| Pronunciation Guide (Phonemes of American English) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONSONANTS |  |  | $\begin{gathered} \text { SEMI- } \\ \text { VOWELS } \end{gathered}$ |  | VOWELS |  |
| p press |  | shine | r | ring | i: bee | ә unbelievable** |
| b bag | 3 | measure | + | call * | I bit | 3 r bird |
| t time | s | sit | j | you | e bed | ei bay |
| d date | z | zebra | w | water | æ bad | aI buy |
| k can | t 5 | chair | h | hot | $\boldsymbol{0}$ lock | oi boy |
| g good |  | jam |  |  | $\wedge$ luck | ou go |
| f $\quad$ find | n | never |  |  | U look | au now |
| v vote | m | more |  |  | u loot |  |
| $\boldsymbol{\theta}$ thin |  | sing |  |  |  |  |
| б that | 1 | lake |  |  |  |  |

There are 8 consonant pairs in which the two phonemes are different only by being voiced or unvoiced:


* The /l/ consonant is different when it comes after a vowel, so some dictionaries use the phoneme written as $/ \$ /$. Other dictionaries don't use $/ \$ /$.
$/ \mathrm{r} / / \mathrm{/} / / \mathrm{j} / / \mathrm{w} /$ and $/ \mathrm{h} /$ are usually listed as consonants but they are actually semi-vowels. They are in the consonant category, but they are not true consonants. They are close to being vowels because speech articulators are not in close contact when making these sounds.
$/ 3 \mathrm{r} /$ is a way of showing $/ \mathrm{r} /$ after the $/ \mathrm{v} /$ vowel, as in these examples:
herd/h3rd/fur/far/ and were/war/, but after other vowels the phonemic transcription can use /r/ as in these examples: card/kord/ fork /fourk/ beer /bi:r/
**/ə/ is a difficult concept to understand. It is the weak, short vowel that appears in unstressed syllables. You can pronounce it with your mouth relaxed and almost closed. Look at these examples. The vowels in underlined bold print are /ə/:
ability, information, specify, relative, causes, collision, uniform, element, glamorous
Be flexible. Accept ambiguity. The use of phonemic symbols is an attempt to represent an analog system in a digital format. There are many variations in English pronunciation in different regions of the world. Some people say /təmertou/ others say/təmætou/.

Don't forget that you can use context to understand when you cannot identify phonemes accurately. Read this sentence in which every vowel letter is replace with an x :

Xt mxy bx dxffecxlt tx lxxrn thx dxffxrxncx bxtwxxn vxwxl sxxnds, bxt xnglxsh cxn xsxxllx bx xndxrstxxd bx lestxnxng tx thx cxmbxnxtxxxn xf cxnsxnxnts xn x sxntxncx.

See the last page for the answer.

## Easy to learn

| $\mathbf{p}$ | $\mathbf{b}$ | $\mathbf{t}$ | $\mathbf{d}$ | $\mathbf{k}$ | $\mathbf{g}$ | $\mathbf{f}$ | $\mathbf{v}$ | $\mathbf{s}$ | $\mathbf{h}$ | $\mathbf{m}$ | $\mathbf{n}$ | $\mathbf{w}$ | $\mathbf{r}$ | $\mathbf{l}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

More difficult to learn

| $\theta$ | ठ | $\int$ | 3 | t 5 | d3 | ワ | 4 | j | i: | I | $\boldsymbol{æ}$ | 0 | $\wedge$ | U | U: | O | 3 r | eI | aI | OI | OU | aU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Special note: /ə/ is very common. It is the weak vowel sound that appears on unstressed parts of words.
examples: information/infərmeIJən/ television /teləvizən/ usual/ju:zu:əф/ (the underlined syllable is the stressed syllable)

## The Vocabulary for Talking about Pronunciation

1. Phoneme: The alphabet of sounds used by speakers of a language, usually written between slash marks such as in this example: /æ/
2. Consonant: A speech sound made by contact of the human speech articulators (lips, teeth, roof of the mouth, tongue and so on (see the diagram below)
3. Vowel: A speech sound made without contact of the human speech articulators

4. Semi-vowel: A vowel that is a little like a consonant (/j/,/r/, /l/). They are usually categorized as consonants.
5. Syllable: A part of a word that contains a vowel. The number of vowels in a word = the number of syllables in that word. A syllable can be a vowel by itself, one or more consonants followed a vowel, a vowel followed by one or more consonants, or a vowel between one or more consonants. Consonants are indicated by C , and vowels are indicated by V.
6. Stressed and unstressed syllables
in the word kitchen, the first syllable is stressed (underlined)
in a sentence, some words and syllables are stressed and others are unstressed
The stove is in the middle of the kitchen.
7. Voiced and unvoiced consonants

What is the difference between the th in this and the th in thick? They are the same except the th in this is voiced and the th in thick is unvoiced. There are other voiced and unvoiced consonant pairs:

| /b/ | /p/ | /ठ/ | /日/ |
| :--- | :--- | :--- | :--- |
| /d/ | /t/ | /z/ | /s/ |
| /g/ | /k/ | /3/ | /S/ |
| /v/ | /f/ | /d3/ | /tj/ |

In English，many combinations of $C$ and $V$ are possible：

| SYLLABLE | EXAMPLE | PHONEMIC LETTERS |
| :--- | :--- | :--- |
| V | eye | ai |
| CV | new | nu： |
| VC | it | It |
| CVC | bit | bit |
| CVCC | little | IIt $\phi$ |
| CCVCC | stashed | stæft |
| CCVCCC | grasped | græspt |
| CCVCCCC | twelfths（5／12＝five twelfths） | twelfӨs |
| CCCVCCC | strengths | strej日s |

This possibility for recombination means that there are thousands of syllables in English．
In Japanese the number of possible syllables is much，much lower．

| SYLLABLE | EXAMPLE | ROMAJI |
| :--- | :--- | :--- |
| V | え（絵） | e |
| CV | け（毛） | ke |
| VC | えん（円） | en |
| CVC | けん（県） | ken |
| CVCC | ？？？ |  |
| CCVCC | ？？？ |  |
| CCVCCC | ？？？ |  |
| CCVCCCC | ？？？ |  |

In fact, there is only one consonant in Japanese that can follow a vowel, and it is really a semi-vowel L . So in most cases, the syllables in Japanese are made of V and CV combinations. The "sound system" of Japanese is very simple. A sentence of Japanese usually has this simple pattern in the syllables:

## CVCVCVCVCVCVCVVVCVCVCVCVCVCVCVC

This is a major reason that Japanese people find it difficult to develop English listening skills. These sound patterns are learned quickly and easily in childhood, but adults can learn them usually only by much conscious effort. English words contain consonant clusters (groups of consonants) before and after vowels, and when English is spoken quickly it is difficult to notice where one word ends and the next begins. When you read you can see the spaces between words, but not when you listen. Read this sentence out loud:

## Thestrengthofthesescreaturesissurprising.

Notice all the consonant clusters in the short sentence above:

## CVCCCVCCVCCVCCCVCVCVCCVCCVCVC

This is an easier way to read the sentence and see the pattern of $C$ and $V$

|  |  | strength |  |  |  |  |  | of |  | these |  |  | creatures |  |  |  |  |  | is |  | surprising |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | V | C | C | C | V | C | C | V | C | C | V | C | C | C | V | C | V | C | V | C | C | V | C | C | V | C | V | C |
| б | ә | s | t | r | e | $\eta$ | $\theta$ | ә | v | б | i: | z | k | r | i: | ts | 3 r | z | I | z | s | 3 r | p | r | aI | z | I | $\eta$ |

Or think of the problem in this sentence:

This is the twelfth stretching exercise in my routine.

From the end of one word (twelfth) to the beginning of the next word (stretching) there are six consonants (CCCCCC). If you can't identify these two words and notice the dividing line (word boundary) between them, two words seem to be one word with six consonants in the middle of it. In fact, there are no words that have so many consonants in one cluster like this, so listeners get a feeling that there must be a boundary between two words in that long series CCCCCC (...lfthstr...)

## The North Wind and the Sun

English Orthography (conventional spelling)

1. The north wind and the sun / were disputing / which was the stronger / when a traveler came along / wrapped in a warm cloak.
2. They agreed / that the one who first succeeded / in making the traveler / take his cloak off / should be considered / stronger than the other.
3. Then the north wind blew / as hard as he could, / but the more he blew / the more closely did the traveler / fold his cloak around him.
4. And at last / the north wind / gave up the attempt.
5. Then the sun shined out warmly / and immediately / the traveler took off his cloak.
6. And so the north wind / was obliged to confess / that the sun / was the stronger of the two.

## The North Wind and the Sun

English Orthography (conventional spelling)

1. The north wind and the sun / were disputing / which was the stronger / when a traveler came along / wrapped in a warm cloak.
2. They agreed / that the one who first succeeded / in making the traveler / take his cloak off / should be considered / stronger than the other.
3. Then the north wind blew / as hard as he could, / but the more he blew / the more closely did the traveler / fold his cloak around him.
4. And at last / the north wind / gave up the attempt.
5. Then the sun shined out warmly / and immediately / the traveler took off his cloak.
6. And so the north wind / was obliged to confess / that the sun / was the stronger of the two.

## The North Wind and the Sun

Phonemic representation as read slowly in North American English with slightly idealized pronunciations of individual words．

| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ð | ə |  | n | OU | r | $\theta$ |  | w | I | n | d |  | $æ$ | n | d |  | ð | ə |  |  |
| s | $\wedge$ | n |  | w | 3 r |  |  | d | I | s | p | j | u： | t | I | 万 |  | w | I | t 5 |
| w | $\wedge$ | z |  | ð | ə |  | s | t | r | 0 | ワ | g | 3 r |  |  | w | e | n |  | ə |
| t | r | æ | v | $\partial$ | 1 | 3 r |  |  | k | eI | m |  | ә | 1 | 0 | $\square$ |  |  |  |  |
| r | æ | p | t |  | I | n |  | ә |  | w | ou | r | m |  | k | 1 | OU | k |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ठ | eI |  | ә | g | r | i： | d |  | ð | $æ$ | t |  | ð | ә |  | w | $\wedge$ | n |  |  |
| h | u： |  | f | 3 r | s | t |  |  | s | ә | k | s | i： | d | ә | d |  | I | n |  |
| m | eI | k | I | $\eta$ |  | ð | ә |  | t | r | $æ$ | v | ә | 1 | 3 r |  |  | t | eI | k |
| h | I | z |  | k | 1 | OU | k |  | 0 | f |  | J | U | d |  | b | i： |  |  |  |
| k | ə | n | s | I | d | 3 r | d |  |  | s | t | r | 0 | 万 | g | 3 r |  |  |  |  |
| ð | æ | n |  | ð | i： |  | $\wedge$ | ð | 3 r |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ð | e | n |  | ð | ə |  | n | OU | r | $\theta$ |  | w | I | n | d |  | b | 1 | u： |  |
| æ | z |  | h | 0 | $r$ | d |  | æ | z |  | h | i： |  | k | U | d |  | b | $\wedge$ | t |
| ð | ә |  | m | ou | $r$ |  | h | i： |  | b | 1 | u： |  | ð | ә |  | m | ou | r |  |
| k | 1 | OU | s | 1 | i： |  | d | I | d |  | ठ | e |  |  |  |  |  |  |  |  |
| t | r | æ | v | ә | 1 | $3 r$ |  |  | f | OU | 4 | d |  | h | I | z |  |  |  |  |
| k | 1 | OU | k |  | ə | $r$ | au | n | d |  | h | I | m |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $æ$ | n | d |  | $æ$ | t |  | 1 | $æ$ | s | t |  | ð | ә |  | n | OU | $r$ | $\theta$ |  |  |
| w | I | n | d |  | g | eI | v |  | $\wedge$ | p |  | б | i： |  | ə | t | e | m | p | t |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ठ | e | n |  | ð | ә |  | s | $\wedge$ | n |  | J | aI | n | d |  | au | t |  |  |  |
| w | OU | r | m | 1 | i： |  | æ | n | d |  | I | m | i： | d | i： | ə | t | I | i： |  |
| 才 | ə |  | t | r | æ | v | ә | 1 | 3 r |  |  | t | U | k |  | $\bigcirc$ | f |  |  |  |
| h | I | z |  | k | 1 | ou | k |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $æ$ | n | d |  | s | OU |  | ð | ә |  | n | OU | $r$ | $\theta$ |  | w | I | n | d |  |  |
| w | $\wedge$ | z |  | ə | b | 1 | aI | d3 |  | t | u： |  | k | ə | n | f | e | s |  |  |
| ð | $\nsim$ | t |  | ð | ə |  | s | $\wedge$ | n |  | w | $\wedge$ | z |  | ð | ə |  |  |  |  |
| s | t | r | 0 | 万 | g | 3 r |  |  | ə | v |  | б | ə |  | t | u： |  |  |  |  |

These phonemic symbols are used in the textbook Breakthrough 3 Plus as a representation of spoken American English．Other textbooks and dictionaries use variations of these symbols．

## Which phonemes are difficult for Japanese speakers to hear correctly

| /b/ | /v/ |  |
| :--- | :--- | :--- |
| ban | van |  |
| /r/ | /I/ |  |
| rock | lock |  |
| /日/ | /s/ |  |
| thick | sick |  |
| /б/ | /d/ |  |
| those | doze |  |
| /d3/ | /з/ |  |
| legion | lesion |  |
| /æ/ | /^/ | /v/ |
| lack | luck | look |
| /v/ | /u:/ |  |
| full | fool |  |
| /э/ | /ov/ |  |
| Auckland | Oakland |  |

These sets of words are called minimal pairs. They are pronounced the same way except that one phoneme in the word is different. You can do drills with many minimal pair combinations at http://www.manythings.org/pp/

Answer for word puzzle on page 1

It may be difficult to learn the difference between vowel sound, but English can usually be understood by listening to the combination of consonants in a sentence.

