INSTRUCTOR'S MANUAL

Articulatory Phonetics: Advanced Version

LEVEL 2: Vocabulary-Building

A guide to pronunciation and the International Phonetic Alphabet, featuring all formats in the Level 2 *Articulatory Phonetics* series

Cheri Montgomery

S.T.M. Publishers
Nashville, TN

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P.O. Box 111485
Nashville, TN 37222
Tel: (615) 831-9859
Email: info@studenttextmfg.com
Website: www.stmpublishers.com/teamphonetics

Articulatory Phonetics: Advanced Version, Level 2, Instructor's Manual, spiral bound,
ISBN 979-8-950135-22-4 (Student Manual ISBN 979-8-950135-21-7)

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PREFACE

Articulatory Phonetics: Advanced Version teaches proper pronunciation and the formation of English speech sounds using the International Phonetic Alphabet (IPA). Intended for university-level coursework, its concepts are applicable across multiple disciplines, including speech-language pathology, vocal performance, and linguistics.

The *Advanced Version* complements other workbooks in the *Articulatory Phonetics* series, which feature the same word lists but use a simplified phonetic system for early reading and pronunciation instruction. These versions are designed for students in fields such as special education and English language instruction.

Although the workbooks share similar content, each serves a distinct instructional purpose.

The instructor's manual for *Articulatory Phonetics: Advanced Version* (this text) contains the instructional content for both phonetic systems used in Level 2: advanced phonetics, which uses the International Phonetic Alphabet (IPA), and accessible phonetics, which is used with both braille and signed symbols. Answer keys for both phonetic systems are included in the appendix.

The *Articulatory Phonetics* series is the teacher-focused companion to *Reading and Phonetics*, a corresponding series designed for students ages 10 and up. Following is the preface to *Reading and Phonetics: Articulation*, level 2.

Reading and Phonetics: Articulation is the speech-support version of a reading and spelling program. Level 1 introduces the spellings and sounds of single-syllable words. Level 2 expands the vocabulary of single-syllable words, includes words with diphthongs, and provides additional opportunities for transcription. Level 3 extends the instruction to include words with multiple syllables. Together, these workbooks provide the activities and homework assignments needed to help the beginning reader.

Individual learning needs are supported through four parallel workbooks designed for students, parents, and teachers who are new to:

- braille
- manual signing and lipreading
- English language learning
- articulatory phonetics

Units in the level 2 versions contain rules for converting spellings into phonetic symbols, teacher-led group exercises, and 12 word lists for individual assignment. Supplemental materials are accessible via QR codes that link to spoken examples of the word lists. In place of audio, the manual signing and lipreading version contains images of vowel and consonant formations. In place of lengthy descriptions, the ELL version contains rules written in formulas with concepts communicated using images. Images are also used to define words from the group and homework assignments.

The resources needed to establish rules and create exercises originated from research developed for the publication of the *Lyric Diction Workbook Series* and the *IPA Scramble* game app by Cheri Montgomery. Computer search functions and her database of more than 87,000 English words were used to organize the spellings of the English language. Words from the database were arranged in order of frequency of occurrence. The words were placed in a graded order and categorized according to the sounds of the English language as defined by the International Phonetic Alphabet (IPA). A simplified version of the IPA was created for this series. A conversion chart is located on the following page.

This text follows the Moore teaching model. The Moore Method is an interactive approach to instruction designed by Robert Lee Moore, a famous topologist who first used the method at the University of Pennsylvania in 1911. His methodology engages students in the learning process by giving each class member the opportunity to present homework assignments.

Class meetings follow a daily routine. Class begins with each student presenting homework that corresponds with their assigned number(s). Students' written work can be shared using a document camera. The teacher introduces new

material in a brief lecture and leads the class in a written and spoken (or sung) group exercise.

Flip this process to double the activities: pass out dry erase boards with markers numbered 1-12. Have each student complete the word list associated with their marker number. Ask students to read and spell the transcriptions. This converts the phonetic exercise into an English reading and spelling exercise.

Grading is simple. Each student begins with a 100 average. Five points would be deducted each time a student fails to present their homework. One or two extra credit opportunities could be offered throughout the grading period so that students could redeem points.

Reading and Phonetics was created to simplify English language learning and make it accessible to students with diverse learning needs. Grading is simplified as well. The recognition of English spellings with accurate pronunciation is assessed during in-class presentations. No outside grading is needed.

ABOUT THE AUTHOR

Cheri Montgomery is an author and lecturer specializing in voice and diction. She teaches voice and English, Italian, German, French, Latin, Spanish, and Russian lyric diction at the Blair School of Music at Vanderbilt University. This series is used in her articulatory phonetics course designed for Vanderbilt University students majoring in voice, speech-language pathology, communication, or special education.

Phonetic Conversion Chart								
IPA	Simplified	Example	IPA	Simplified	Example	IPA	Simplified	Example
[æ]	[a]	hat	[k^h]	[k]	cake	[θ]	[th]	thing
[ɑ]	[A]	father	[ɬ]	[l]	little	[ð]	[Th]	this
[b^h]	[b]	baby	[m]	[m]	meme	[u]	[u]	moon
[ʧ]	[tS]	chair	[n]	[n]	note	[ʊ]	[U]	book
[d^h]	[d]	dance	[ŋ]	[N]	sing	[ʌ]	[x]	up
[ɛ]	[E]	bed	[ɔ]	[O]	ought	[v]	[v]	vase
[f]	[f]	fig	[p^h]	[p]	pin	[w]	[w]	win
[g^h]	[g]	good	[ɹ]	[r]	ring	[j]	[j]	yes
[h]	[h]	heart	[ɜ]	[R]	earth	[z]	[z]	zoo
[i]	[i]	seat	[s]	[s]	cease	[ʒ]	[Z]	beige
[ɪ]	[I]	fit	[ʃ]	[S]	shirt	stress: [ˈ]	[']	be'lieve
[ʤ]	[dZ]	judge	[t^h]	[t]	time	glottal: [ʔ]	[?]	I, ever

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Introduction

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INSTRUCTIONAL TOOLS

The International Phonetic Alphabet (IPA) was created by phoneticians for language study. Each symbol stands for one unit of sound. Brackets enclose the symbols and distinguish phonetic content from the spellings of words. Other versions within this series use a simplified phonetic system that is accessible to those who sign or read braille. It is also beneficial for those new to English as it uses only uppercase and lowercase letters. A conversion chart is located on page vi.

Studying phonetic transcription is an efficient way to learn a language. Students discover proper pronunciation while learning the spellings of English. Numerous sight words are not necessary.

The following introduction provides an index to all speech sounds of the English language. Phonetic terms are located on pages 7 and 8.

Guide students through the introduction by pronouncing the words. Ensure that students who communicate using the manual alphabet can view your mouth formation. Have students repeat each word after your example. The sounds, accompanying English spellings, and phonetic symbols will be introduced incrementally throughout the text – the introduction simply exposes students to the sounds of the language. They may refer back to this section for a review of the phonetic symbols and sounds. A QR code link on the title page of each unit provides audio examples of each word.

The format of the exercises within allows all students to be engaged in the learning process. Encourage them (by example) to enjoy the language by singing the words. Singing is an excellent way to explore the sounds of a language. Singing slows down the articulatory process and gives the voice time to clarify the sounds. Model singing by intoning the words. There are always students who would love to join in and share their beautiful voices with the class.

The first class meeting is unique in that it is teacher-led. Students lead class for all units that follow. A daily routine is recommended:

1. Have students present a uniquely assigned word list in front of the class (word lists are numbered 1-12). They may speak or sing their word list. Use a document camera to share the students' phonetic transcriptions. The class should observe the presentations and use the workbook to transcribe their classmates' word lists.
2. Introduce new rules in a brief lecture.
3. Lead the class in a group transcription exercise. An answer key is located in the instructor's manual on page 193.

This workbook is ideal for those acquiring clear speech. The sounds of each word are depicted using a side-view image of the vocal tract. Voiced consonants are indicated with a sound bar, nasal consonants are indicated with a lowered soft palate, lip and tongue formations are indicated with intricate detail. Students are instructed to trace the flow of air through each formation.

ADDITIONAL ACTIVITIES

Phonetic exercises facilitate multiple group-engaging activities. Word lists can be distributed as board work. The students can then read the board work (phonetic symbols) and provide English spellings. This flips the activity into a spelling challenge. Do not correct the board work. Encourage students to read the words as they are transcribed and allow them point out errors as they are identified.

This series was designed to help students enjoy the sounds of the English language. They will quickly discover that homework assignments are reminiscent of word games. Once they learn the sounds and associated symbols, they will be ready to play word games such as IPA Scramble. Large playing cards are available on the S.T.M. Publishers website at *www.teamphontics.com*.

PRONUNCIATION GUIDE

FRONT VOWELS

[i]/[i]	tree [tʰɹi]/[tri]	leaf [ɬif]/[lif]	sleep [sɬipʰ]/[slip]
[ɪ]/[I]	hill [hɪɬ]/[hIl]	mitt [mɪtʰ]/[mIt]	wind [wɪndʰ]/[wInd]
[ɛ]/[E]	thread [θɹɛdʰ]/[thrEd]	nest [nɛstʰ]/[nEst]	bread [bʰɹɛdʰ]/[brEd]

BACK VOWELS

[u]/[u]	moon [mun]/[mun]	fruit [fɹutʰ]/[frut]	school [skʰuɬ]/[skul]
[ʊ]/[U]	wood [wʊdʰ]/[wUd]	foot [fʊtʰ]/[fUt]	book [bʰʊkʰ]/[bUk]
[ɔ]/[O]	walk [wɔkʰ]/[wOk]	thought [θɔtʰ]/[thOt]	corn [kʰɔɹn]/[kOrn]

CENTRAL VOWELS

[æ]/[a]	hand [hændʰ]/[hand]	lamb [łæm]/[lam]	cat [kʰætʰ]/[kat]
[ɑ]/[A]	heart [hɑɹtʰ]/[hArt]	rock [ɹɑkʰ]/[rAk]	stop [stʰɑpʰ]/[stAp]
[ʌ]/[x]	sun [sʌn]/[sxn]	dove [dʰʌv]/[dxv]	won [wʌn]/[wxn]
[ɜ]/[R]	nurse [nɜs]/[nRs]	bird [bʰɜdʰ]/[bRd]	world [wɜɬdʰ]/[wRld]

BILABIAL CONSONANTS

[pʰ]/[p]	pin [pʰɪn]/[pIn]	palm [pʰɑm]/[pAm]
[bʰ]/[b]	bed [bʰɛdʰ]/[bEd]	bag [bʰægʰ]/[bag]

LABIODENTAL CONSONANTS

[f]/[f]	fan [fæn]/[fan]	flag [fɬægʰ]/[flag]
[v]/[v]	vest [vɛstʰ]/[vEst]	glove [gʰɬʌv]/[glxv]

DENTAL CONSONANTS

[θ]/[th]	tooth [tʰuθ]/[tuth]	wealth [wɛɬθ]/[wElth]
[ð]/[Th]	this [ðɪs]/[ThIs]	breathe [bʰɹið]/[briTh]

*ALVEOLAR CONSONANTS

[tʰ]/[t]	tea [tʰi]/[ti]	tent [tʰɛntʰ]/[tEnt]
[dʰ]/[d]	dart [dʰɑɹtʰ]/[dArt]	drink [dʰɹɪŋkʰ]/[drINk]
[ɬ]/[l]	lamp [ɬæmpʰ]/[lamp]	wheel [wiɬ]/[wil]

*Consonants *d, t, l,* and *r* are classified as dental in the Romance languages – the tongue tip touches the upper front teeth. The tongue tip touches the alveolar ridge for *d, t, l, r* in English.

ALVEOLAR CONSONANTS

[ɹ]/[r]	ring [ɹɪŋ]/[rIN]	roof [ɹuf]/[ruf]
[n]/[n]	noon [nun]/[nun]	knee [ni]/[ni]
[s]/[s]	street [st^{h}ɹit^{h}]/[strit]	swan [swɑn]/[swAn]
[z]/[z]	zoo [zu]/[zu]	news [njuz]/[njuz]

PREPALATAL CONSONANTS

[ʃ]/[S]	sheep [ʃip^{h}]/[Sip]	fish [fɪʃ]/[fIS]
[ʒ]/[Z]	rouge [ɹuʒ]/[ruZ]	liege [ɬiʒ]/[liZ]
[ʧ]/[tS]	chart [ʧɑɹt^{h}]/[tSArt]	church [ʧɜʧ]/[tSRtS]
[ʤ]/[dZ]	judge [ʤʌʤ]/[dZxdZ]	jar [ʤɑɹ]/[dZAr]

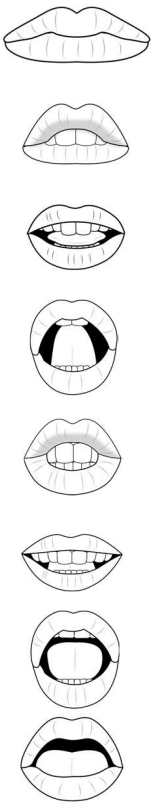
VELAR CONSONANTS

[k^{h}]/[k]	cup [k^{h}ʌp^{h}]/[kxp]	key [k^{h}i]/[ki]
[g^{h}]/[g]	gum [g^{h}ʌm]/[gxm]	dog [d^{h}ɑg^{h}]/[dAg]
[ŋ]/[N]	swing [swɪŋ]/[swIN]	wink [wɪŋk^{h}]/[wINk]

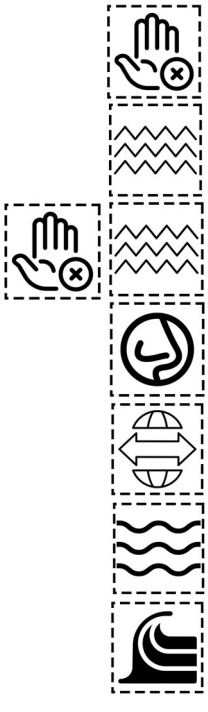
Classification of Symbols: Consonants



Voicing
Voiced. A voiced consonant engages the voice and can be sung. They are in bold below.
Voiceless. A voiceless consonant does not engage the voice and can only be whispered.



Points of Articulation	Phonetics
Bilabial [bʰɑɪˈɬɛɪbʰɪʊɬ] Refers to the lips	**[bʰ]** [pʰ] **[m] [w]**
Labiodental [ɬɛɪbʰɪoˈdʰɛntʰʊɬ] Involves the lower lip and the upper front teeth	**[v]** [f]
Dental [ˈdʰɛntʰʊɬ] Involves the tip of the tongue and the back of the front teeth	**[ð]** [θ]
Alveolar [ʔæɬˈvioɬɜ] Involves the tip of the tongue and the ridge behind the upper teeth	**[dʰ]** [tʰ] **[z]** [s] **[ɬ] [n] [ɹ]**
Prepalatal [pʰɹɪˈpʰæɬɪtʰʊɬ] Involves the tip of tongue and the front of the hard palate	**[ʒ]** [ʃ] **[ʤ]** [ʧ]
Palatal [ˈpʰæɬɪtʰʊɬ] Involves a front arch of the tongue and the hard palate	**[j]**
Velar [ˈviɬɜ] Involves the back of the tongue and the soft palate	**[gʰ]** [kʰ] **[ŋ]**
Glottal [ˈgʰɬɑtʰʊɬ] Involves the air flow and the opening between the vocal cords	[ʔ] [h]



Manner of Articulation	Phonetics
Plosive [ˈpʰɬoʊsɪv] **Stop** [stʰɑpʰ] A momentary closure of the air flow passage	**[bʰ]** [pʰ] **[dʰ]** [tʰ] **[gʰ]** [kʰ] [ʔ]
Fricative [ˈfɪɪkʰʌtʰɪv] Produced by directing the air flow past a set of articulators	**[v]** [f] **[z]** [s] **[ʒ]** [ʃ] [h] **[ð]** [θ]
Affricate [ˈʔæfɪɪkʰɪtʰ] A stop that is followed by a fricative	**[ʤ]** [ʧ]
Nasal [ˈnɛɪzʊɬ] Produced by directing vocalized tone through the nasal passages	**[m] [n] [ŋ]**
Lateral [ˈɬætʰɜʊɬ] Produced by directing vocalized tone over the sides of the tongue	**[ɬ]**
Glide [gʰɬɑɪdʰ] Produced by directing the tone past a set of articulators without friction	**[w] [j]**
Retroflex [ˈɹɛtʰɹoflɛkʰs] Produced with tongue tip curled up	**[ɹ]**

Classification of Symbols: Vowels





Quality	Phonetics
Closed Formed with less space between the tongue arch and the roof of mouth	[i] [u] [o]
Open Formed with more space between the tongue arch and the roof of mouth	[ɪ] [ɛ] [ʊ] [ɔ] [æ] [ɑ] [ʌ]







Peak of Tongue Arch	Phonetics
Front The front of the tongue arches with tongue tip touching lower front teeth	[i] [ɪ] [ɛ]
Back The back of the tongue arches with tongue tip touching lower front teeth	[u] [ʊ] [o] [ɔ]
Central The tongue arch maintains a low position, the tip touches lower front teeth	[æ] [ɑ] [ʌ]

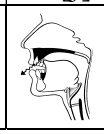
Articulatory Formation of Phonetic Symbols												
a [æ]	a [ɑ]	b [b^{h}]	c	ch [ʧ]	d [d^{h}]	e [ɛ]	f [f]	g [g^{h}]	g [ʤ]	h [h]	i [i]	i [ɪ]
												
j [j]	k [k^{h}]	l [ɬ]	m [m]	n [n]	n [ŋ]	o [o]	o [ɔ]	p [p^{h}]	q	q/c [k^{h}]	r [ɹ]	r [ɜ]
												
s [s]	s [ʃ]	t [t^{h}]	u [u]	u [ʊ]	v [v]	w [w]	x [ʌ]	y	z [z]	z [ʒ]	[']	[ʔ]
												

Image Key

The midsagittal (side-view) images created for this text contain intricate detail. The lips may be rounded or unrounded, positioned together or apart, to indicate various vowel or consonant formations. The soft palate may be lowered or elevated to indicate nasal or oral airflow. The tongue tip may draw near or contact the teeth or alveolar ridge for various consonant formations. The tongue may arch toward the front or back of the mouth in varying degrees, with or without a furrow, for particular vowel formations. The voice may be engaged or silent during articulation.

Voiced consonants are indicated by a sound bar and two jagged vocal fold lines. Voiceless consonants are indicated by two straight vocal fold lines. A large-scale version of the vocal tract is provided for each formation on the instructional pages. Trace the flow of air, paying close attention to the position of the lips, tongue tip, tongue arch, tongue sides, soft palate, and voicing.

UNIT 1:

English Spellings: *a, i, b, p, d, t, g, k, c*

TOPIC	PAGE
Transcription rules	10
Group exercise	10
Individual exercises	11
Answer key	194

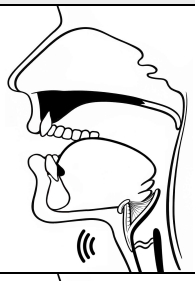
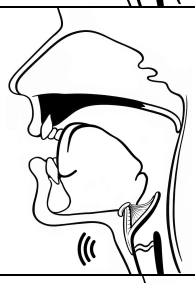




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Vocabulary for the phonetic test following this unit:
www.stmpublishers.com/level2vocab

UNIT 1: Transcription rules for *a, i, p, b, t, d, k, g, c*

SOUNDS	SPELLINGS & SYMBOLS		
	[æ]/[a]	a = [æ]	man [mæn] cat [k^hæt^h]
	[ɪ]/[I]	i, y, ui = [ɪ]	win [wɪn] hymn [hɪm] build [b^hɪłd^h]
	[p^h]/[p]	p, pp = [p^h]	pin [p^hɪn]
	[b^h]/[b]	b, bb = [b^h] (mb = [m])	bib [b^hɪb^h]
	[t^h]/[t]	t, tt = [t^h]	tan [t^hæn]
	[d^h]/[d]	d, dd = [d^h]	dad [d^hæd^h]
	[k^h]/[k]	c, k, ck = [k^h] (kn = [n])	kick [k^hɪk^h]
	[g^h]/[g]	g, gg = [g^h] (gn = [n])	give [g^hɪv]

Note. The consonants above are classified as aspirate. A puff of air is released with the consonant articulation.

Group Exercise: Place the correct phonetic symbol in front of each formation. Trace the airflow pathway.

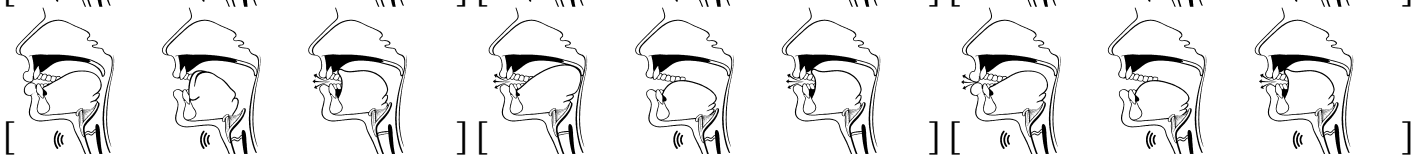
can big pan did back tap

[] [] []

[] [] []

WORKSHEET #1: *a, i, p, b, t, d, k, g, c*

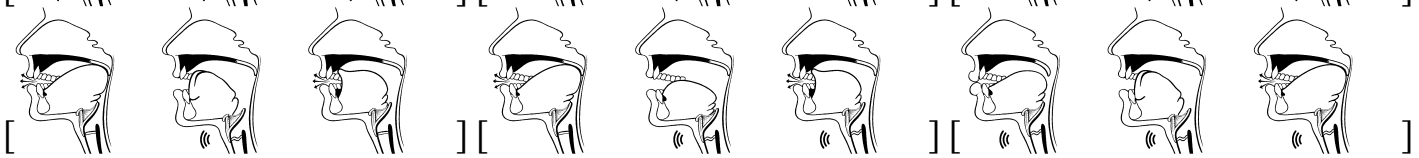
#1 dip nap tag mitt cat bad

[]
[]

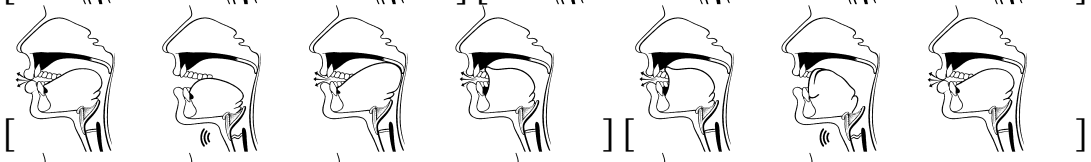
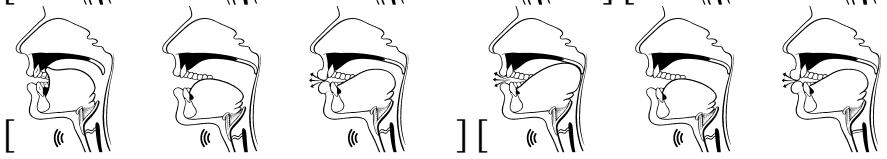
#2 pig band mid camp Tim knack

[]
[]
[]

#3 ban tick Pam kit cad mig

[]
[]

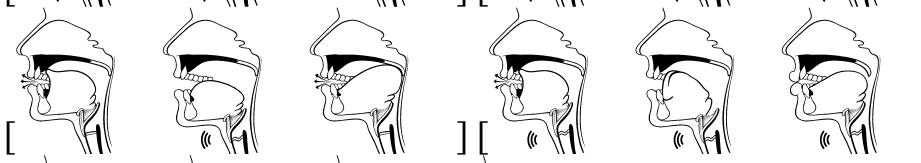
#4 Dan mint pact tip nab gap

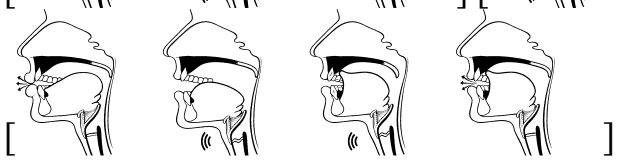
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WORKSHEET #1: *a, i, p, b, t, d, k, g, c*

#5 map Gib bat tack dim pant

[]

[]

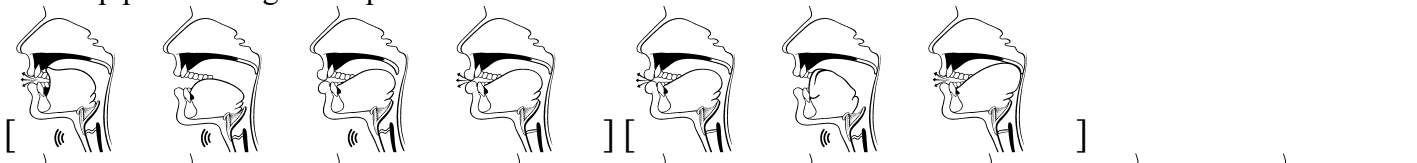
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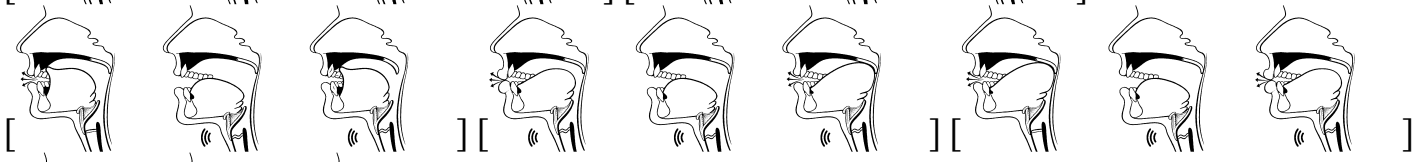
#6 mat Nick gag nip tad bin

[]

[]

#7 damp pick tan bag cab Pip

[]

[]

[]

#8 nag tint dam bid Mack pit

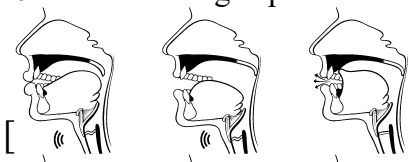
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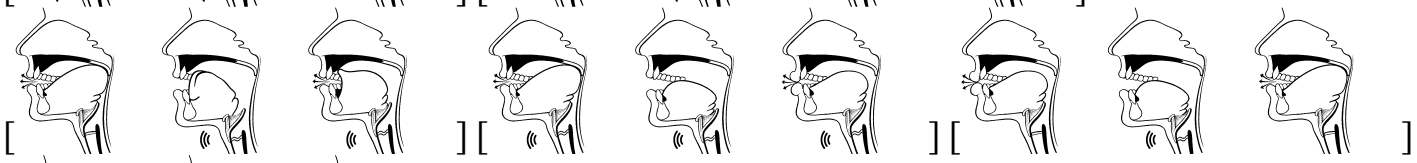
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WORKSHEET #1: *a, i, p, b, t, d, k, g, c*

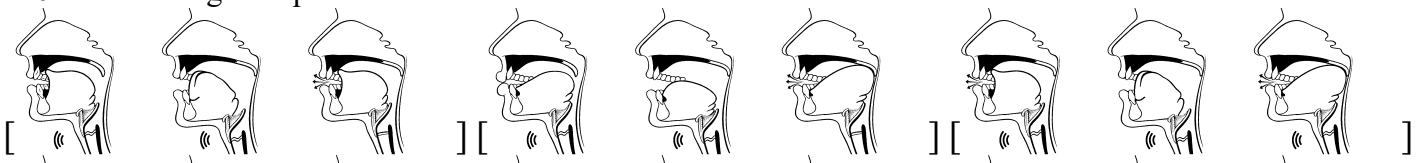
#9 Matt tact kid gab pack bit

[] []

[]

[]

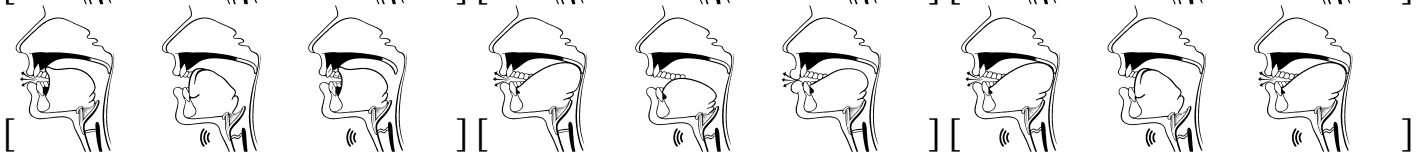
#10 knit Mac dig mad pin tab

[]

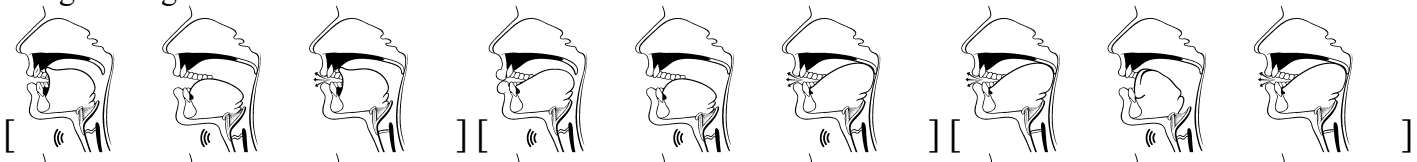
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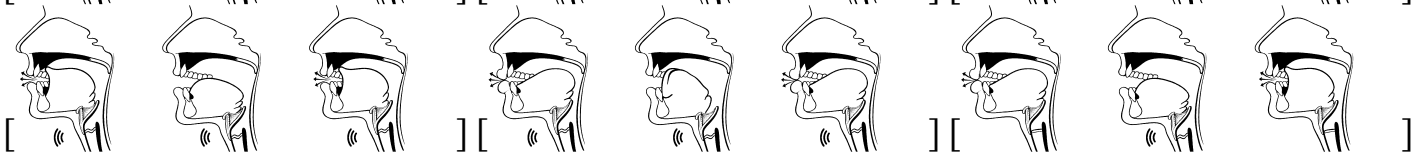
#11 pad Kip dab tin cap gig

[]

[]

#12 gnat mag kick dad bib Pat

[]

[]

UNIT 2

English Spellings: *s* and *x*

TOPIC	PAGE
Transcription rules	16
Group exercise	16
Individual exercises	17
Answer key	195

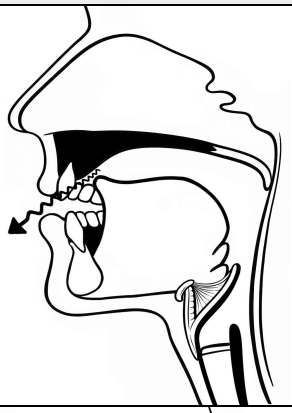
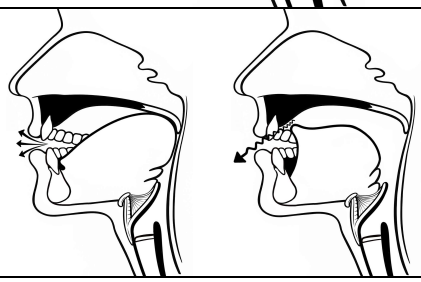




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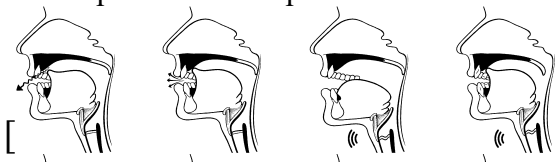
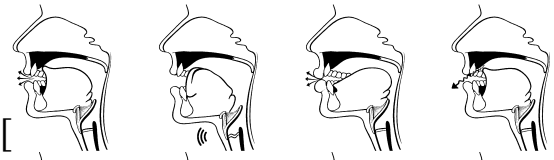
Vocabulary for the phonetic test following this unit:
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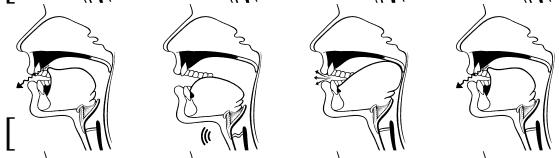
UNIT 2: Transcription rules for *s* and *x*

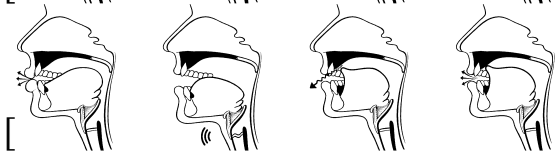
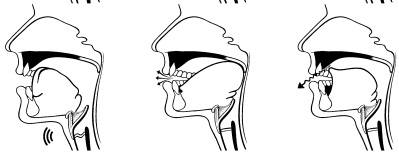
SOUNDS	SPELLINGS & SYMBOLS		
	[s]	s, ss = [s]	sat [sæt^{h}] bliss [b^{h}ɬɪs]
		c + e = [s] c + i = [s]	peace [p^{h}is] cinch [sɪnʧ]
	[k^{h}s] [ks]	x = [k^{h}s]	next [nɛk^{h}st^{h}] box [b^{h}ɑk^{h}s]

Group Exercise: Place the correct phonetic symbol in front of each formation. Trace the airflow pathway.

stand tips sacks mists past six

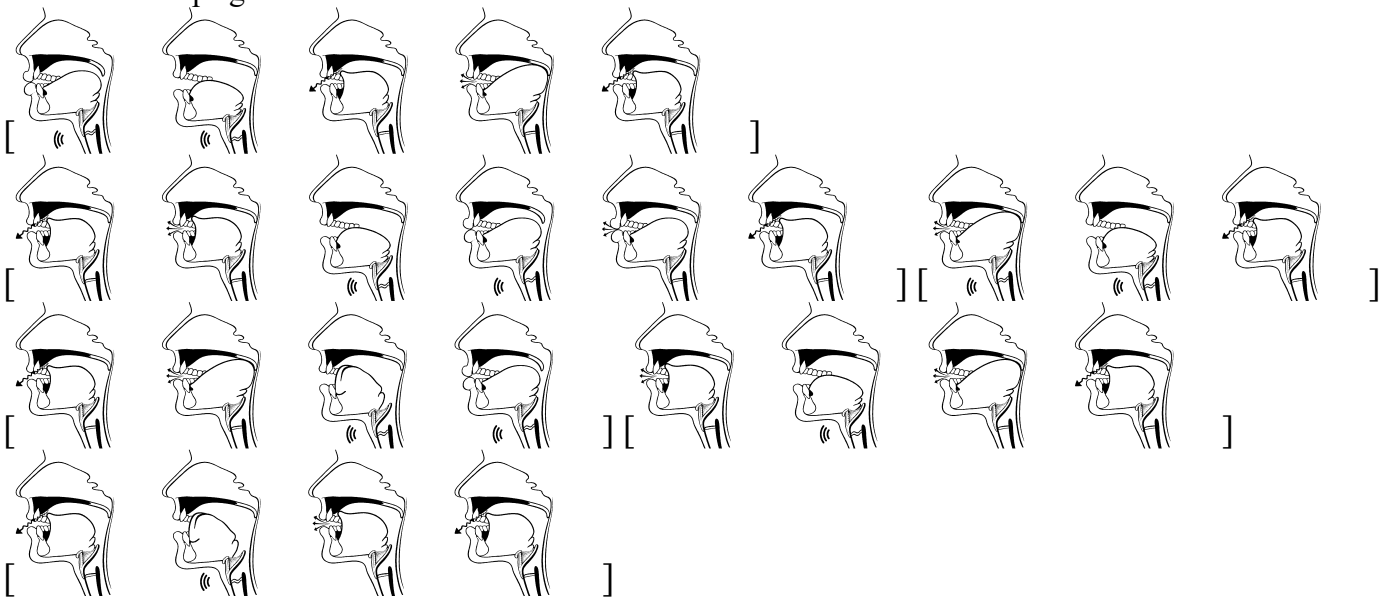
[] []

[] []

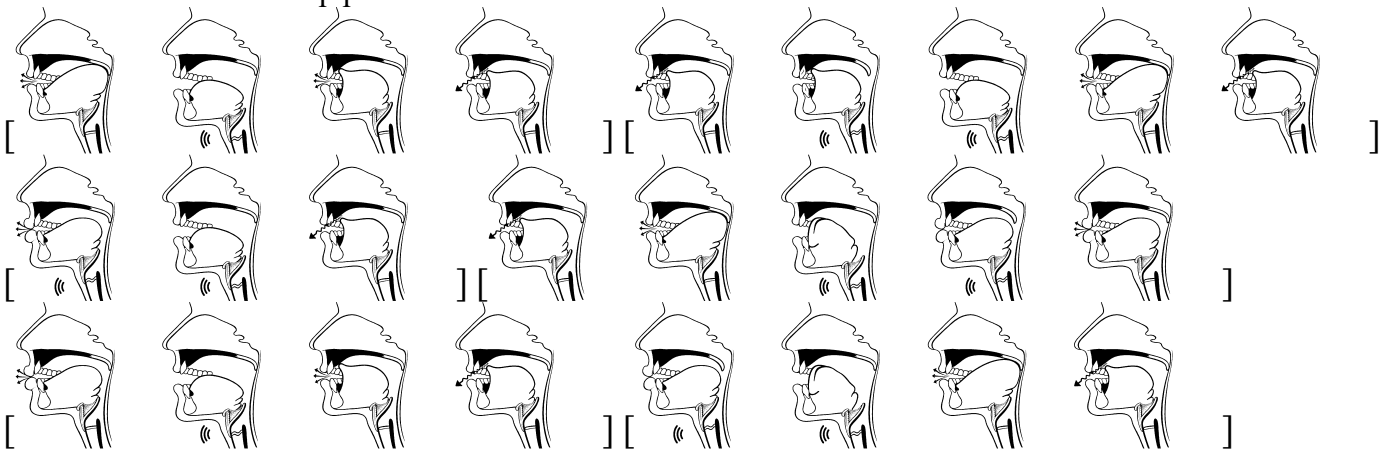
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WORKSHEET #2: *s* and *x*

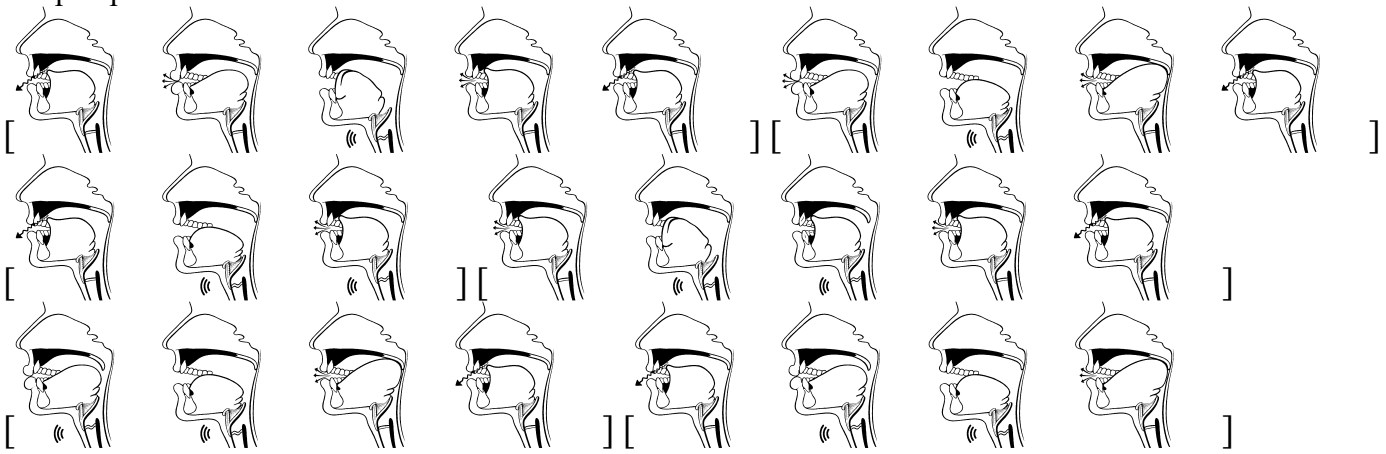
#1 masks stamps gas skim tax sits



#2 cats snacks bass skimp pats mix

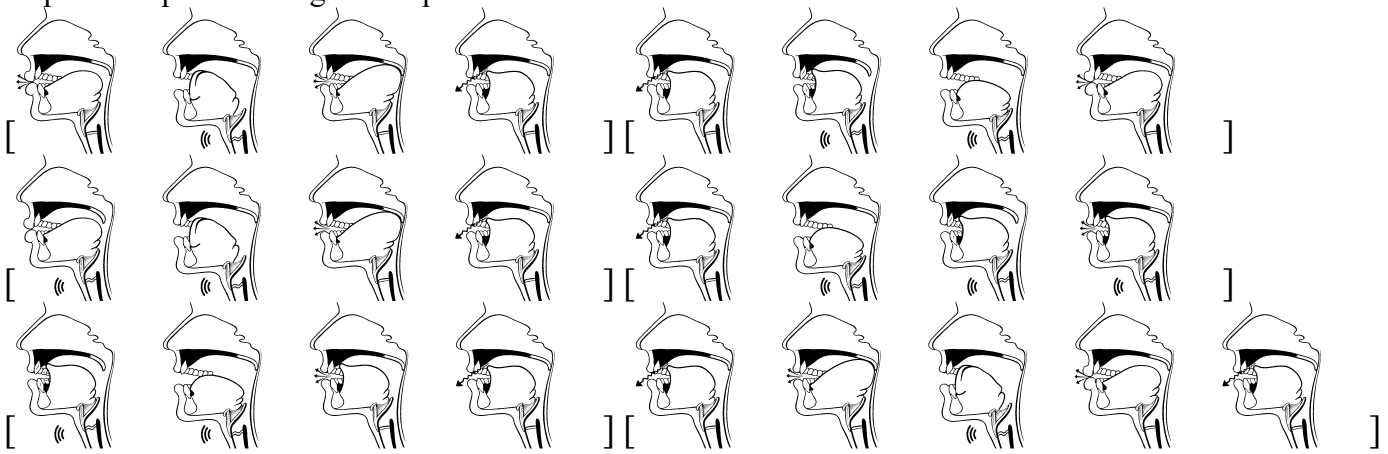


#3 spits packs sad tints Max smack

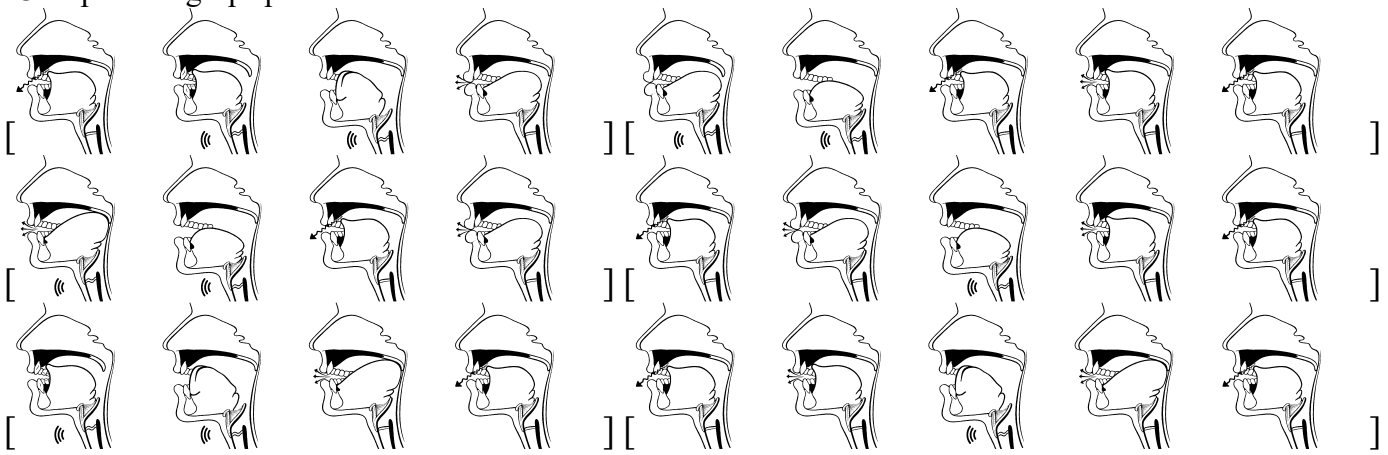


WORKSHEET #2: *s* and *x*

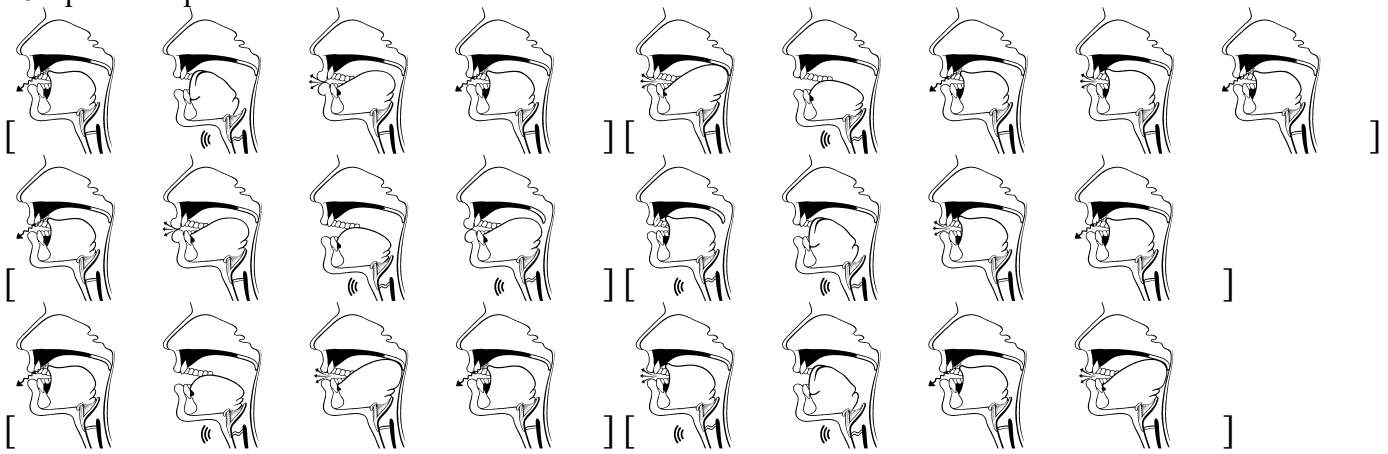
#4 picks snap mix sand gnats skips



#5 snip masts gasp spats nix sticks

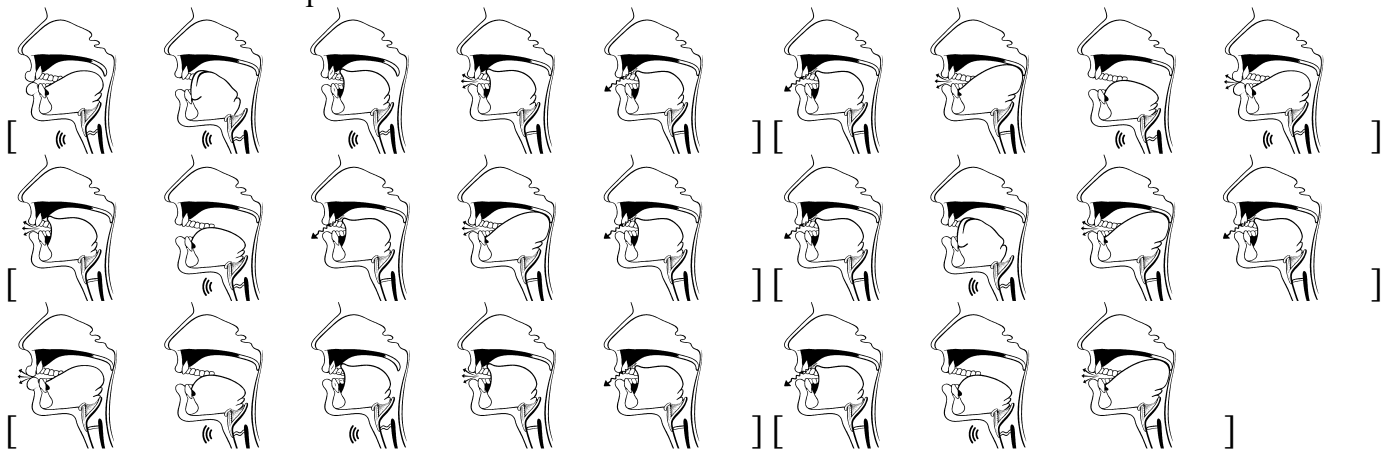


#6 sips casts spam knits sax disk

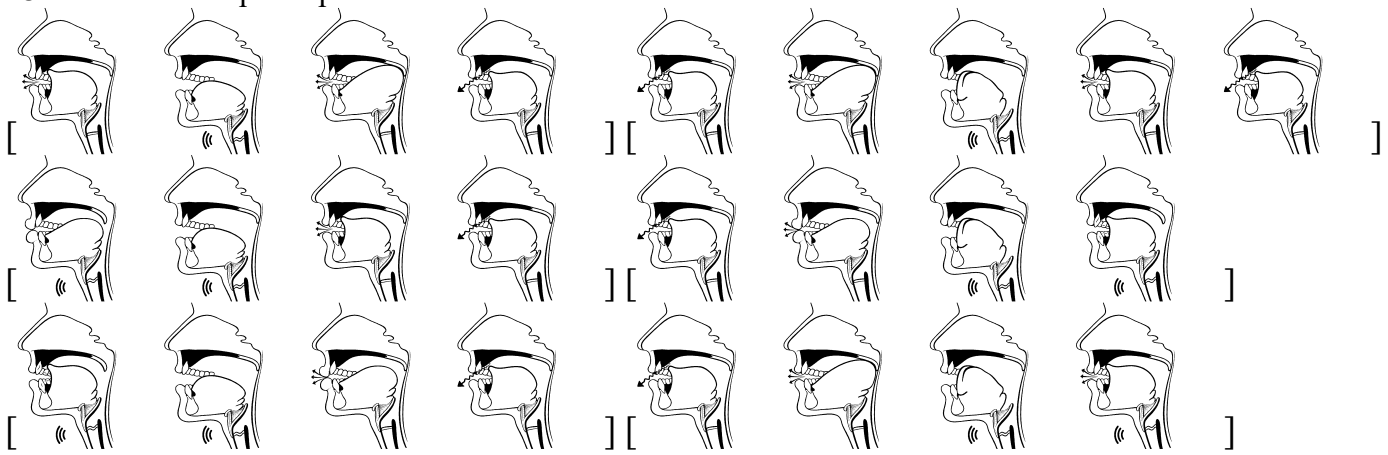


WORKSHEET #2: *s* and *x*

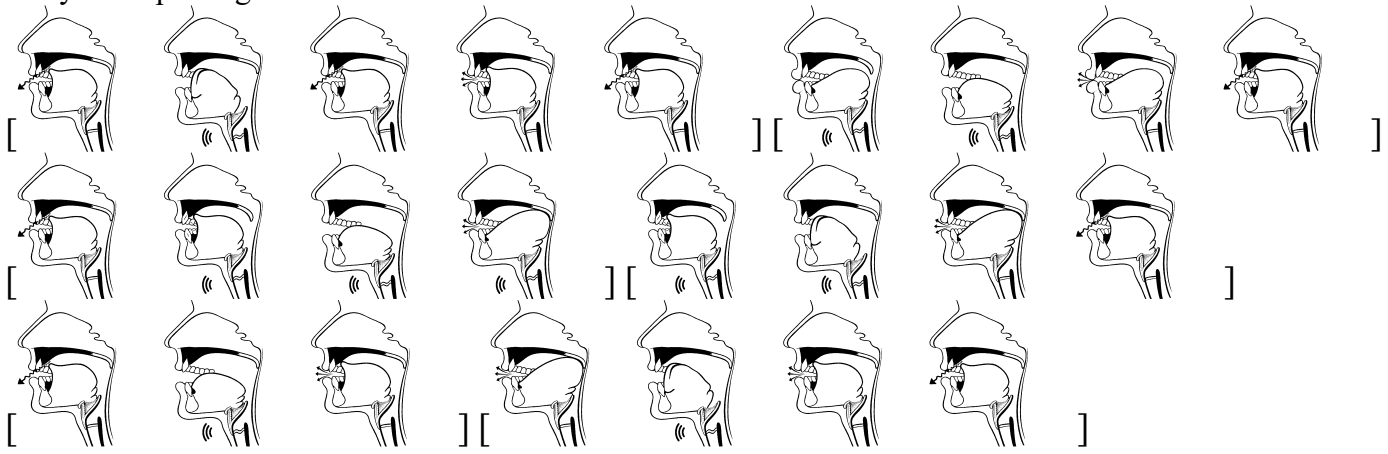
#7 mints scab tasks six pants sack



#8 tax skits mats spin naps skid

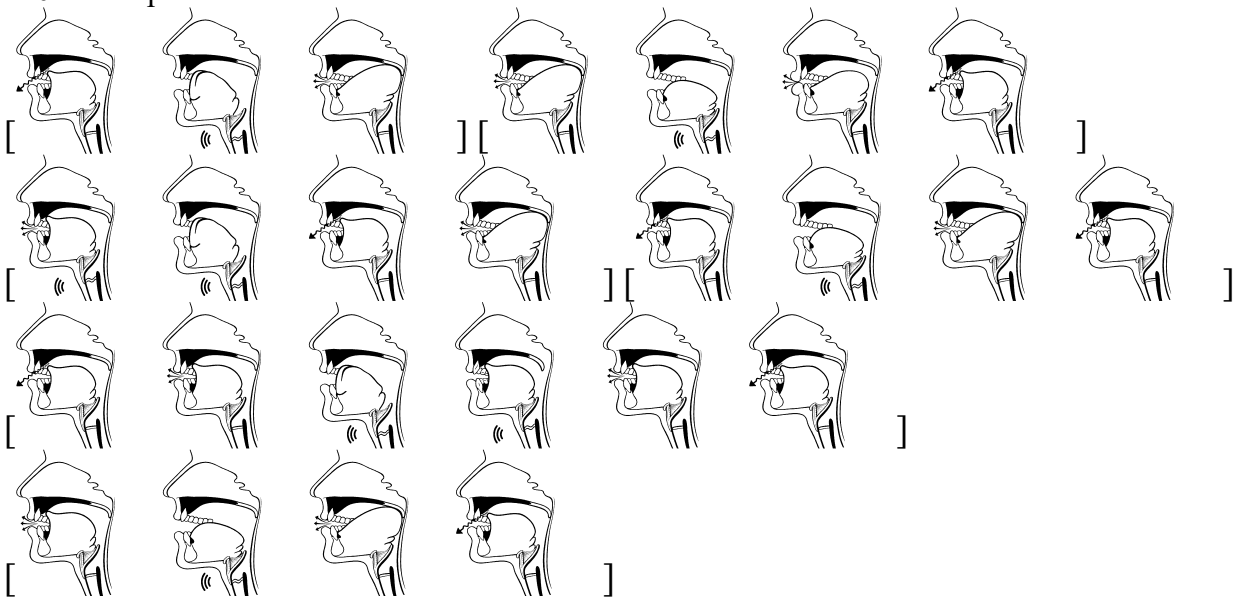


#9 cysts maps snag nix sat kits

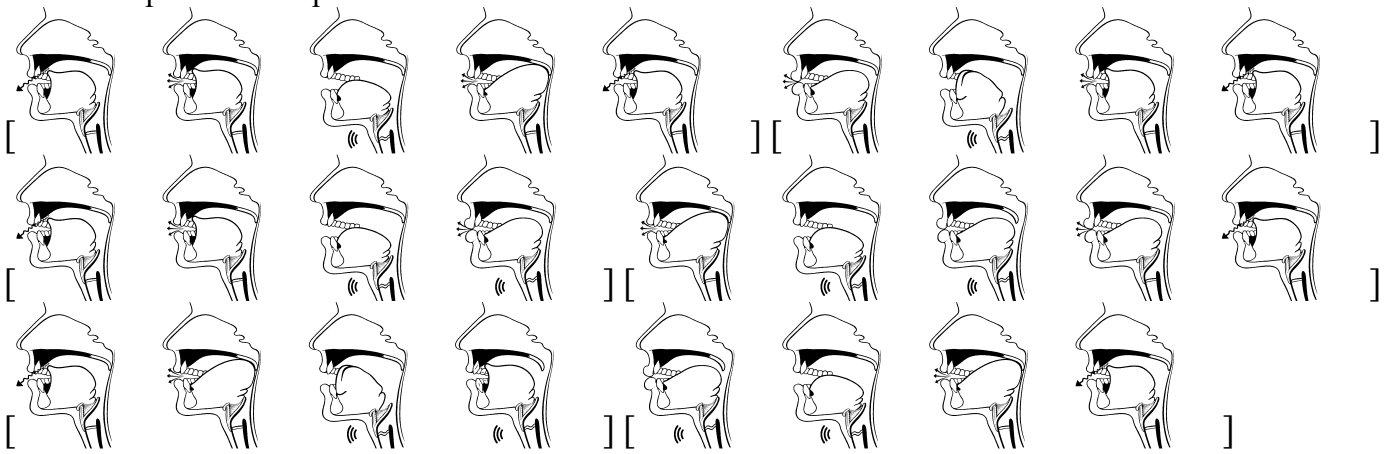


WORKSHEET #2: *s* and *x*

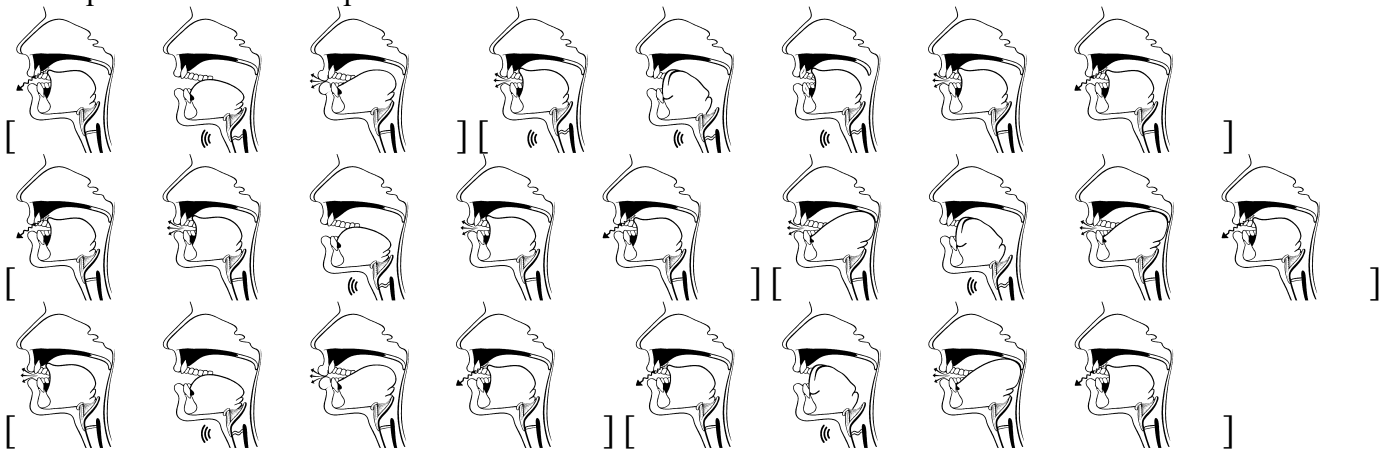
#10 sick caps disc sax stints tacks



#11 stacks pits stab camps skin Max



#12 sap dints stats kicks taps six



ANSWER KEY

Unit 1

Group Exercise

can	[kʰæn]/[kan]
big	[bʰɪgʰ]/[bIg]
pan	[pʰæn]/[pan]
did	[dʰɪdʰ]/[dId]
back	[bʰækʰ]/[bak]
tap	[tʰæpʰ]/[tap]

#1

dip	[dʰɪpʰ]/[dIp]
nap	[næpʰ]/[nap]
tag	[tʰægʰ]/[tag]
mitt	[mɪtʰ]/[mIt]
cat	[kʰætʰ]/[kat]
bad	[bʰædʰ]/[bad]

#2

pig	[pʰɪgʰ]/[pIg]
band	[bʰændʰ]/[band]
mid	[mɪdʰ]/[mId]
camp	[kʰæmpʰ]/[kamp]
Tim	[tʰɪm]/[tIm]
knack	[nækʰ]/[nak]

#3

ban	[bʰæn]/[ban]
tick	[tʰɪkʰ]/[tIk]
Pam	[pʰæm]/[pam]
kit	[kʰɪtʰ]/[kIt]
cad	[kʰædʰ]/[kad]
mig	[mɪgʰ]/[mIg]

#4

Dan	[dʰæn]/[dan]
mint	[mɪntʰ]/[mInt]
pact	[pʰækʰtʰ]/[pakt]
tip	[tʰɪpʰ]/[tIp]
nab	[næbʰ]/[nab]
gap	[gʰæpʰ]/[gap]

#5

map	[mæpʰ]/[map]
Gib	[gʰɪbʰ]/[gIb]
bat	[bʰætʰ]/[bat]
tack	[tʰækʰ]/[tak]
dim	[dʰɪm]/[dIm]
pant	[pʰæntʰ]/[pant]

#6

mat	[mætʰ]/[mat]
Nick	[nɪkʰ]/[nIk]
gag	[gʰægʰ]/[gag]
nip	[nɪpʰ]/[nIp]
tad	[tʰædʰ]/[tad]
bin	[bʰɪn]/[bIn]

#7

damp	[dʰæmpʰ]/[damp]
pick	[pʰɪkʰ]/[pIk]
tan	[tʰæn]/[tan]
bag	[bʰægʰ]/[bag]
cab	[kʰæbʰ]/[kab]
Pip	[pʰɪpʰ]/[pIp]

#8

nag	[nægʰ]/[nag]
tint	[tʰɪntʰ]/[tInt]
dam	[dʰæm]/[dam]
bid	[bʰɪdʰ]/[bId]
Mack	[mækʰ]/[mak]
pit	[pʰɪtʰ]/[pIt]

#9		**#10**	
Matt	[mæt^{h}]/[mat]	knit	[nɪt^{h}]/[nIt]
tact	[t^{h}æk^{h}t^{h}]/[takt]	Mac	[mæk^{h}]/[mak]
kid	[k^{h}ɪd^{h}]/[kId]	dig	[d^{h}ɪg^{h}]/[dIg]
gab	[g^{h}æb^{h}]/[gab]	mad	[mæd^{h}]/[mad]
pack	[p^{h}æk^{h}]/[pak]	pin	[p^{h}ɪn]/[pIn]
bit	[b^{h}ɪt^{h}]/[bIt]	tab	[t^{h}æb^{h}]/[tab]
#11		**#12**	
pad	[p^{h}æd^{h}]/[pad]	gnat	[næt^{h}]/[nat]
Kip	[k^{h}ɪp^{h}]/[kIp]	mag	[mæg^{h}]/[mag]
dab	[d^{h}æb^{h}]/[dab]	kick	[k^{h}ɪk^{h}]/[kIk]
tin	[t^{h}ɪn]/[tIn]	dad	[d^{h}æd^{h}]/[dad]
cap	[k^{h}æp^{h}]/[kap]	bib	[b^{h}ɪb^{h}]/[bIb]
gig	[g^{h}ɪg^{h}]/[gIg]	Pat	[p^{h}æt^{h}]/[pat]

Unit 2

Group Exercise

stand	[st^{h}ænd^{h}]/[stand]
tips	[t^{h}ɪp^{h}s]/[tIps]
sacks	[sæk^{h}s]/[saks]
mists	[mɪst^{h}s]/[mIsts]
past	[p^{h}æst^{h}]/[past]
six	[sɪk^{h}s]/[sIks]

#1		**#2**	
masks	[mæsk^{h}s]/[masks]	cats	[k^{h}æt^{h}s]/[kats]
stamps	[st^{h}æmp^{h}s]/[stamps]	snacks	[snæk^{h}s]/[snaks]
gas	[g^{h}æs]/[gas]	bass	[b^{h}æs]/[bas]
skim	[sk^{h}ɪm]/[skIm]	skimp	[sk^{h}ɪmp^{h}]/[skImp]
tax	[t^{h}æk^{h}s]/[taks]	pats	[p^{h}æt^{h}s]/[pats]
sits	[sɪt^{h}s]/[sIts]	mix	[mɪk^{h}s]/[mIks]
#3		**#4**	
spits	[sp^{h}ɪt^{h}s]/[spIts]	picks	[p^{h}ɪk^{h}s]/[pIks]
packs	[p^{h}æk^{h}s]/[paks]	snap	[snæp^{h}]/[snap]
sad	[sæd^{h}]/[sad]	mix	[mɪk^{h}s]/[mIks]
tints	[t^{h}ɪnt^{h}s]/[tInts]	sand	[sænd^{h}]/[sand]
Max	[mæk^{h}s]/[maks]	gnats	[næt^{h}s]/[nats]
smack	[smæk^{h}]/[smak]	skips	[sk^{h}ɪp^{h}s]/[skIps]

#5

snip	[snɪp^{h}]/[snIp]
masts	[mæst^{h}s]/[masts]
gasp	[g^{h}æsp^{h}]/[gasp]
spats	[sp^{h}æt^{h}s]/[spats]
nix	[nɪk^{h}s]/[nIks]
sticks	[st^{h}ɪk^{h}s]/[stIks]

#6

sips	[sɪp^{h}s]/[sIps]
casts	[k^{h}æst^{h}s]/[kasts]
spam	[sp^{h}æm]/[spam]
knits	[nɪt^{h}s]/[nIts]
sax	[sæk^{h}s]/[saks]
disk	[d^{h}ɪsk^{h}]/[dIsk]

#7

mints	[mɪnt^{h}s]/[mInts]
scab	[sk^{h}æb^{h}]/[skab]
tasks	[t^{h}æsk^{h}s]/[tasks]
six	[sɪk^{h}s]/[sIks]
pants	[p^{h}ænt^{h}s]/[pants]
sack	[sæk^{h}]/[sak]

#8

tax	[t^{h}æk^{h}s]/[taks]
skits	[sk^{h}ɪt^{h}s]/[skIts]
mats	[mæt^{h}s]/[mats]
spin	[sp^{h}ɪn]/[spIn]
naps	[næp^{h}s]/[naps]
skid	[sk^{h}ɪd^{h}]/[skId]

#9

cysts	[sɪst^{h}s]/[sIsts]
maps	[mæp^{h}s]/[maps]
snag	[snæg^{h}]/[snag]
nix	[nɪk^{h}s]/[nIks]
sat	[sæt^{h}]/[sat]
kits	[k^{h}ɪt^{h}s]/[kIts]

#10

sick	[sɪk^{h}]/[sIk]
caps	[k^{h}æp^{h}s]/[kaps]
disc	[d^{h}ɪsk^{h}]/[dIsk]
sax	[sæk^{h}s]/[saks]
stints	[st^{h}ɪnt^{h}s]/[stInts]
tacks	[t^{h}æk^{h}s]/[taks]

#11

stacks	[st^{h}æk^{h}s]/[staks]
pits	[p^{h}ɪt^{h}s]/[pIts]
stab	[st^{h}æb^{h}]/[stab]
camps	[k^{h}æmp^{h}s]/[kamps]
skin	[sk^{h}ɪn]/[skIn]
Max	[mæk^{h}s]/[maks]

#12

sap	[sæp^{h}]/[sap]
dints	[d^{h}ɪnt^{h}s]/[dInts]
stats	[st^{h}æt^{h}s]/[stats]
kicks	[k^{h}ɪk^{h}s]/[kIks]
taps	[t^{h}æp^{h}s]/[taps]
six	[sɪk^{h}s]/[sIks]

Unit 3

Group Exercise

spins	[sp^{h}ɪnz]/[spInz]
bags	[b^{h}æg^{h}z]/[bagz]
sands	[sænd^{h}z]/[sandz]
Nick's	[nɪk^{h}s]/[nIks]
cabs	[k^{h}æb^{h}z]/[kabz]
zig	[zɪg^{h}]/[zIg]

Bibliography

Marshall, Madeleine. *The Singer's Manual of English Diction*. New York: G. Schirmer, Inc., 1953.

Montgomery, Cheri. *A Sketchbook Atlas of the Vocal Tract*. Nashville, TN: S.T.M. Publishers, 2025.

Ross, W. M. T. *Voice Culture and Elocution*. New York: The Baker & Taylor Co., 1890.