

The IPA for Choirs

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Abstract

This paper discussed the practice of using the International Phonetic Alphabet (IPA) in a choral classroom. The Review of Literature gave a brief history and description of the IPA, and described the basic mechanics of how the IPA works. It then went on to describe the many uses of the IPA as an educational tool to aid in transfer of training and ease of communication. In addition, the Review also addressed many of the roadblocks that exist to the implementation of daily use of the IPA in a high school choral classroom, such as worries about time management and handling foreign languages.

The results of this project discussed the use of the IPA and how to teach it in within the context of a high school choral rehearsal. While the IPA can be taught through the use of choral literature, the purpose of this project was to provide a deliberate introduction to the IPA through the use of systematic and simple worksheets. The worksheets are intended to take a minimal amount of class time to cover each specific sound, and to provide a straightforward method of assessment for the music educator. The use of these worksheets will increase student familiarity with the IPA, allowing for more efficient transfer and retention of sounds in the choir rehearsal. The benefits conferred by an understanding of the IPA are described by authors such as De'Ath, Miller, Karna, Pfautsch, and Wall.

Statement of the Problem

Chi sa ben respirare e sillabare, sopra ben cantare.
[ki sa ben respirare:e sil:labare sopra ben cantare]

This translates to “if you breathe and articulate well, you will sing well.” The dual concepts of breath and diction are not new, and have been advocated by teachers of singing for centuries. There are many resources dedicated to choral breathing techniques. By contrast, the concepts of choral diction and pronunciation are not nearly as well defined. As the diversity of cultural, regional and linguistic options for choral groups increase, it has become more important than ever for directors to simplify the communication of specific consonant and vowel sounds. If a choir is to learn numerous foreign languages and regional dialects without becoming fluent in them, the director must also be able to accurately convey the intended pronunciations. This is exactly what the International Phonetic Alphabet (IPA) was designed to address. “The use of the IPA results in more precise communication about speech sounds and pronunciation” (Wall, 1989, p. 6). The IPA provides a common method both for directors to communicate the intended sounds to their choir, and for choir members to notate those sounds for later recall.

While the IPA is becoming commonplace in university vocal programs (Wall, 2005), the widespread use of the IPA has not yet moved to the high school level. As of this time, there are currently no instructional materials available that are specifically designed for use in the high school choral setting. In the first chapter of his new book, Karna (2012, p. 1) stated that “I believe that the teaching and use of the International Phonetic Alphabet’s symbols for sound should be used for all singers within the context of the choral rehearsal.” However, he then goes on to say “This can be reinforced daily through the use of choral warm ups that introduce new

and familiar sounds and their corresponding IPA symbols” (p.1). No mention is made of a systematic methodology of teaching, the symbols are taught as they come up in the choral literature being performed. This absence of classroom materials leaves it up to the high school choral director to either create their own, or to attempt the incorporation of the IPA through a more haphazard manner.

This project will answer some basic questions about how the IPA can increase efficiency, save time, and improve tone in the choir rehearsal. A simple way to teach the IPA to high school choral students will also be presented. A systematic approach to the introduction of the IPA symbols will be provided and justified, along with a clear method of assessment. It is not within the scope of this project to provide a comprehensive overview of the IPA. Rather, it is assumed that the choral teacher will use additional resources to become proficient in the use of the IPA. This project should provide the tools necessary to transfer that knowledge efficiently and succinctly to others within the setting of the high school choral program. The following questions will be addressed:

1. How can the IPA be taught in a precise and efficient manner in a high school choral setting?
2. How can students be assessed for understanding of the IPA in a high school choral setting?
3. What is the effect of IPA training on tone production and language pronunciation in a high school choral setting?

Review of Literature

A Brief Description of the International Phonetic Alphabet

Origins. The International Phonetic Association is an organization dedicated to the study of the science of phonetics. To further the scholarly goals of the Association, it was practical to have a way to represent sounds of language in written form. This led the group to the following conclusion:

From its foundation in 1886 the Association has been concerned to develop a set of symbols which would be convenient to use, but comprehensive enough to cope with the wide variety of sounds found in the languages of the world; and to encourage the use of this notation as widely as possible among those concerned with language. The system is generally known as the International Phonetic Alphabet. (Association, 1999, p. 3)

What is the IPA. The International Phonetic Alphabet (IPA) is an extensive collection of characters that each represents only one sound. It is based primarily on the Roman alphabet; so much of it will be familiar to students (Wall, 1989). However, the IPA is designed to encompass a variety of diverse languages. There are additional letters and symbols included because there are more sounds in language than there are letters in the Roman alphabet (Association, 1999).

Basic Mechanics of the IPA. While the IPA can be complicated when studied in detail, there are a few helpful hints that can assist with a basic understanding of the system. First, the convention of enclosing symbols in square brackets [] is used to distinguish them from the letters of the English alphabet (Wall, 2005). “The Letters of the alphabet of a language are referred to as the orthographic letters, which distinguishes them from IPA symbols (Wall, 1989).

While some of the IPA symbols have specific name, for example the *schwa* [ə], most are simply referred to by the sound they represent (Association, 1999). It is important to remember that the IPA is used to transcribe the *sounds* of a word, and is not affected by language conventions such as silent letters, double letters, capitalization conventions, or punctuation.

The Value of the IPA

Transfer of training. One of the primary goals of the IPA is to provide a way for linguists to recreate sounds of languages that were unfamiliar to them without having to become fluent in the language (Association, 1999). This description would also apply to a choir that is expected to perform in a language with which they are unfamiliar. Because of this similarity in outcome, the IPA would seem to be a powerful tool for singers to learn. Once learned, the IPA can be applied to many different languages, thus speeding up the process of learning different languages. Consistency of symbols in multiple languages can be very useful to singers (Wall, 1989). Every individual sound does not need to be taught one at a time. Rather, the sounds that are tied to the IPA symbols can be quickly and directly applied to the new language (Karna, 2006).

This specific type of transfer is called context transfer. It is identified by a student applying what they have learned to a slightly different situation (Haskell, 2001). Without the IPA, singers are reduced to learning through imitation and repetition, which are time consuming methods. This would explain why, according to Richard Miller, “It is now rare to find singing teachers in major North American departments of music who ignore the valuable aids offered by

the IPA in accomplishing greater language awareness and pronunciation accuracy” (Miller, 2011, p. 53).

Multiple learning styles. The IPA also provides a visual component to a method of learning that is typically limited to aural. Some students may learn quickly by hearing the text and repeating it, which are traits of aural and oral learners, respectively. Others will retain information through seeing the IPA characters and writing them in their score, exhibiting traits of visual and kinesthetic learners (Emmons & Chase, 2006). This diversity of teaching accommodates the wide variety of learning styles present in the classroom.

Change of focus.

“Use of the IPA symbols requires the singer to view ‘voice production’ in acoustic, not in laryngeal, terms. Such concentration removes attention from the laryngeal vibrator itself, over which no direct local control is possible. The singer’s attention is now directed to the resonance system, over which there *is* considerable conscious control” (Miller, 2011, p. 54).

The shift in focus from the mechanical to the acoustic is one of the benefits of the IPA. Again, Richard Miller stated:

“The International Phonetic Alphabet can be of tremendous value in vocal pedagogy because it directs the mind and the ear phonetically. The teacher who scoffs at the need to incorporate such information most probably does not possess it and cannot therefore assess its efficacy; or perhaps she or he finds it threatening to cherished opinions” (Miller, 2011, p. 55).

Communication. There are also times that a director takes for granted the pronunciation of certain words. This is especially true when singing in one's native language (Pfautsch, 1971). There are also variations of pronunciation within the ensemble due to differences in cultural and regional experiences. The use of IPA in a choral rehearsal forces the director to make specific choices about certain sounds, and encourages consistent use of these sounds. "Speaking and writing precisely will lead to your thinking precisely about what you do as a teacher" (Duke, 2005, p. 20). This ability to quickly and precisely communicate vocal sounds and pronunciations to a choir should not be underestimated.

Roadblocks to Implementation

Worries about time. Many voice teachers feel differently than choral directors about the use of the IPA (Pfautsch, 1971). The most common reason given is a function of rehearsal time. Smith and Sataloff (2006) voiced these fears stating, "Choral singers learn to sing texts in foreign languages by imitation and repetition. It is generally not time-effective to expect choral singers to learn the International Phonetic Alphabet as their tool for pronunciation" (p. 198). When held against other authors' research, this opinion seems unsupported.

The IPA does take time to teach. If the director expects singers to learn the IPA on their own with little time or input during rehearsal, the results will be less than optimal. Time and care must be taken during choral rehearsals to teach the use of many different singing skills, and diction is no exception (Pfautsch, 1971). However, it is even less time-effective to teach every sound in a piece by wrote, which is what imitation and repetition imply. The IPA is a system for

teaching sounds that can then be applied to a variety of languages and dialects. “Singers will be able to use appropriate diction in a variety of circumstances” (Karna, 2006, p. 27).

Much of this teaching and reinforcement can be accomplished through targeted vocalizing instead of through repeated academic study of the IPA characters. “Warm-ups provide the perfect opportunity to teach singers the IPA. Teaching it during warm-ups doesn’t take much time, and it can save considerable rehearsal time as a choir becomes more familiar with the IPA symbols and uses them to learn works in unfamiliar languages” (Karna, 2006, p. 28). Most choral directors feel that time spent warming up is not time wasted. Incorporating IPA lessons into these exercises will achieve the same goal of warming up while teaching secondary concepts at the same time (Karna, 2006).

Foreign Languages. Just knowing the IPA does not immediately allow students to sing in a foreign language, it is a tool that is used to convey pronunciation. One must still know the pronunciation rules for a language to be able to transcribe a text (De’Ath, 2001). This fact is what has led choir directors to abandon the IPA in favor of rote teaching methods.

There are alternatives that involve the use of the IPA. If the director is proficient in a language, then a thorough knowledge of the IPA will allow them to transcribe the piece. This is an excellent option for many reasons. It provides access to almost any text for which a director can research pronunciations. There is also the option for a director to choose particular vowel and consonant sounds depending on the musical situation. For example, modified vowels for soprano notes in the upper register can be worked into the transcription (Emmons & Chase, 2006).

The second solution is to find resources that present prepared transcriptions of familiar choral texts. Fortunately, there are many such resources available. Ron Jeffers and others have provided a number of texts on this topic titled *Translation and Annotation of Choral Repertoire* that specifically address a variety of traditional choral texts. Volume one provides transcriptions of Latin texts (Jeffers, 1988), while volume two covers numerous famous German texts (Jeffers & Paine, 2000). Volume three addresses French and Italian texts (Jeffers & Paine, 2007), while volume 4 includes a variety of Hebrew texts (Nash & Jacobson, 2009). Once the lengthy task of transcription has been completed, the issue of time turns in favor of learning the IPA.

Taste of a language. Every language has a feel and style all its own. The basic characters of the IPA do not differentiate these sounds well (De'Ath, 2001). One must master hundreds of IPA symbols to understand it at this level. This may be another reason why directors abandon the IPA as a tool. De'Ath (2001) wrote, "A slavish adherence to the exact procession of phonemes indicated by an IPA transcription can result in a stilted, mechanical rendition of text." (De'Ath, 2001, p. 62) This may lead one to assume that imitation and repetition are again the best solutions.

Wall (1989) addresses this issue indirectly when explaining what an allophone is. She says:

"Within each phoneme, however, there may be slight variations of the pronunciation even though the identity of the particular sound is still maintained. For example, the [t] in the word *team* is produced with the tip of the tongue placed more forward in the mouth than when saying the [t] in the word *wart*. Yet, in both cases the identity of the sound is

maintained, allowing it to be easily recognizable as [t], even though the sound of each [t] is slightly different. These slight variations in the pronunciations of the same sound are called allophones. (Wall, 1989, p. 11)

An understanding of the cardinal vowel sounds in the IPA gives students something more than just a visual representation of sounds. One of the strengths of the IPA is that it helps singers to think about what is going on inside their mouth in a way that is not tied to biology and physiology. With this heightened sense of awareness, students are more receptive to small changes to phonemes that will help them to sound more “authentic” in a foreign language. For example, the differences in the schwa sound in English, French, and German are very subtle (De’Ath, 2001). A student who has previously been made aware of the basic sounds within a language has an easier time hearing small changes to those sounds when presented with a new language.

Conclusions

The IPA is a useful skill. It is a tool that is specifically designed for solving problems with pronunciation and diction. When creating a sculpture, a sense of what is beautiful and an eye for working with the shape of the marble is absolutely essential. However, one should not underestimate the importance of knowing how to swing a hammer. In the same manner, it may seem that the focus of the limited time in rehearsals should be on singing the music. But if the choral director takes time to hone the singers’ skills in vowel production and matching through the use of the IPA, singers will be able to apply those skills to every piece they sing. This will eventually save rehearsal time by increasing efficiency. Emmons & Chase (2006) put voice to a

similar fear when they posed the question “Is requiring my singers to learn the IPA, another whole written language, worthwhile for them and for me?” In turn they answer by stating:

“The advantage of using the IPA is that precise and accurate understanding of vowels makes possible better blend, better resonance, more intelligibility, a lessening of passaggio impediments, and better answers to range problems in all sections—all the advantages that accrue to vowel modification, ease of foreign language pronunciation, as well as uniformity despite regional accents. It is well worth the trouble” (p. 96).

Method

Curricular Goals

A workbook for students to learn the basics of the IPA was created. The information in the workbook comes from various sources (Wall, 1989; Association, 1999; Rudder, 2012) in addition to what was derived from personal experience singing in and directing choirs. This workbook is not intended to be a comprehensive or definitive source of information on the IPA for either the director or the student. Rather, it is a tool to familiarize high school choral students with the basic symbols that the IPA uses to represent sounds. The workbook also provides a means for the choir director to assess student comprehension of the IPA symbols. The worksheets are presented in an order that allows for immediate use of the most common IPA symbols within the high school choral rehearsal setting, while still allowing the remaining information to be presented over an extended period of time.

Workbook Contents

The workbook is divided into four sections. It begins with a short introduction to the IPA, followed by three segments of worksheets. The introduction is a condensed version of Joan Wall's introduction to the IPA (1989). These pages introduce the basic mechanics of the IPA and common terminology the students will need to be familiar with (see Appendix A). The introduction also covers many of the common pitfalls associated with the use of the IPA. Finally, it provides the students with a short description of the value of the IPA.

The introduction is followed by three segments of worksheets. Segment one contains five worksheets, each worksheet focusing on one of the pure Latin vowels [i ε α ɔ u] (see Appendix B). Segment two contains seven worksheets, each worksheet focusing on one of the remaining common English vowels [ɪ e æ ʊ o ɜ ə] (see Appendix C). The third and final segment of worksheets is based on the non-orthographic English consonants [θ ð ʃ ʒ ŋ] (see Appendix d), with each worksheet focusing on either a single consonant, or on the voiced/unvoiced pair of consonants. Answer keys have been provided for each of the worksheets (see Appendix E). In addition, a blank template (see Appendix F) has been provided for ease in creating worksheets with additional symbols, depending on the language or pronunciation needs of the choral program.

Order of Presentation of the Symbols

Pure Latin Vowels. The order of presentation of the vowels is based on two factors. The first factor is practicality of use. Since Latin is a language of pure vowels, it is practical to begin with the five pure Latin vowels [i ε α ɔ u] (Wall, 2005). This provides an opportunity to begin

using the IPA in rehearsals immediately for pronunciation purposes. This first set of vowels can be used in most warm-up exercises. This same set of vowels can also be used in most basic pronunciations of both Latin and English texts. The second factor is the placement of the vowels in the oral cavity. Vowels are presented beginning with forward close, proceeding to forward open, followed with back open, and ending with back close vowels.

American English Vowels. The second set of worksheets complete the American English vowels [ɪ e æ ʊ o ɜ ə] necessary for the most common singing pronunciations. The order of presentation of vowels is based on the same oral cavity placement order as before. Vowels are presented beginning with forward close, proceeding to forward open, followed with back open, and ending with back close vowels. The two mid center vowels are then presented last. Two of the vowels, [e] and [o], are primarily found in English only as a diphthong. These vowels have been addressed in their diphthong state, pairing them with vowels that were covered in previous worksheets.

Unfamiliar Consonants. Finally, the symbols for consonants that are not the same as the orthographic English consonants [θ ð ʃ ʒ ɳ] will be taught. They are presented in the same front to back of the oral cavity order that the vowels were presented in. The voiced and unvoiced pairs of the consonants [θ ð] and [ʃ ʒ] are similar to each other. Because of this, they have been combined onto one worksheet for each pair to accurately showcase their differences. The IPA symbols that are visually the same as the corresponding orthographic English consonants have been left off of the worksheets, as they are beyond the scope of this project.

Assessment

The answer key is designed with two goals in mind. The first is to increase the speed of grading the worksheets. The second is to provide a consistent pronunciation guide throughout the workbook. Pronunciations for all of the example words are derived from a variety of sources. For this project, the sources used were Wall (1989), Rudder (2010), Association (1999), Kenyon & Knott (1953), and Marshall (1953). Words were chosen based on the consistency of pronunciation between various sources, with the examples selected favoring words in which agreement exists across numerous texts.

Blank Worksheet

A blank worksheet page has been provided which uses the same formatting and directions as the rest of the workbook. It is important that the student be already familiar with the format of the worksheet, so as not to be distracted by formatting when trying to learn new symbols. There are many additional symbols used in foreign languages, and the blank page is provided to address a need to incorporate those symbols as the need arises.

Results

The worksheets provide practice transcribing both from IPA to English and from English to the IPA. They are short, half-page worksheets that contain twelve questions each divided into two sections. At the top of each worksheet is a large font example of the IPA symbol to be covered (*Figure 1*). A short description of the vowels placement in the oral cavity is provided, along with an example English word utilizing the vowel. Directions for both assignment portions are provided on each worksheet, and these directions are consistent on every worksheet.

[i]

the forward vowel [i] as in *beet*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. me _____

4. seed _____

2. mean _____

5. knee _____

3. we _____

6. meat _____

Transcribe these IPA symbols into English words.

7. [it] _____

10. [mil] _____

8. [did] _____

11. [tim] _____

9. [hid] _____

12. [fi] _____

Figure 1. The workbook provides practice transcribing from IPA to English and back.

There are six examples of English words for the student to transcribe into the IPA. Each word consists of a one syllable word representing the example vowel. No other vowel is used on the page, with the exceptions being the worksheets on diphthongs and the worksheets on the central vowels [ɜ] and [ə]. Only the IPA symbols that match the English consonants are used for the worksheets on vowels, and the non-orthographic consonants are covered in their own separate worksheets.

Next, there are six words written in the IPA that are provided for transcription into English. An attempt was made to limit the vocabulary, excluding words that are not in common use for the average high school student. This was done to focus the worksheets on the students ability to transcribe the IPA accurately, and to avoid the workbook becoming a vocabulary test.

The answer key is designed to be simple and easy to read. Formatting has been simplified for quick reference of pronunciations and for easy grading.

**IPA Worksheets Set 1
Answer Key**

the forward vowel [i] as in beet

1. [mi]
2. [min]
3. [wi]
4. [sid]
5. [ni]
6. [mit]
7. eat
8. deed
9. heed
10. meal
11. team/teem
12. free

the back vowel [ɔ] as in awe

1. [kɔt]
2. [sɔ]
3. [vɔlf]
4. [bɔl]
5. [kɔf]
6. [stɔl]
7. law
8. aught
9. raw
10. moss
11. salt
12. broad

Figure 2. The answer key is designed to be simple and easy to read.

Each question in the worksheets has been provided an answer in the key. An attempt has been made to provide both answers with words that have more than one orthographic, either of which is acceptable. The answer key has been divided into the same segments as the workbook. The subtitles of each worksheet have been reprinted for easy reference back to the worksheet.

Discussion

Implications

Unlike other forms of music, singing involves shaping different sounds based on the language requirements of the music being performed. In choral music, it is especially important that all the members of the ensemble are creating the same vowel at the same time. An instrumental colleague of mine once said to me that “Music is simply playing the right note at the right time.” Choral music, however takes this one step further. Choral music involves the process of singing the right note, at the right time, *with the right vowel*. Without this additional step, it is nearly impossible for a vocal ensemble to sing pitches in tune with either themselves or with each other.

The purpose of this project was to create a set of worksheets to aid in teaching the most frequently used IPA symbols to high school choral students. These worksheets were specifically designed to be used in the high school choral setting. When working with students, it is recommended that only one symbol be addressed at a time. It is also recommended that no more than one symbol per day be covered in a class. With discussion of the symbol included in the estimate, students should be able to complete one entire worksheet in approximately five to ten minutes of class time.

In addition to the worksheets, it is up to the choral teacher to reinforce the IPA through repetition and continual use in class. This will help reinforce the concepts that are introduced through the worksheets. Without a practical application of the information, time spent on the worksheets by themselves is not enough for students to become proficient with the IPA. This

repetition and classroom use can be achieved through vocal exercises and transliterations of texts.

Applications of the IPA

Vocal Exercises. Most choir directors use vocal warm ups and exercises to begin class. This time is used by many directors to work on specific vocal production issues, many of which are centered on specific vowels. If the IPA is used during this time to focus the singers on a specific sound, it creates learning on multiple levels. Students who are aural learners hear the vowel, and can begin to make a visual connection to the IPA character shown. Students who are visual learners will be better able to recreate sounds because of the IPA character association.

Additionally, these sounds can then be easily recalled during rehearsal by referring to the IPA character, making for simple transfer from one activity to another. In addition to creating warm ups using IPA symbols, there are resources that have the IPA integrated into their vocal exercises, allowing directors to make these connections without having to create warm ups from scratch. One such resource, *Building Beautiful Voices* by Paul Nesheim (1995), utilizes both the IPA and common orthographic spelling of sounds in the same vocal exercises. This provides a wonderful opportunity for students to not only practice reading the IPA, but reminds them of the pronunciation of the symbols.

Transliterations of Texts. There are many fine sources of texts that utilize the IPA for a pronunciation guide. Many of them have been mentioned in this project. Utilizing these resources, or creating your own transliterations, is the most efficient and rewarding use of the IPA in a high school choral setting. The ability for students to learn one common set of icons to

represent sound allows them access to a number of different languages without having to learn the pronunciation rules for each one. Having access to the IPA pronunciation guide to a song also will improve retention of pronunciation. It also allows students to pronounce languages that do not use the same alphabet as their native language, such as English speakers learning Russian.

In addition to the listed resources, there are websites and other computer software that are being developed for use specifically for singers. One example of this new type of website is www.ipasource.com. This site offers over one thousand IPA transliterations of aria texts in a variety of languages. Individual titles may be purchased, or users may sign up through a subscription for unlimited access. A second example is an iPad app called IPANow! by PhoneticSoft. It allows users to input Latin (or German, Italian, and French for a small fee each) and be given an IPA pronunciation back. It and other programs like it are an exciting way for both teachers and students to create transliterations of a variety of obscure texts not necessarily found in the provided resources.

Future Research

Additional appendices could include warm-up and vocal exercises associated with each vowel or consonant sheet. Wall (1989) does this, utilizing the same pitch patterns for every vowel, changing within the vocal exercise between similar vowels to point out similarities. It would be beneficial to take this further by using opposite vowels to practice moving seamlessly between sounds. While there are resources for vocal exercises available that utilize the IPA, it would be beneficial to tailor a series of warm ups to teach with the worksheets.

It would also be interesting to survey choral conductors to see if many currently teach the IPA to their students. In my experience and interaction with other directors, I know of very few who take the time to do so. Surveying the few directors who do teach the IPA and to discover their methods of both teaching and assessment might provide further insight into additional methods of teaching. In addition, distributing workbooks to various teachers who do not currently teach the IPA and monitoring the results would be the next step in testing the accessibility of the material for both students and educators.

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Appendix A
Introduction to the IPA

The International Phonetic Alphabet

(as cited in Wall, 1989, pp. 1-3, 6, 8-9, 12)

What are Phonetics?

The study of phonetics is the study of speech sounds. A phonetic alphabet is one in which a *single* sound is represented by a *single* symbol. A quick look at the English roman alphabet will show that it is not a phonetic alphabet, that sound and spelling are often not the same. For example, the sound of *ee* may have seven different spellings:

be eat bet receive people brief Phoenix.

A single symbol may stand for many sounds. Look at the different sounds that can come from the letter *i*:

ah-ih in might *ee* in liter
ih in mitt *sh* in nation

A single letter may not have a sound at all, such as the *p* in *pneumonia*. Other letters represent more than one sound, as in the word *mix* where *x* has two sounds: *ks*. Words may also be spelled differently, but pronounced alike: *peace* and *piece*.

What is the International Phonetic Alphabet?

The International Phonetic Alphabet (IPA) is a true phonetic alphabet in which *one* symbol stands for *one* sound. Many of the IPA symbols are the same as the letters in our roman alphabet, making the IPA easy to learn

The International Phonetic Alphabet

(as cited in Wall, 1989, pp. 1-3, 6, 8-9, 12)

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The study of phonetics is the study of speech sounds. A phonetic alphabet is one in which a *single* sound is represented by a *single* symbol. A quick look at the English roman alphabet will show that it is not a phonetic alphabet, that sound and spelling are often not the same. For example, the sound of *ee* may have seven different spellings:

be eat bet receive people brief Phoenix.

A single symbol may stand for many sounds. Look at the different sounds that can come from the letter *i*:

ah-ih in might *ee* in liter
ih in mitt *sh* in nation

A single letter may not have a sound at all, such as the *p* in *pneumonia*. Other letters represent more than one sound, as in the word *mix* where *x* has two sounds: *ks*. Words may also be spelled differently, but pronounced alike: *peace* and *piece*.

What is the International Phonetic Alphabet?

The International Phonetic Alphabet (IPA) is a true phonetic alphabet in which *one* symbol stands for *one* sound. Many of the IPA symbols are the same as the letters in our roman alphabet, making the IPA easy to learn.

Helpful Hints for using the IPA

Brackets: IPA symbols are placed in brackets and are called symbols to distinguish them from the letters of the English alphabet.

[t] is an IPA symbol.

Letters and symbols: The letters of the alphabet of a language are referred to as orthographic letters, which distinguishes them from IPA symbols

t is an orthographic letter.

till is an orthographic spelling.

[t] is an IPA symbol.

[tɪl] is an IPA spelling or transcription.

Names of symbols: An IPA symbol is referred to by its sound.

The symbol [i] is called by its sound *ee*.

Transcribing: Writing a word in IPA symbols is called transcribing the word. When writing in IPA symbols, be sure to transcribe the *sounds* within a word and not the orthographic letters. Common pitfalls include:

Silent letters: Do not transcribe silent letters into IPA

know is [nɒ], without the *k*.

Helpful Hints for using the IPA

Brackets: IPA symbols are placed in brackets and are called symbols to distinguish them from the letters of the English alphabet.

[t] is an IPA symbol.

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Transcribing: Writing a word in IPA symbols is called transcribing the word. When writing in IPA symbols, be sure to transcribe the *sounds* within a word and not the orthographic letters. Common pitfalls include:

Silent letters: Do not transcribe silent letters into IPA

know is [nɒ], without the *k*.

Double letters: Transcribe only what you hear. Double letters do not sound different from single letters in English, so transcribe the single sound with a single IPA symbol.

bell is [bɛl], with only one *l*.

Capital letters: IPA symbols remain the same whether or not the orthographic word is capitalized.

Francis would be [fræŋ sɪs].

Punctuation: Do not use apostrophe marks, periods, or commas in IPA.

Pete's is [pɪts]

Penmanship: Write symbols clearly. Several IPA symbols look similar and can be easily confused if written carelessly.

Conclusion

The most important value of the IPA is that it breaks down all the complex sounds of languages into individual units, and attaches a symbol to each one. Be sure to speak the words aloud and feel the movements of your tongue, lips and jaw as you go from one sound to another.

Double letters: Transcribe only what you hear. Double letters do not sound different from single letters in English, so transcribe the single sound with a single IPA symbol.

bell is [bɛl], with only one *l*.

Capital letters: IPA symbols remain the same whether or not the orthographic word is capitalized.

Francis would be [fræŋ sɪs].

Punctuation: Do not use apostrophe marks, periods, or commas in IPA.

Pete's is [pɪts]

Penmanship: Write symbols clearly. Several IPA symbols look similar and can be easily confused if written carelessly.

Conclusion

The most important value of the IPA is that it breaks down all the complex sounds of languages into individual units, and attaches a symbol to each one. Be sure to speak the words aloud and feel the movements of your tongue, lips and jaw as you go from one sound to another.

Appendix B
IPA Worksheets Set 1

[i]

the forward vowel [i] as in *beet*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. me _____

4. seed _____

2. mean _____

5. knee _____

3. we _____

6. meat _____

Transcribe these IPA symbols into English words.

7. [it] _____

10. [mil] _____

8. [did] _____

11. [tim] _____

9. [hid] _____

12. [fri] _____

[i]

the forward vowel [i] as in *beet*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. me _____

4. seed _____

2. mean _____

5. knee _____

3. we _____

6. meat _____

Transcribe these IPA symbols into English words.

7. [it] _____

10. [mil] _____

8. [did] _____

11. [tim] _____

9. [hid] _____

12. [fri] _____

[ɛ]

the forward vowel [ɛ] as in *wed*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. vet _____

4. guest _____

2. best _____

5. bell _____

3. dents _____

6. cent _____

Transcribe these IPA symbols into English words.

7. [bɛt] _____

10. [blɛd] _____

8. [fɛl] _____

11. [lɛft] _____

9. [sɛd] _____

12. [ɛnd] _____

[ɛ]

the forward vowel [ɛ] as in *wed*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. vet _____

4. guest _____

2. best _____

5. bell _____

3. dents _____

6. cent _____

Transcribe these IPA symbols into English words.

7. [bɛt] _____

10. [blɛd] _____

8. [fɛl] _____

11. [lɛft] _____

9. [sɛd] _____

12. [ɛnd] _____

[ɑ]

the back vowel [ɑ] as in *father*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. pop _____

4. mom _____

2. stop _____

5. fond _____

3. mop _____

6. lock _____

Transcribe these IPA symbols into English words.

7. [tap] _____

10. [barn] _____

8. [rat] _____

11. [kap] _____

9. [spats] _____

12. [hak] _____

[ɑ]

the back vowel [ɑ] as in *father*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. pop _____

4. mom _____

2. stop _____

5. fond _____

3. mop _____

6. lock _____

Transcribe these IPA symbols into English words.

7. [tap] _____

10. [barn] _____

8. [rat] _____

11. [kap] _____

9. [spats] _____

12. [hak] _____

[ɔ]

the back vowel [ɔ] as in awe

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. caught _____

4. ball _____

2. saw _____

5. cough _____

3. vault _____

6. stall _____

Transcribe these IPA symbols into English words.

7. [lɔ] _____

10. [mɔs] _____

8. [ɔt] _____

11. [sɔlt] _____

9. [rɔ] _____

12. [brɔd] _____

[ɔ]

the back vowel [ɔ] as in awe

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. caught _____

4. ball _____

2. saw _____

5. cough _____

3. vault _____

6. stall _____

Transcribe these IPA symbols into English words.

7. [lɔ] _____

10. [mɔs] _____

8. [ɔt] _____

11. [sɔlt] _____

9. [rɔ] _____

12. [brɔd] _____

[u]

the back vowel [u] as in *boot*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. boost _____

4. two _____

2. soup _____

5. rude _____

3. too _____

6. cool _____

Transcribe these IPA symbols into English words.

7. [luz] _____

10. [fud] _____

8. [tum] _____

11. [pul] _____

9. [drup] _____

12. [mud] _____

[u]

the back vowel [u] as in *boot*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. boost _____

4. two _____

2. soup _____

5. rude _____

3. too _____

6. cool _____

Transcribe these IPA symbols into English words.

7. [luz] _____

10. [fud] _____

8. [tum] _____

11. [pul] _____

9. [drup] _____

12. [mud] _____

Appendix C
IPA Worksheets Set 2

[ɪ]

the forward vowel [ɪ] as in *bit*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. him _____

4. tip _____

2. fin _____

5. his _____

3. mill _____

6. sip _____

Transcribe these IPA symbols into English words.

7. [mɪt] _____

10. [mɪnt] _____

8. [kɪdz] _____

11. [pɪt] _____

9. [tɪn] _____

12. [bɪd] _____

[ɪ]

the forward vowel [ɪ] as in *bit*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. him _____

4. tip _____

2. fin _____

5. his _____

3. mill _____

6. sip _____

Transcribe these IPA symbols into English words.

7. [mɪt] _____

10. [mɪnt] _____

8. [kɪdz] _____

11. [pɪt] _____

9. [tɪn] _____

12. [bɪd] _____

[e] or [ei]

the forward vowel [e] as in *chaotic*

the diphthong [ei] as in *bait*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. bay _____

4. feign _____

2. fail _____

5. may _____

3. hail _____

6. wait _____

Transcribe these IPA symbols into English words.

7. [keɪp] _____

10. [steɪt] _____

8. [peɪ] _____

11. [teɪk] _____

9. [seɪm] _____

12. [peɪd] _____

[e] or [ei]

the forward vowel [e] as in *chaotic*

the diphthong [ei] as in *bait*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. bay _____

16. feign _____

14. fail _____

17. may _____

15. hail _____

18. wait _____

Transcribe these IPA symbols into English words.

19. [keɪp] _____

22. [steɪt] _____

20. [peɪ] _____

23. [teɪk] _____

21. [seɪm] _____

24. [peɪd] _____

[æ]

the forward vowel [æ] as in *bat*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. back _____

4. have _____

2. dab _____

5. can't _____

3. rat _____

6. hack _____

Transcribe these IPA symbols into English words.

7. [ækt] _____

10. [pæk] _____

8. [hæm] _____

11. [tæk] _____

9. [bræn] _____

12. [stæmp] _____

[æ]

the forward vowel [æ] as in *bat*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. back _____

16. have _____

14. dab _____

17. can't _____

15. rat _____

18. hack _____

Transcribe these IPA symbols into English words.

19. [ækt] _____

22. [pæk] _____

20. [hæm] _____

23. [tæk] _____

21. [bræn] _____

24. [stæmp] _____

[ʊ]

the back vowel [ʊ] as in *book*

Description: The high point of the tongue is in the back of the mouth close to the soft palate. The tip of the tongue touches the back of the bottom front teeth. The jaw is relaxed and slightly lowered. The lips are round but lax. The soft palate is raised, closing off the nasal passageway.

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. look _____

4. pull _____

2. full _____

5. good _____

3. could _____

6. hood _____

Transcribe these IPA symbols into English words.

7. [tʊk] _____

10. [fʊt] _____

8. [pʊt] _____

11. [wʊl] _____

9. [bʊl] _____

12. [kʊk] _____

[ʊ]

the back vowel [ʊ] as in *book*

Description: The high point of the tongue is in the back of the mouth close to the soft palate. The tip of the tongue touches the back of the bottom front teeth. The jaw is relaxed and slightly lowered. The lips are round but lax. The soft palate is raised, closing off the nasal passageway.

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. look _____

4. pull _____

2. full _____

5. good _____

3. could _____

6. hood _____

Transcribe these IPA symbols into English words.

7. [tʊk] _____

10. [fʊt] _____

8. [pʊt] _____

11. [wʊl] _____

9. [bʊl] _____

12. [kʊk] _____

[o] or [ou]

the forward vowel [o] as in *pillow*

the diphthong [ou] as in *boat*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. goes _____

4. foe _____

2. own _____

5. load _____

3. node _____

6. float _____

Transcribe these IPA symbols into English words.

7. [souks] _____

10. [moud] _____

8. [mould] _____

11. [boost] _____

9. [koup] _____

12. [nou] _____

[o] or [ou]

the forward vowel [o] as in *pillow*

the diphthong [ou] as in *boat*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. goes _____

16. foe _____

14. own _____

17. load _____

15. node _____

18. float _____

Transcribe these IPA symbols into English words.

19. [souks] _____

22. [moud] _____

20. [mould] _____

23. [boost] _____

21. [koup] _____

24. [nou] _____

[ɜ]

the central vowel [ɜ] as in *bird*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. firm _____

4. lurk _____

2. pearl _____

5. hurl _____

3. curve _____

6. first _____

Transcribe these IPA symbols into English words.

7. [wɜrk] _____

10. [fɜrn] _____

8. [dɜrt] _____

11. [lɜrn] _____

9. [bɜrn] _____

12. [jɜrk] _____

[ɜ]

the central vowel [ɜ] as in *bird*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. firm _____

16. lurk _____

14. pearl _____

17. hurl _____

15. curve _____

18. first _____

Transcribe these IPA symbols into English words.

19. [wɜrk] _____

22. [fɜrn] _____

20. [dɜrt] _____

23. [lɜrn] _____

21. [bɜrn] _____

24. [jɜrk] _____

[ə]

the central vowel *schwa* [ə] as in *appeal*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. bottle _____

4. aware _____

2. adapt _____

5. cruel _____

3. suppose _____

6. comma _____

Transcribe these IPA symbols into English words.

7. [sɛn trəl] _____

10. [ə ɡɛn] _____

8. [ə drɛs] _____

11. [sɪm bəl] _____

9. [oʊ pən] _____

12. [ə weɪ] _____

[ə]

the central vowel *schwa* [ə] as in *appeal*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. bottle _____

16. aware _____

14. adapt _____

17. cruel _____

15. suppose _____

18. comma _____

Transcribe these IPA symbols into English words.

19. [sɛn trəl] _____

22. [ə ɡɛn] _____

20. [ə drɛs] _____

23. [sɪm bəl] _____

21. [oʊ pən] _____

24. [ə weɪ] _____

Appendix D
IPA Worksheets Set 3

[θ] and [ð]

the unvoiced lingua-dental consonant [θ] as in *think and faith*

the voiced lingua-dental consonant [ð] as in *then and smooth*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. these _____

4. father _____

2. thin _____

5. path _____

3. rather _____

6. soothe _____

Transcribe these IPA symbols into English words.

7. [ðɪs] _____

10. [mɪθs] _____

8. [θri] _____

11. [ræθ] _____

9. [leð] _____

12. [ðeɪ] _____

[θ] and [ð]

the unvoiced labial-dental consonant [θ] as in *think and faith*

the voiced labial-dental consonant [ð] as in *then and smooth*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. these _____

16. father _____

14. thin _____

17. path _____

15. rather _____

18. soothe _____

Transcribe these IPA symbols into English words.

19. [ðɪs] _____

22. [mɪθs] _____

20. [θri] _____

23. [ræθ] _____

21. [leð] _____

24. [ðeɪ] _____

[ʃ] and [ʒ]

the unvoiced lingua-alveolar consonant [ʃ] as in *she*
the voiced lingua-alveolar consonant [ʒ] as in *beige*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. she _____

4. seizure _____

2. shure _____

5. mash _____

3. ocean _____

6. beige _____

Transcribe these IPA symbols into English words.

7. [ʃeɪm] _____

10. [vɪ ʒən] _____

8. [ʃɪp] _____

11. [flɛʃ] _____

9. [kə ʃən] _____

12. [mɪ rɑʒ] _____

[ʃ] and [ʒ]

the unvoiced lingua-alveolar consonant [ʃ] as in *she*
the voiced lingua-alveolar consonant [ʒ] as in *beige*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. she _____

16. seizure _____

14. shure _____

17. mash _____

15. ocean _____

18. beige _____

Transcribe these IPA symbols into English words.

19. [ʃeɪm] _____

22. [vɪ ʒən] _____

20. [ʃɪp] _____

23. [flɛʃ] _____

21. [kə ʃən] _____

24. [mɪ rɑʒ] _____

[ŋ]

the nasal consonant [ŋ] as in *hung*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. sing _____

4. finger _____

2. swing _____

5. stronger _____

3. long _____

6. single _____

Transcribe these IPA symbols into English words.

7. [lɪŋ kən] _____

10. [du ɪŋ] _____

8. [brɪŋk] _____

11. [gæŋ] _____

9. [tɒŋz] _____

12. [wɪŋ] _____

[ŋ]

the nasal consonant [ŋ] as in *hung*

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. sing _____

16. finger _____

14. swing _____

17. stronger _____

15. long _____

18. single _____

Transcribe these IPA symbols into English words.

19. [lɪŋ kən] _____

22. [du ɪŋ] _____

20. [brɪŋk] _____

23. [gæŋ] _____

21. [tɒŋz] _____

24. [wɪŋ] _____

Appendix E
IPA Worksheets Answer Key

IPA Worksheets Set 1

Answer Key

the forward vowel [i] as in *beet*

1. [mi]
2. [min]
3. [wi]
4. [sid]
5. [ni]
6. [mit]
7. eat
8. deed
9. heed
10. meal
11. team/teem
12. free

the back vowel [ɔ] as in *awe*

1. [kɔt]
2. [sɔ]
3. [vɔlt]
4. [bɔl]
5. [kɔf]
6. [stɔl]
7. law
8. aught
9. raw
10. moss
11. salt
12. broad

the forward vowel [ɛ] as in *wed*

1. [vet]
2. [best]
3. [dents]
4. [gest]
5. [bɛl]
6. [sɛnt]
7. bet
8. fell
9. said
10. bled
11. left
12. end

the back vowel [u] as in *boot*

1. [bust]
2. [sup]
3. [tu]
4. [tu]
5. [rud]
6. [kul]
7. loose
8. tomb
9. droop
10. food
11. pool
12. mood

the back vowel [ɑ] as in *father*

1. [pɑp]
2. [stɑp]
3. [mɑp]
4. [mɑm]
5. [fɑnd]
6. [lɑk]
7. top
8. rot
9. spots
10. barn
11. cop
12. hawk

IPA Worksheets Set 2

Answer Key

the forward vowel [ɪ] as in *bit*

1. [hɪm]
2. [fɪn]
3. [mɪl]
4. [tɪp]
5. [hɪs]
6. [sɪp]
7. mitt
8. kids
9. tin
10. mint
11. pit
12. bid

the back vowel [ʊ] as in *book*

1. [lʊk]
2. [fʊl]
3. [kʊd]
4. [pʊl]
5. [gʊd]
6. [hʊd]
7. took
8. put
9. bull
10. foot
11. wool
12. cook

the forward vowel [e] as in *chaotic*

the diphthong [eɪ] as in *bait*

1. [beɪ]
2. [feɪl]
3. [heɪl]
4. [feɪn]
5. [meɪ]
6. [weɪt]
7. cape
8. pay
9. same
10. state
11. take
12. paid

the forward vowel [o] as in *pillow*

the diphthong [oʊ] as in *boat*

1. [goʊs]
2. [oʊn]
3. [noʊd]
4. [foʊ]
5. [loʊd]
6. [floʊt]
7. soaks
8. mold
9. cope
10. mode
11. boast
12. know/no

the forward vowel [æ] as in *bat*

1. [bæk]
2. [dæb]
3. [ræt]
4. [hæv]
5. [kænt]
6. [hæk]
7. act
8. ham
9. bran
10. pack
11. tack
12. stamp

the central vowel [ɜ] as in *bird*

1. [fɜrm]
2. [pɜrl]
3. [kɜrv]
4. [lɜrk]
5. [hɜrl]
6. [fɜrst]
7. work
8. dirt
9. burn
10. fern
11. learn
12. jerk

the central vowel *schwa* [ə] as in *appeal*

1. [bətəl]
2. [ədæpt]
3. [səpouz]
4. [əwɛr]
5. [kruəl]
6. [kʌmə]
7. central
8. address
9. open
10. again
11. symbol
12. aware

IPA Worksheets Set 3

Answer Key

the unvoiced consonant [θ] as in *think and faith*

the voiced consonant [ð] as in *then and smooth*

1. [ðiz]
2. [θɪn]
3. [ræðər]
4. [fɑðər]
5. [pæθ]
6. [sɒð]
7. this
8. three
9. lathe
10. myths
11. wath
12. there

the nasal consonant [ŋ] as in *hung*

1. [sɪŋ]
2. [swɪŋ]
3. [lɒŋ]
4. [fɪŋgər]
5. [strɒŋgər]
6. [sɪŋgəl]
7. Lincoln
8. brink
9. tongs
10. doing
11. gang
12. wing

the unvoiced lingua-alveolar consonant [ʃ] as in *she*

the voiced lingua-alveolar consonant [ʒ] as in *beige*

1. [ʃi]
2. [ʃʊr]
3. [oʊʃən]
4. [sɪʒər]
5. [mæʃ]
6. [berʒ]
7. shame
8. ship
9. caution
10. vision
11. flesh
12. mirage

Appendix F
Blank IPA Worksheet

[]

the

[] as in

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

1. _____

4. _____

2. _____

5. _____

3. _____

6. _____

Transcribe these IPA symbols into English words.

7. [] _____

10. [] _____

8. [] _____

11. [] _____

9. [] _____

12. [] _____

[]

the

[] as in

Transcribe these words into IPA symbols.

Speak each word aloud and then transcribe the sounds of the word into IPA symbols. Be sure that you transcribe the symbol for the sound that you hear, and not the orthographic English letter that you are used to seeing written.

13. _____

16. _____

14. _____

17. _____

15. _____

18. _____

Transcribe these IPA symbols into English words.

19. [] _____

22. [] _____

20. [] _____

23. [] _____

21. [] _____

24. [] _____