], cat [æ], table [ej], above [ə], awful [a], Israel [i].
 c) mesquite, priest, meet, meat: all underlined letters = [i]
 d) tough (where *gh* = [f]); hiccough (where *gh* = [p])

2. Note: (the vowels [ej], [aj], [aw], and [ow] are treated as single unit segments; see note 1, page 45 of chapter 2. Most students will intuitively treat these vowels as single segments.
 a) 2 [æt] e) 8 [sajkələdʒi]* * Note that IPA transcription forces the
 b) 3 [mæθ] f) 5 [nalɪdʒ]* 2-symbol transcription of what students
 c) 4 [kjur] g) 7 [mejlɪbaks] should interpret as a single segment
 d) 5 [hapiŋ] h) 4 [asəm] for the purposes of this question: [dʒ].

3. a) voiced [ð] e) voiced [z] i) voiceless [h] m) voiced [w] / voiceless [ʍ]
 b) voiceless [θ] f) voiceless [s] j) voiceless [tʃ] n) voiced [g]
 c) voiceless [f] g) voiceless [p] k) voiced [dʒ] o) voiced [n]
 d) voiced [v] h) voiced [b] l) voiced [b] p) voiced [w]

4. a) voiced [ow] e) voiced [m] i) voiced [dʒ] m) voiced [n]
 b) voiceless [t] f) voiceless [k] j) voiced [z] n) voiced [ow]
 c) voiced [m] g) voiced [n] k) voiced [dʒ] o) voiceless [k]
 d) voiced [u] h) voiceless [t] l) voiced [z] p) voiceless [t]

5. a) same: alveolar e) different: bilabial/alveolar i) different: bilabial/labiodental
 b) same: velar f) same: alveopalatal j) same: alveopalatal
 c) different: bilabial/velar g) different: labiodental/glottal k) different: alveolar/labiodental
 d) same: alveolar h) different: labiovelar/palatal l) different: interdental/alveolar

6. a) same: fricative e) different: liquid/stop i) different: liquid/glide
 b) same: stop f) same: fricative j) same: affricate
 c) same: glide (continuant) g) different: affricate/fricative k) different: fricative/stop
 d) same: fricative h) same: nasal (stop) l) different: fricative/affricate

7. a) voiceless velar stop [k]
 b) voiced labiodental fricative [v]
 c) voiced alveopalatal affricate [dʒ]
 d) voiced palatal glide [j]
 e) voiced velar nasal [ŋ]
 f) voiceless interdental fricative [θ]
 g) high back rounded lax vowel [ʊ]
 h) low front unrounded vowel [æ]
8. Which of the following pairs of words show the same vowel quality? Mark each pair as *same* or *different*. Then transcribe the vowels of each word.

Note: the transcription represents standard Canadian pronunciation here.

- | | | | | | |
|---------|--------|-----------------------|----------|--------|------------------------|
| a) back | sat | same: [æ] | h) hide | height | different: [aj] / [ʌj] |
| b) cot | caught | same: [ɑ] | i) least | heed | same: [i] |
| c) bid | key | different: [ɪ] / [i] | j) drug | cook | different: [ʌ] / [ʊ] |
| d) luck | flick | different: [ʌ] / [ɪ] | k) sink | fit | same: [ɪ] |
| e) ooze | deuce | same: [u] | l) oak | own | same: [ow] |
| f) cot | court | different: [ɑ] / [o] | m) pour | port | same: [o] |
| g) fell | fail | different: [ɛ] / [ej] | n) mouse | cow | different: [ʌw] / [aw] |
9. Using descriptive terms like sibilant, fricative, and so on, provide a single phonetic characteristic that all the segments in each group shares. Avoid over-obvious answers such as ‘consonant’ or ‘vowel’.
- Example: [b d g u m j] are all voiced.
- | | |
|---|---------------------------------------|
| a) [p t k g ʔ] are all stops. | f) [h ʔ] are both voiceless glottals. |
| b) [i e ɛ æ] are all front vowels. | g) [u o] are both back vowels. |
| c) [tʃ ʒ ʃ dʒ] are all alveopalatals (sibilants). | h) [s z tʃ dʒ ʃ ʒ] are all strident. |
| d) [p b m f v] are all labials. | i) [l r m n ŋ j w] are all sonorants. |
| e) [ʌ ə ʊ a] are all back vowels. | j) [t d l r n s z] are all alveolars. |
10. Transcribe the following sets of words. You may use these words to practice transcribing aspiration.

Note: some variation is to be expected, especially in certain vowels in unstressed syllables, such as c) and s), which may fluctuate between [æ] or [ə] as their initial vowel.

- | | | | | | |
|-----------|----------|----------|---------|-----------|----------|
| a) tog | [tʰɑg] | i) peel | [pʰil] | q) spell | [spɛl] |
| b) kid | [kʰɪd] | j) stun | [stʌn] | r) cord | [kʰɔrd] |
| c) attain | [ətʰejn] | k) Oscar | [ɑskər] | s) accord | [əkʰɔrd] |

d) despise [dəspajz]	l) cooler [kʰulər]	t) astound [əstawnd]
e) elbow [ɛlbəw]	m) sigh [saj]	u) pure [pjur]
f) haul [həl]	n) hulk [hʌlk]	v) wheeze [wiz]
g) juice [dʒus]	o) explode [ɛkspləʊd]	w) remove [rɪmuv]
h) thimble [θɪmbəl]	p) tube [tʰub]	x) clinical [kɪnɪkəl]
	(Brit.) [tʃub]	

11. Using 'H', 'L', and association lines, transcribe the intonation of the following English phrases. Compare your results with the transcriptions of several classmates. Are they the same? If they aren't, discuss what aspects of intonation (such as emotion or speech context) might account for the differences in transcription. Note: just one of several possible intonations is given here.

- H L H
| | |
- a) 'Hi, Alice.'
- H L H L HL HL
| | | | | |
- b) 'Three people got off the bus at the last stop.'
- H L H L
| | | |
- c) 'My uncle likes to mountain climb.'

12. Mark primary and secondary (where present) stresses on the following words. It is not necessary to transcribe them.

- | | | |
|----------------|---------------|---------------|
| a) súnny | f) arríve | k) sécret |
| b) banána | g) defý | l) excéed |
| c) bláckbòard | h) súmmary | m) súmmary |
| d) Cánada | i) Canádan | n) Canádanìze |
| e) (to) réject | j) (a) réject | o) dífficult |

13. Find a fluent speaker of a language other than English and transcribe phonetically ten words of that language. If you encounter any sounds for which symbols are not found in this chapter, attempt to describe them in phonetic terms and then invent diacritics to help you transcribe them.

14. Compare the careful speech and rapid speech pronunciations of the following English words and phrases. Then, name the process or processes that make the rapid speech pronunciation different from the careful speech. (Stress is omitted here.)

	<u>Careful Speech</u>	<u>Rapid Speech</u>
a) in my room regressive assimilation:	[ɪn maj rum] [ɪn <u>maj</u>] →	[ɪm maj rum] [ɪm <u>maj</u>]
b) I see them. deletion & vowel reduction:	[aj sij ðɛm] [si <u>ð</u> ɛm] →	[ajsiəm] [si <u>ə</u> m]
c) I see him deletion & vowel reduction:	[aj si hɪm] [si <u>h</u> ɪm] →	[ajsiəm] [si <u>ə</u> m]
d) within (intervocalic) voicing:	[wɪθɪn] [wɪ <u>θ</u> ɪn] →	[wɪðɪn] [wɪ <u>ð</u> ɪn]
e) balloons (unstressed schwa) deletion:	[bəlunz] [b <u>ə</u> l] →	[blunz] [bl]
f) popsicle deletion and deaspiration:	[p ^h apsɪk ^h əl] [sɪ <u>k</u> ^h əl] →	[p ^h apskəl] [s <u>k</u> əl]
g) sit down deletion of either [t] or [d]; flapping:	[sɪt dɔwn] [sɪt dɔwn] →	[sɪrɔwn] [sɪrɔwn]

Note: there is no way to tell which of the consonants deletes. One could even argue that they coalesce into a single consonant (though coalescence is not dealt with in this chapter). In any event, only a single [t] or [d] flaps in English, so it is important to include deletion in the list of processes and follow it with flapping.

h) my advice (consonant) deletion:	[maj ədv ^h js] [ə <u>d</u> v ^h js] →	[maj əv ^h js] [əv ^h js]
i) Scotch tape metathesis:	[skatʃ t ^h ejp] [s <u>k</u> atʃ t ^h ejp] →	[k ^h atʃ stejp] [k ^h atʃ s <u>t</u> ejp]

j) protection	[p r̥oʊtʰɛkʃən]	[pərtʰɛkʃən]
metathesis, vowel reduction:	[p r̥ow] →	[pər]

[illegible]

- regressive assimilation (for nasality): [hænd mi] → [hǣnd mi]
- (consonant) deletion: [hǣnd mi] → [hǣn mi]
- (nasal consonant) deletion: [hǣn mi] → [hæ mi]

- deletion of initial glide: [p^hæm wil] → [p^hæmil]

• reduction of unstressed vowel:	[p ^h æmɪl] →	[p ^h æməɪ]
• deletion of unstressed vowel:	[p ^h æməɪ] →	[p ^h æmɪ] . . .
• syllabification of the liquid that follows:	[p ^h æmɪ] →	[p ^h æmɪ̯]
• palatalization of [t] before the palatal glide [j] :	[sit ju] →	[sitʃju]