

Prof Stromswold: Psych 351 Self-Exam for Units 1 & 2: ANSWERS

1. Transcribe the following sentence phonetically: "Today is Monday." tudej iz mʌndej
2. Fill out the following chart describing the articulatory features for the following English sounds. Underline the letter(s) in the word that corresponds to the sound indicated by the phonetic symbol.

Phonetic Symbol	Word containing	Voicing	Nasal	Point of articulation	Manner of articulation
ŋ	si <u>ng</u>	yes	yes	velar	nasal stop
v	<u>v</u> oice	yes	no	labiodental	fricative
j	<u>y</u> ellow	yes	no	palatal	glide
t	<u>t</u> op	no	no	alveolar	oral stop
dʒ	ju <u>dg</u> e	yes	no	palatal	affricate
θ	<u>th</u> igh	no	no	interdental	fricative

3. Give an exhaustive list of all of the feature(s) that the following sets of sounds have in common?
Example: [p] [b] [m] Feature: bilabial stop consonant

- a. [k] [ŋ] [w] [g] velar
- b. [s] [f] [θ] [z] [v] [ʒ] [ʃ] [ð] fricative
- c. [g] [d] [b] [l] [r] [w] [j] [v] [z] [ð] voiced
- d. [θ] [k] [h] [t] [s] [f] [p] voiceless

4. Write the IPA symbol that corresponds to each of the following articulatory feature descriptions, and then give an English word that contains the sound.

Example: voiced alveolar stop [d] dog

- a. voiceless affricate [tʃ] chew
- b. palatal glide [j] yes
- c. voiced velar glide [w] wet
- d. voiceless labiodental fricative [f] fan
- e. voiced interdental fricative [ð] then
- f. alveolar nasal [n] nap
- g. voiced liquid [l] lap or [r] rap

- h. voiced, velar oral stop [g] get
- i. voiceless bilabial stop (unaspirated) [p] spin

5. In each of the following pairs of words, the bold underlined sounds differ by one or more articulatory properties (features). State the differences and, in addition, state what properties they have in common. Example: sip- zip The *s* in *sip* is unvoiced
 The *z* in *zip* is voiced
 Both are alveolar fricatives

- a. ins-outs: The *s* in *ins* is voiced, the *s* in *outs* is voiceless. Both are alveolar fricatives
- b. leaf-leaves: The *f* in *leaf* is voiceless, the *v* in *leaves* is voiced. Both are labiodental fricatives
- c. inconceivable-impossible: The *n* in *inconceivable* is alveolar, the *m* in *impossible* is bilabial Both are nasal stops.
- d. either-ether: *th* in *ether* is voiceless; *th* in *either* is voiced. Both are interdental fricatives.
- e. goat-coat: *g* in *goat* is voiced, *k* in *coat* is voiceless. Both are velar oral stops.

6. The following sets of minimal pairs show that English /p/ and /b/ contrast in initial, medial and final positions: Initial: pit/bit Medial: rapid/rabid Final: cap/cab

Find similar sets of minimal pairs for the following pairs of consonants

sounds	Initial	Medial	Final
/p/ -/f/	pail/fail	copy/coffee	leap/leaf
/s/ -/ʃ/	sell/shell	masses/mashes	lease/leash
/tʃ/ -/dʒ/	chin/gin	etches/edges	rich/ridge
/s/ -/z/	sip/zip	fussy/fuzzy	mace/maze
/k/ -/g/	cold/gold	mucky/muggy	tug/tuck

7-8. Consider the following data from Finnish:

- a. [ku:zi] 'six'
- b. [kudot] 'failures'
- c. [kate] 'cover'
- d. [katot] 'roofs'
- e. [kade] 'envious'
- f. [ku:si] 'six'
- g. [li:sa] 'Lisa'
- h. [madon] 'of a worm'
- i. [maton] 'of a rug'
- j. [ratas] 'wheel'
- k. [li:za] 'Lisa'
- l. [radan] 'of a track'

- 7a. Do [s] and [z] represent different phonemes? No
- 7b. Are [s] and [z] in complementary distribution? No
- 7c. Are [s] and [z] in free variation? Yes
- 7d. State the distribution of [s] and [z]: [s] and [z] occur in the same words freely, as shown by the pairs [li:sa] and [li:za] for "Lisa" and [ku:si] and [ku:zi] for "six"

- 8a. Do [d] and [t] represent different phonemes? Yes
- 8b. Are [d] and [t] in complementary distribution? No
- 8c. Are [d] and [t] in free variation? No
- 8d. State the distribution of [d] and [t]. [d] and [t] are separate phonemes, occurring in the same environments in different words, as shown by the minimal pairs [madon] "of a worm" - [maton] "of a rug" and [kate] "cover" - [kade] "envious"

9. Write the English word that corresponds to the following phonetic transcriptions (Use pp 119-121 of Gleason & Ratner book for the vowels!)

- a. [gret] great or grate
- b. [ju] you
- c. [sit] seat
- d. [but] boot
- e. [swit] sweet or suite
- f. [mjuwl] mule
- g. [mit] meet or meat
- h. [nIt] knit
- i. [do] dough
- j. [frɛt] fret

For question 10, fill in the following chart

The key here is to be CONSISTENT. You can make up the facts about your systems

Design Feature	Definition/Description	System with feature	System without feature
Vocal/Auditory	Self-explanatory	English	Bee dance
Broadcast/received	Self-explanatory	English	Panting dog
Rapid fading	Self-explanatory	English	Written text
Interchangeable	speaker/receiver can interchange roles	English	Bee dance
Total feedback	speaker gets total feedback of message	English	Bee dance
Specialization	just for communication	English	Panting dog
Semanticity	dog means "dog"	English	Panting dog
Arbitrariness	not iconic	English	Panting dog
Discreteness	discrete units	English	Panting dog
Displacement	Can talk about things not present	English	Panting dog
Productivity	Infinite # of messages	English	Panting dog
Trad.transmission	Taught	English	Bee dance
Dual patterning	meaningless & meaningful levels	English	Panting dog