

lines / will become

## The Sounds of British English (R.P.) – Consonants

- |                       |               |         |
|-----------------------|---------------|---------|
| 1. [p] as in the word | <i>spoon</i>  | /spu:n/ |
| 2. [b] as in the word | <i>beat</i>   | /bi:t/  |
| 3. [t] as in the word | <i>stem</i>   | /stem/  |
| 4. [d] as in the word | <i>dean</i>   | /di:n/  |
| 5. [k] as in the word | <i>school</i> | /sku:l/ |
| 6. [g] as in the word | <i>good</i>   | /gud/   |

7. [tʃ] as in the word	<i>teach</i>	/ti:tʃ/
8. [dʒ] as in the word	<i>June</i>	/dʒu:n/
9. [m] as in the word	<i>mean</i>	/mi:n/
10. [n] as in the word	<i>neat</i>	/ni:t/
11. [ŋ] as in the word	<i>finger</i>	/'fɪŋgə/ <sup>1</sup>
12. [f] as in the word	<i>feet</i>	/fi:t/
13. [v] as in the word	<i>vest</i>	/vest/
14. [θ] as in the word	<i>three</i>	/θri:/
15. [ð] as in the word	<i>these</i>	/ði:z/
16. [s] as in the word	<i>seat</i>	/si:t/
17. [z] as in the word	<i>zoo</i>	/zu:/
18. [ʃ] as in the word	<i>sheet</i>	/ʃi:t/
19. [ʒ] as in the word	<i>leisure</i>	/'leɪʒə/ <sup>1</sup>
20. [h] as in the word	<i>heat</i>	/hi:t/
21. [l] as in the word	<i>leave</i>	/li:v/
22. [r] as in the word	<i>rest</i>	/rest/
23. [j] as in the word	<i>yes</i>	/jes/
24. [w] as in the word	<i>west</i>	/west/

### The Sounds of British English (R.P.) – (Vowels)

1. /i:/ as in the word	<i>seat</i>	/si:t/
2. /ɪ/ as in the word	<i>sit</i>	/sɪt/
3. /e/ as in the word	<i>bed</i>	/bed/
4. /æ/ as in the word	<i>bad</i>	/bæd/
5. /ɑ:/ as in the word	<i>past</i>	/pɑ:st/
6. /ɒ/ as in the word	<i>lost</i>	/lɒst/
7. /ɔ:/ as in the word	<i>saw</i>	/sɔ:/
8. /u:/ as in the word	<i>two</i>	/tu:/
9. /ʊ/ as in the word	<i>put</i>	/pʊt/

<sup>1</sup> The mark ' before a syllable indicates that the syllable that comes immediately after the mark is *stressed* or *strong* or *accented*. You will learn more about the phenomenon of *word-accent* in a later Chapter.

10. /ʌ/ as in the word	<i>cut</i>	/kʌt/
11. /ɜː/ as in the word	<i>girl</i>	/gɜːl/
12. /ə/ as in the word	<i>father</i>	/'fɑːðə/ second syllable)
13. /eɪ/ as in the word	<i>late</i>	/leɪt/
14. /aɪ/ as in the word	<i>light</i>	/laɪt/
15. /ɔɪ/ as in the word	<i>boy</i>	/bɔɪ/
16. /aʊ/ as in the word	<i>cow</i>	/kaʊ/
17. /əʊ/ as in the word	<i>coat</i>	/kəʊt/
18. /ɪə/ as in the word	<i>hear</i>	/hɪə/
19. /ʊə/ as in the word	<i>tour</i>	/tʊə/
20. /eə/ as in the word	<i>where</i>	/weə/

The forty-four symbols listed above are used to represent the sounds that occur in one variety of English. The International Phonetic Alphabet (often abbreviated to IPA) has symbols for all the sounds that are used in all the languages of the world. The IPA chart has been reproduced at the end of this book. Listed below are the phonetic symbols of the sounds you are likely to come across and use in your everyday life. Let us now describe each symbol, that is, give a descriptive label of the sound each symbol represents, with an illustrative example from English, an Indian language or Arabic. No illustrative example is given in the case of certain sounds that don't occur in English or the better-known Indian languages.

All the sounds that are described here are articulated with the air that goes out of our lungs. There are a few sounds which are articulated with the help of air other than the air we breathe out. These sounds don't occur in English or the major Indian languages (some of them do occur in Sindhi, a language used by people in India and Pakistan) and the symbols representing these sounds are not described below.

### Consonant Sounds:

- [p] Voiceless bilabial plosive as in the English word *spin*, Hindi प, Tamil ப in the word பால் (= *milk*)
- [p<sup>h</sup>] Aspirated voiceless bilabial plosive as in English *appear*, Hindi फ
- [b] Voiced bilabial plosive, as in English *box*, Hindi ब, Tamil ப as in இன்பம் (= *pleasure*)

## (A) WHAT IS LINGUISTICS?

*The Advanced Learner's Dictionary* defines Linguistics as a **scientific study of language or of particular languages**. *The Collins Cobuild English Language Dictionary* defines Linguistics as **the study of the way in which language works**. We can define linguistics as **a systematic study of the way in which a language works**. Now what do we mean by saying **the way in which a language works**? Let us look at a few facts about English. We add the letters **-ed** (or the letter **-d**) to the infinitive form of a regular verb to make it into the past tense form. But the same two letters **-ed** are pronounced [t] in the word **cooked** and [d] in the word **played**. If we ask

ourselves the question, "*Why is the past-tense marker <-ed> pronounced differently in different words?*" we are asking ourselves a question about the *linguistics* of English.

Here is another example, this time from Hindi and English. In English, if someone points a dog and asks us the question, *What's this?* our answer will be *This is a dog* (.). The same answer in Hindi, if literally (word for word) translated, will be *This dog is* (.) which is unacceptable in English. If we ask ourselves the question, *why is the order in which we combine words to form sentences different in different languages?* we are asking ourselves a question about *linguistics*.






Now that we know that *Linguistics* deals with *language*, it is time we ask ourselves the question, *Well, what is Language?*

## (B) WHAT IS LANGUAGE?

The *Advanced Learner's Dictionary* says that language is a *system of sounds, words, patterns, etc., used by humans to communicate thoughts and feelings*. The *Collins Cobuild English Language Dictionary* says that Language is a *system of communication which consists of a set of sounds and written symbols which are used by the people of a particular country or region for talking or writing in.....*

Language, then, is something that people use for communication. It is a tool of communication. There are a number of situations in our daily lives in which we communicate with each other. In these situations, we use **LANGUAGE**. Let us look at a few examples:

- (1) Mary is a student. She has breakfast everyday at 8.00 a.m. because her classes commence at 9.00 a.m. On Saturday 30 October, she has to be in the college at 8.00 a.m. because she has a test in psychology. So she has to eat her breakfast at 7.00 a.m. that day, instead of at her usual time of 8.00 a.m. She has to inform her mother on the 29<sup>th</sup> October that on the next day she wants breakfast an hour earlier than usual. Otherwise, her mother will not know anything about the test and so she will get breakfast ready at 8.00 a.m. as usual. Mary will have to **COMMUNICATE** with her mother and to do this, she will use **LANGUAGE**. She will go to her mother on the 29<sup>th</sup> October and tell her, "Mother, can you please give me breakfast at 7.00 a.m. tomorrow? I've to go to the college an hour early tomorrow." Now what did Mary do? She used **LANGUAGE** in order to **COMMUNICATE**

-  *Phonetics – Articulation, transmission and reception of speech sounds*
-  *Phonology – How sounds function in a language*
-  *Morphology – Word-systems—Words and their structure*
-  *Syntax – Sentence-structure of languages*
-  *Semantics – Meaning*

## COMPONENTS OF LINGUISTICS

Linguistics, as we said in Chapter 2, is a systematic study of how a language operates. Let us now look at the various components of linguistics. Given below is a list of the several components of linguistics and the area of language each component deals with.

<i>S.No.</i>	<i>Component of Linguistics</i>	<i>Area of Language</i>
1.	Phonetics	Speech sounds
2.	Phonology	Sound system of languages
3.	Morphology	Word system of languages
4.	Syntax	Sentence-structure of languages
5.	Semantics	Meaning

We shall now look briefly at each of these components of linguistics. In later Chapters, we shall take up the component of **PHONETICS** for a detailed discussion.

### 1. PHONETICS

Phonetics is a component of linguistics that deals with **SPEECH SOUNDS**. The English word *spoon* is made up of four speech sounds. These are [s],

# Components of Linguistics

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- 📖 *Phonology – How sounds function in a language*
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## 1. PHONETICS

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[p], [u:] and [n]. The example given above is an interesting one because in this word there is no correspondence between the number of letters in the written form of the word and the number of sounds in its spoken form. The word *spoon* has five letters, but the two letters <oo> represent the **SINGLE SOUND** [u:] and so in the spoken form of this word there are only **FOUR** sounds as indicated in the transcription of the word. There are hundreds of words in English in which there is no correspondence between the letters of the alphabet in their written forms and the speech sounds in their spoken forms. We, therefore, shouldn't count the number of letters in the written form of a word and say there are so many sounds in that word. There are, of course, several words in English in which the number of sounds in their spoken form is the same as the number of letters in their written form. For example, the English word *bat* has three letters and it has the three sounds [b], [æ] and [t]. The English word *skin* has four letters and it has the four sounds [s], [k], [ɪ] and [n]. The point to remember is that in Phonetics we deal with **SPEECH SOUNDS** and we should make a clear distinction between **LETTERS OF THE ALPHABET** and **SPEECH SOUNDS**. The English word *father* is made up of four sounds – [f], [ɑ:], [ð] and [ə] – if we don't pronounce the final letter <r> and it has five sounds – [f], [ɑ:], [ð], [ə] and [r] – if we pronounce the letter <r> in it. Phonetics deals with

- (a) the **ARTICULATION** or **PRODUCTION** of speech sounds;
- (b) the way in which speech sounds are **TRANSMITTED** from the speaker to the hearer;
- (c) the way in which the hearer **RECEIVES** the sounds; and
- (d) the **CLASSIFICATION** of speech sounds into **VOWELS** and **CONSONANTS**.

## 2. PHONOLOGY

Phonology is a component of linguistics which deals with the way in which sounds **FUNCTION IN A LANGUAGE**. It deals with

- (a) the **SELECTION and ORGANISATION OF SOUNDS**;
- (b) **SOUND UNITS** called **PHONEMES**;

Let us look at each of these three points.

**SELECTION of sounds:** If we examine two languages carefully, we will find that some sounds that exist in one language **DON'T** exist in the other. For example, the sound that begins the English word *father*

### 3. MORPHOLOGY

*Morphology* deals with words and the way in which words can be divided into smaller units. Let us take the word *love* [lʌv]. This word cannot be divided into smaller units. Of course, we can split the word up into the three speech sounds [l], [ʌ] and [v]. But these three sounds, by themselves, are meaningless. But if we examine the word *lovely* [lʌvlɪ], we can divide it into two **MEANINGFUL** parts. The two parts are the word *love* and the bit *-ly*. **Both these parts of this word have meaning.** *Love* is a word in English. It can be used as a noun and as a verb. The bit *-ly* is also meaningful. It is a suffix which makes the word *love* into an adjective. Each one of these **MEANINGFUL** parts of the word *lovely* is a **MORPHEME**. Let us take one more example. Take the word *girls*. This word can be divided into two parts. The two parts are the word *girl* and the bit *-s* which makes the singular noun into plural. Both these parts are meaningful. The word *girl* is, of course, meaningful and the part *-s* is also meaningful. It means *more than one*. So the word *girls* has two morphemes. Let us now take another example. Let us examine the English word *re-examination*. This word is made up of the morphemes *re* (which means *once again*), *examine* (which is a verb) and *-ation* which makes the verb *examine* into a noun. The way in which the words of a language are **STRUCTURED** is called the morphology of that language.

### 4. SYNTAX

*Syntax* is a component of linguistics that deals with the **sentence-structure** of languages. In other words, it deals with the way in which **words are arranged to form sentences** in languages. The way in which words are arranged to form sentences is **NOT THE SAME** in all languages. For example, in English, the adjective that qualifies a noun must be **BEFORE** the noun, as in

*The good boy.....*

But in Arabic, adjectives are placed **AFTER** the noun.

To give another example, English does not permit a verb to begin a statement. The following sentence is unacceptable in English.

*\*Eats Ravi bread everyday.*

But Arabic permits a verb (or the subject of the sentence) to begin a statement.

## 5. SEMANTICS

So far, we have been looking at speech sounds, phonemes, morphemes, sentences, etc. More important than all these is **MEANING**. We use a language for communication and our communication must be **MEANINGFUL**. The component of linguistics that deals with meaning is called **SEMANTICS**. The following is an acceptable sentence in English.

*Mohammed drank a cup of tea.*

*Mohammed* is the name of a boy or a man. This word is the subject of the sentence. The sentence is a statement and according to the rules of English syntax, a statement should begin with the subject. The subject is followed by the verb *drank* which is followed by the object (*a cup of tea*). The sentence is thus grammatically acceptable. It is also meaningful. But the following sentence is unacceptable.

*\*Mohammed drank a camel.*

The sentence is acceptable grammatically, because in its construction, we have followed the rules of English syntax. But **SEMANTICALLY** it is an unacceptable sentence because it is not possible for any human being to drink a camel.

We have, in the preceding pages of this Chapter, given an elementary outline of the different components of linguistics. In the following Chapters, we shall take up *phonetics* for a detailed analysis.

### SUMMARY

1. Linguistics is a systematic study of language.
2. There are different components of linguistics, each one dealing with a particular aspect or a particular area of language.
3. The five components of linguistics are (a) *Phonetics*, (b) *Phonology*, (c) *Morphology*, (d) *Syntax* and (e) *Semantics*.
4. *Phonetics* deals with the *production, transmission* and *reception* of **SPEECH SOUNDS**.
5. *Phonology* deals with the way in which the speech sounds of a language **FUNCTION**. It deals with the **SELECTION** and **ORGANIZATION** of speech sounds, and **PHONEMES**
6. *Morphology* deals with **WORDS** and their structure.
7. *Syntax* deals with the **GRAMMATICAL STRUCTURE OF SENTENCES** in a language.
8. *Semantics* deals with **MEANING**.

# Phonetics: The Articulation of Speech Sounds

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- 📖 *The Speech Mechanism*
  - 📖 *The Respiratory System*
  - 📖 *The Articulatory System*
  - 📖 *The Phonatory System – The Vocal Cords*
- Voiceless and voiced sounds*  
*The vocal cords and pitch*

We learnt in Chapter 3 that *Phonetics* is a component of linguistics and that it deals with the *articulation, transmission* and *reception* of speech sounds. In this Chapter, we shall discuss the **ARTICULATION** of speech sounds in some detail.

It may come to you as a matter of surprise, but about half of the human body is needed for the production of speech. The organs of our body that help us to speak can be divided into three groups. Each group of human organs that help people to speak forms a *system*. The way in which these three systems help us to speak is called the **SPEECH MECHANISM**. These three systems are:

- (a) The **RESPIRATORY** system;
- (b) The **ARTICULATORY** system; and
- (c) The **PHONATORY** system.

The **RESPIRATORY** system lies in the **TRUNK** of our body (that is, from the **NECK to the ABDOMEN**). The **ARTICULATORY** system lies in the **HEAD** and the **PHONATORY** system lies in the **THROAT**. Let us look at these three systems in some detail.

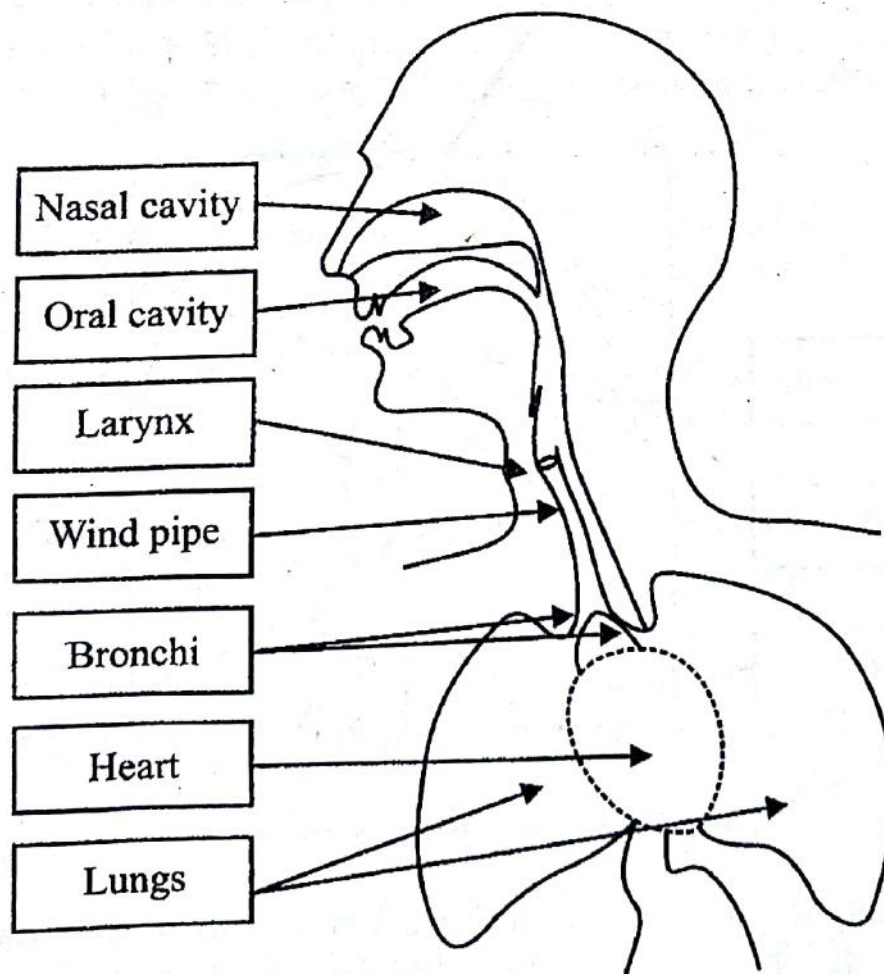
## (A) THE RESPIRATORY SYSTEM

The respiratory system consists of:

- (i) the **LUNGS**;
- (ii) the **MUSCLES OF THE CHEST** which make the lungs expand and contract;
- (iii) the **WINDPIPE** (which is also called the **TRACHEA** /trə'ki:ə/;)
- (iv) the two tubes which enter the lungs. These two tubes are called **BRONCHI** /'brɒŋkaɪ/. Each tube is called a **BRONCHUS** /'brɒŋkəs/.

The **lungs** are soft bodies situated on either side of our chest. The lungs receive oxygen through the two **bronchi**. The two bronchi join together into one **bronchus** above the lungs. The bronchus joins the **windpipe** or the **trachea**.

When we breathe **in** (that is, when we take the air from the outer atmosphere into our lungs), we take the air into the lungs through the windpipe, the bronchus and the bronchi. The process of **breathing in** is called **INSPIRATION**. When we take air into our lungs, the muscles of



**Fig. 4.1** *The respiratory System and the Heart*

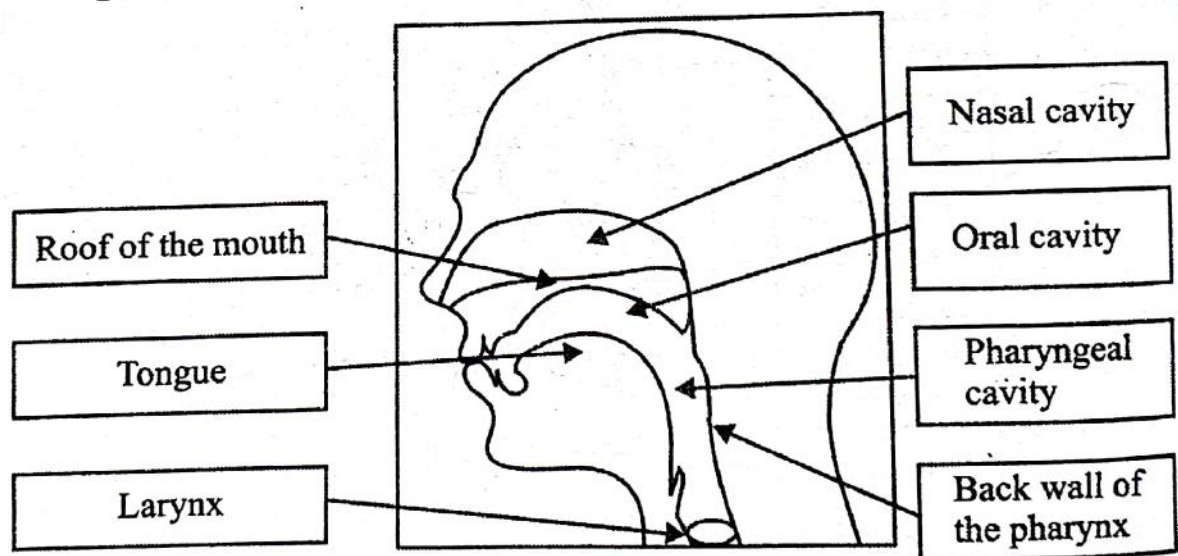
the chest make the lungs *expand*. When we breathe *out*, the air from the lungs goes out of the lungs through the bronchi into the bronchus, then into the trachea, and then into the outer atmosphere. The process of *breathing the air out of the lungs* is called *EXPIRATION*. When we breathe out, the muscles of the chest make the lungs *contract*.

The respiratory system is important in the production of speech because we need air for speaking. For the production of **MOST SPEECH SOUNDS OF MOST LANGUAGES IN THE WORLD**, we use the air that we **BREATHE OUT**. We can say that we use the **EXPIRATORY LUNG - AIR** for the production of a vast majority of speech sounds used by the languages of the world. In fact, **ALL THE SPEECH SOUNDS OF ENGLISH AND SEVERAL INDIAN LANGUAGES (EXCEPT Sindhi) ARE PRODUCED WITH THE HELP OF THE AIR THAT WE BREATHE OUT.**

Given on the previous page is a diagram of the organs that comprise the respiratory system. The heart is included in the diagram.

## (B) THE ARTICULATORY SYSTEM

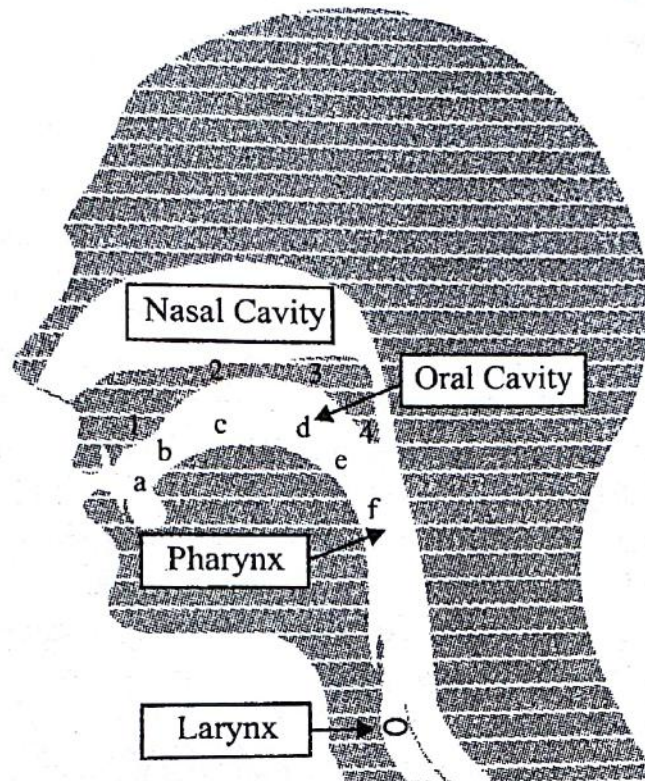
The Articulatory System consists of a few organs in our **HEAD** and **NECK**. These organs are called the **ORGANS OF SPEECH**. These organs include the **LIPS**, the **TEETH**, the **TONGUE**, and the **PALATE**. Given below is a diagram of the Organs of Speech.



**Fig. 4.2** *The Organs of Speech*

In Fig. 4.2, the nostrils (in fact there are **TWO** nostrils, only one of which is shown in the diagram), the lips, the teeth and the tongue are easily

recognisable. The part called the **ROOF OF THE MOUTH** is divided into four parts and the tongue is divided into six parts. The different parts of the roof of the mouth and the tongue are given in Fig. 4.3.



**Fig. 4.3** The different parts of the Roof of the Mouth and the Tongue.

**Roof of the Mouth:** 1. The Teeth Ridge 2. The Hard Palate  
3. The Soft Palate 4. The Uvula

Immediately after the front teeth (in the upper row), there is a hard surface on the roof of the mouth. This is called the **TEETH RIDGE** or the **ALVEOLAR RIDGE** or the **ALVEOLUM**. After the teeth ridge the roof of the mouth changes its shape, but continues to be hard and bony. This part of the roof of the mouth is called the **HARD PALATE**. After this, the roof of the mouth becomes soft and fleshy. This part of the roof of the mouth is called the **SOFT PALATE** or the **VELUM**. After the soft palate there is a soft, fleshy part hanging loose. This is called the **UVULA**. The tongue is divided into the **tip**, the **blade**, the **front**, the **centre** and the **back**. The tip can be easily recognised. The **BLADE** of the tongue lies opposite the **TEETH RIDGE**; the **FRONT** lies opposite the **HARD PALATE**; the **BACK** of the tongue lies opposite the **SOFT PALATE**. The **CENTRE** of the tongue lies **between the FRONT and the BACK**. The

**ROOT** of the tongue lies beyond the back of the tongue. These are the positions occupied by the different parts of the tongue *when the speech organs are AT REST*, that is, when we are not speaking.

What we call **THROAT** in our everyday language is called the **PHARYNX**. Behind the pharynx is the **BACK WALL OF THE PHARYNX**. What we commonly call **ADAM'S APPLE** is called the **LARYNX**.

### (C) THE PHONATORY SYSTEM

The **PHONATORY SYSTEM** consists of the **LARYNX** and the **VOCAL CORDS**. The **LARYNX** is situated in the upper part of the trachea. Inside the larynx are two small structures which look like lips. These are called the **VOCAL CORDS**. These are attached at one end and left loose at the other end. Because of this, they can be brought close to each other or moved far away from each other. When they are moved far away from each other, there is a space between them. This space is called the **GLOTTIS**. The air that we breathe in and breathe out passes through the glottis. When we breathe normally, the vocal cords are moved away from each other and therefore, the glottis is wide open. The air that we breathe in or breathe out goes freely through the wide-open glottis, without affecting or moving the vocal cords. When we produce certain speech sounds, the vocal cords are drawn far away from each other and the air passes through the wide-open glottis, without affecting the vocal cords. Such sounds are called **VOICELESS SOUNDS**. In English, the following sounds are **VOICELESS**.

1. [p] as in *spoon* [spu:n]
2. [t] as in *stool* [stu:l]
3. [k] as in *school* [sku:l]
4. [tʃ] as in *cheap* [tʃi:p]
5. [f] as in *feel* [fi:l]
6. [θ] as in *three* [θri:]
7. [s] as in *scene* [si:n]
8. [ʃ] as in *sheet* [ʃi:t]
9. [h] as in *heat* [hi:t]

When we articulate certain speech sounds, the vocal cords are kept close to each other, loosely. When the air from the lungs passes through them, the pressure of the air makes them *open and close rapidly*. This rapid opening and closing of the vocal cords is called the **VIBRATION** of the