

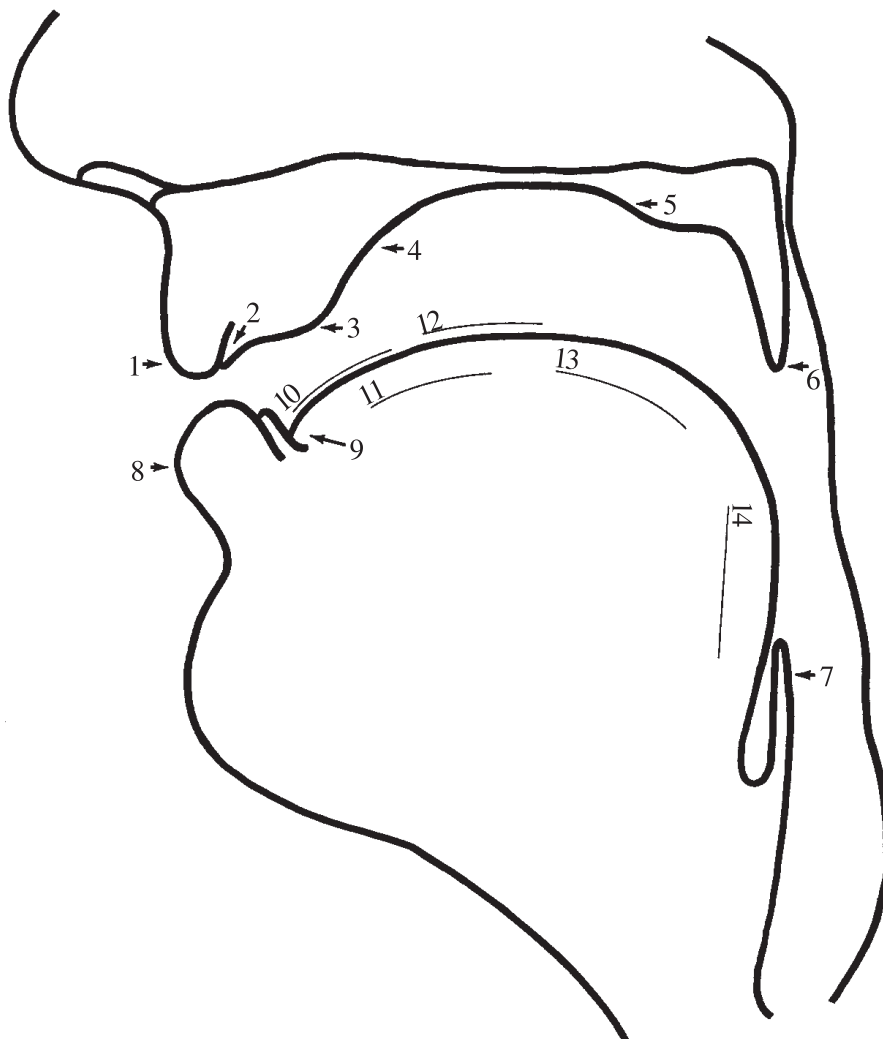
EXERCISES

(Printable versions of all the exercises are available on the website.)

A. Fill in the names of the vocal organs numbered in Figure 1.15.

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

Figure 1.15



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.

C.

	1	2	3	4	5
	Voiced or voiceless	Place of articulation	Central or lateral	Oral or nasal	Articulatory action
s	<i>voiceless</i>	<i>alveolar</i>	<i>(central)</i>	<i>(oral)</i>	<i>fricative</i>
k					
n					
f					
l					
t					

D. Figure 1.16 a–g illustrates all the places for articulatory gestures that we have discussed so far, except for retroflex sounds (which will be illustrated in chapter 7). In the spaces provided, (1) state the place of articulation and (2) state the manner of articulation of each sound, and (3) give 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. Studying a new subject often involves learning a large number of technical terms. Phonetics is particularly challenging in this respect. Read over the definitions of the terms in this chapter before completing the exercises that follows. Say each of the words and listen to the sounds. Be careful not to be confused by spellings. Using a mirror may be helpful.

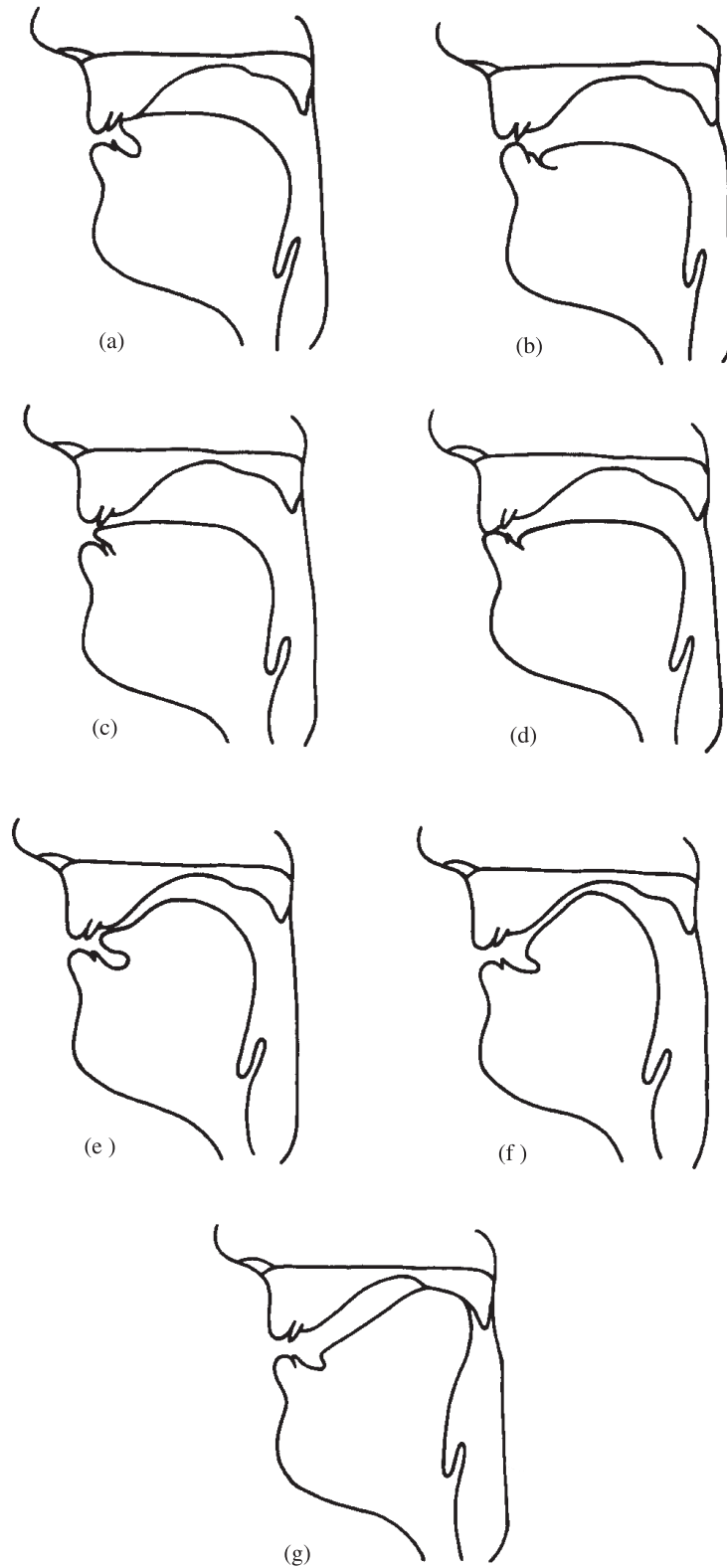
1. Circle the words that begin with a bilabial consonant.

met net set bet let pet

2. Circle the words that begin with a velar consonant.

knot got lot cot hot pot

Figure 1.16 Sounds that illustrate all the places of articulation discussed so far, except for retroflex sounds.



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

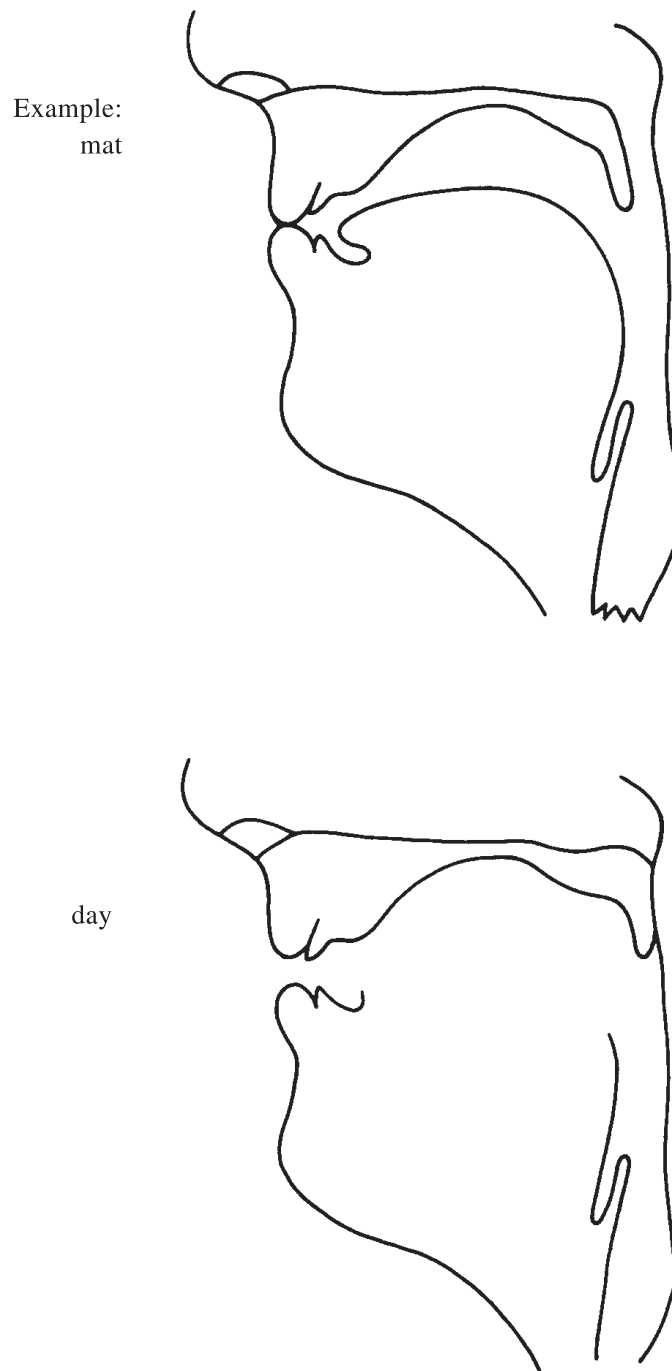
- F.** Define the consonant sounds in the middle of each of the following words as indicated in the example.

	Voiced or voiceless	Place of articulation	Manner of articulation
adder	<i>voiced</i>	<i>alveolar</i>	<i>stop</i>
father			
singing			
etching			
robber			
ether			
pleasure			
hopper			
selling			
sunny			
lodger			

- G.** Complete the diagrams in Figure 1.17 to illustrate the target for the gesture of the vocal organs for the first consonants in each of the words given. If the sound is voiced, schematize the vibrating vocal folds by drawing a wavy line at the glottis. If it is voiceless, use a straight line.
- H.** Figure 1.18 shows the waveform of the phrase *Tom saw ten wasps*. Mark this figure in a way similar to that in Figure 1.12. Using just ordinary spelling, show the center of each sound. Also indicate the manner of articulation.
- I.** Make your own waveform of a sentence that will illustrate different manners of articulation. You can use the WaveSurfer application that is available at <http://www.speech.kth.se/wavesurfer/> or Praat, which is available at <http://www.praat.org>.
- J.** 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>	_____	_____

Figure 1.17



cat



think



nut

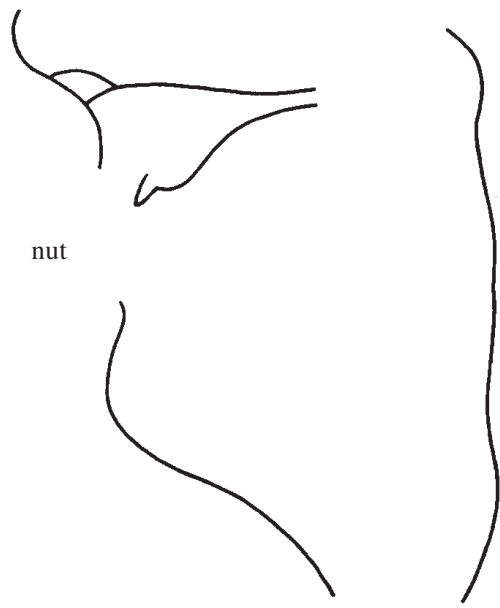
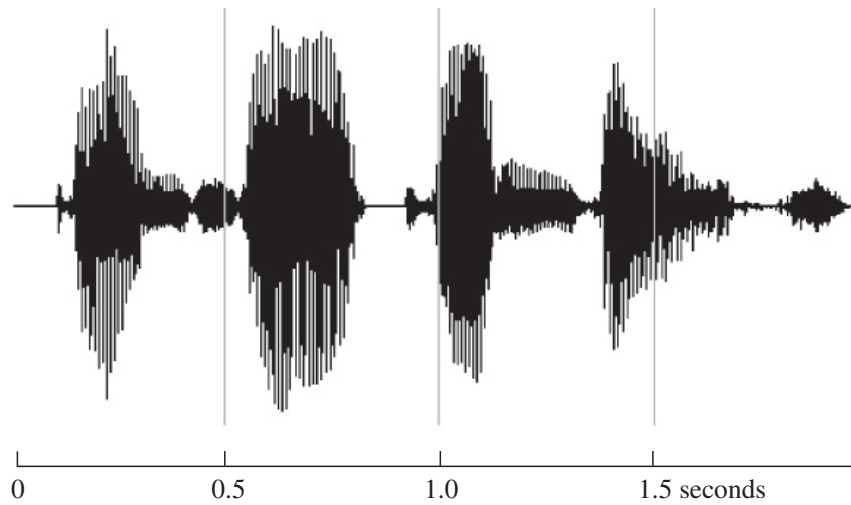


Figure 1.18 The waveform of the phrase *Tom saw ten wasps.*

K. In the next chapter, we will start using phonetic transcriptions. The following exercises prepare for this by pointing out 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

L. 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