

A Studying a new subject often involves learning a large number of technical terms. Phonetics is particularly difficult in this respect. Read over the definitions of the terms in Chapter 1 before completing the exercises below. Say each of the words, and listen to the sound. Be careful not to be confused by spellings. Using a mirror may be helpful.

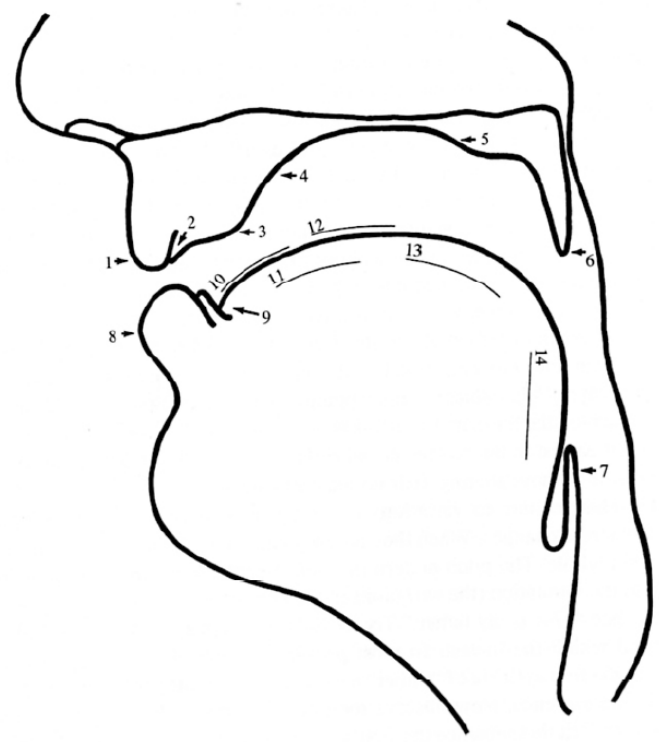
1. Mark the words that begin with a bilabial consonant:
met net set bet let pet
2. Mark the words that begin with a velar consonant:
knot got lot cot hot pot
3. Mark the words that begin with a labiodental consonant:
fat cat that mat chat vat
4. Mark the words that begin with an alveolar consonant:
zip nip lip sip tip dip
5. Mark the words that begin with a dental consonant:
pie guy shy thigh thy high
6. Mark the words that begin with a palato-alveolar consonant:
sigh shy tie thigh thy lie
7. Mark the words that end with a fricative:
race wreath bush bring breathe bang
rave real ray rose rough
8. Mark the words that end with a nasal:
rain rang dumb deaf
9. Mark the words that end with a stop:
pill lip lit graph crab dog hide
laugh back
10. Mark the words that begin with a lateral:
nut lull bar rob one
11. Mark the words that begin with an approximant:
we you one run
12. Mark the words that end with an affricate:
much back edge ooze
13. Mark the words in which the consonant in the middle is voiced:
tracking mother robber leisure massive stomach razor
14. Mark the words that contain a high vowel:
sat suit got meet mud
15. Mark the words that contain a low vowel:
weed wad load lad rude
16. Mark the words that contain a front vowel:
gate caught cat kit put
17. Mark the words that contain a back vowel:
maid weep coop cop good
18. Mark the words that contain a rounded vowel:
who me us but him

B Describe the consonants in the word *skinflint* using the chart below. Fill in all five columns, and put parentheses around the terms that may be left out, as shown for the first consonant.

	1	2	3	4	5
	voiced or	place of	central or	oral or	articulatory
	voiceless	articulation	lateral	nasal	action
s	<i>voiceless</i>	<i>alveolar</i>	<i>(central)</i>	<i>(oral)</i>	<i>fricative</i>
k					
n					
f					
l					
t					

C Fill in the names of the vocal organs numbered in Figure 1.14.

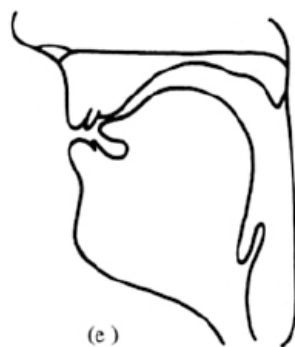
- | | |
|----------|-----------|
| 1. _____ | 8. _____ |
| 2. _____ | 9. _____ |
| 3. _____ | 10. _____ |
| 4. _____ | 11. _____ |
| 5. _____ | 12. _____ |
| 6. _____ | 13. _____ |
| 7. _____ | 14. _____ |



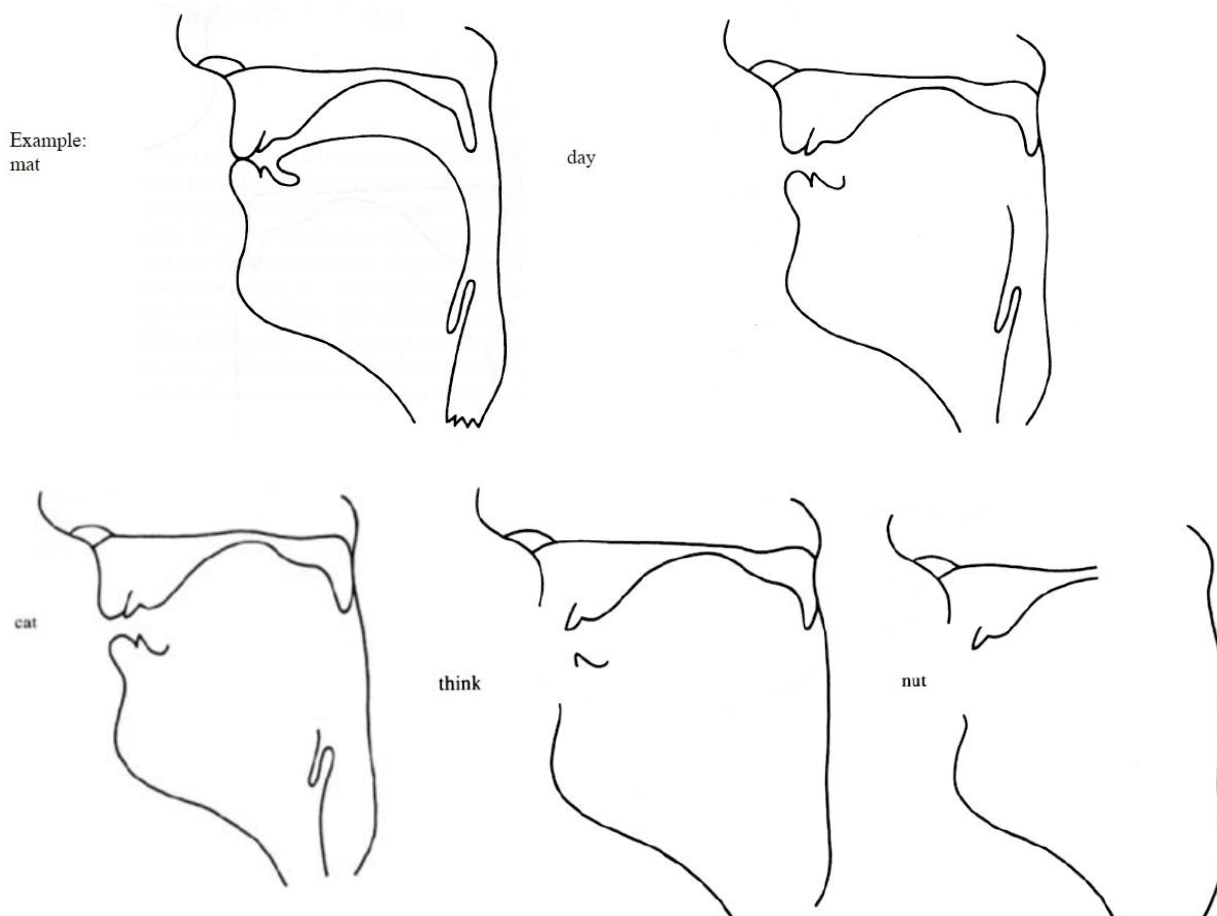
D Figure 1.15 a-g (below) illustrates all the places of articulation we have discussed so far, except for retroflex sounds (which will be illustrated in Chapter 7). In the spaces provided below, state (1) the place of articulation and (2) the manner of articulation of each sound. In addition, give (3) an example of an English word beginning with the sound illustrated.

(1) Place of articulation (2) Manner of articulation 3) Example)

- a
- b
- c
- d
- e
- f
- g



E Complete the diagrams in Figure 1.16 below so as to illustrate the target for the gesture of the vocal organs for the first consonants in each of the following words. If the sound is voiced, schematize the vibrating vocal folds by a wavy line at the glottis. If it is voiceless, use a straight line.



F Define the consonant sounds in the middle of each of the following words as indicated in the example:

Voiced or voiceless	Place of articulation	Manner of articulation
a dder	<i>voiced</i>	<i>alveolar stop</i>
f ather		
s inging		
e tching		
r obber		
e ther		
p leasure		
h opper		
s elling		
s unny		
l odger		

G In the following sets of words the sound of the vowel is the same in every case but one. Circle the word that has a different vowel sound.

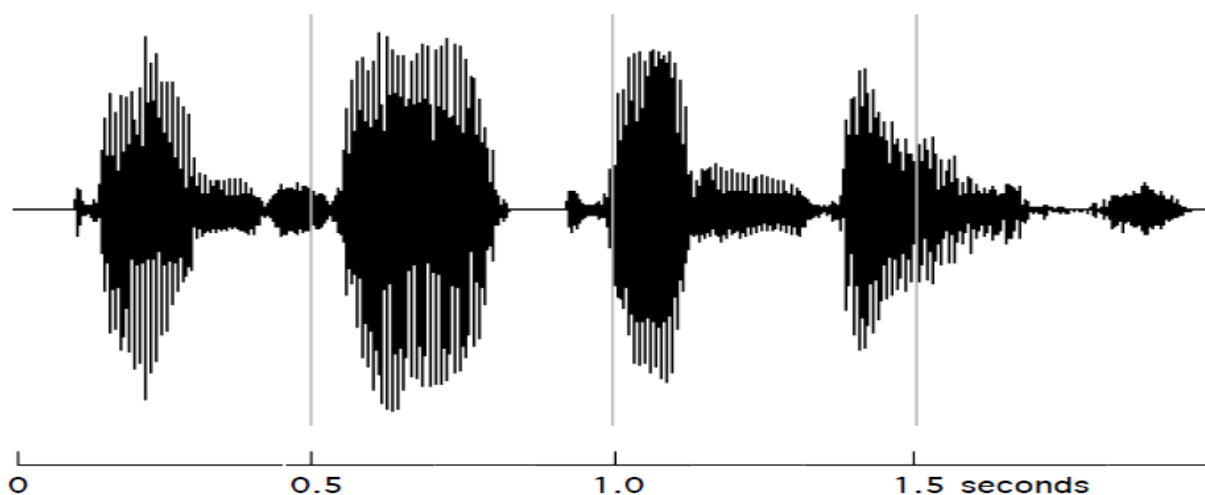
1. pen said death mess mean
2. meat steak weak theme green
3. sane paid eight lace mast
4. ton toast both note toes
5. hoot good moon grew suit
6. dud died mine eye guy

H In the next chapter we will start using phonetic transcriptions. The following exercises prepare for this by pointing up the differences between sounds and spelling.

How many distinct sounds are there in each of the following words? Circle the correct number.

- | | | | | | | | | |
|-----|---------|---|---|---|---|---|---|---|
| 1. | laugh | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | begged | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | graphic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | fish | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | fishes | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | fished | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | batting | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | quick | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | these | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | physics | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | knock | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | axis | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I Figure 1.17 shows the waveform of the phrase *Tom saw nine wasps*. Mark this figure in a way similar to that in figure 1.10. Using just ordinary spelling, show the center of each sound. Also indicate the manner of articulation.



J. Make your own waveform of a sentence that will illustrate different manners of articulation. You can use the WaveSurfer application that is available on the CD or download it at <http://www.speech.kth.se.wavesurfer>

K Recall the pitch of the first formant (heard best in a creaky voice) and the second formant (heard best when whispering) in the vowels in the words *heed, hid, head, had, hod, hawed, hood, who'd*. Compare their formants to those in the first parts of the vowels in the following words:

	First formant similar to that in the vowel in:	Second formant similar to that in the vowel in:
<i>bite</i>	_____	_____
<i>bait</i>	_____	_____
<i>boat</i>	_____	_____