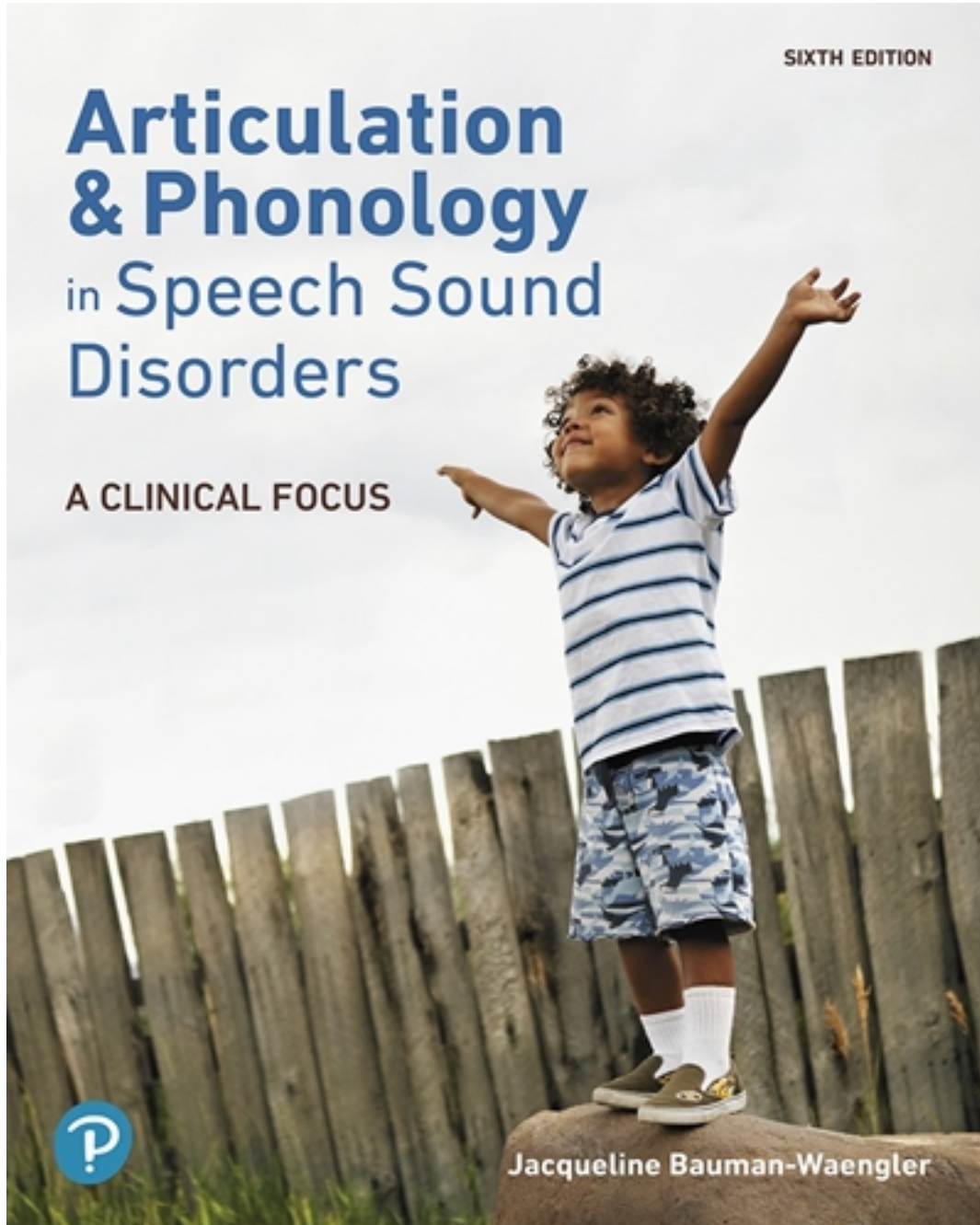


# Test Bank for Articulation and Phonology in Speech Sound Disorders 6th Edition by Bauman Waengler

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# Test Bank



# **Instructor's Manual and Test Bank**

*For*

## **Articulation and Phonology in Speech Sound Disorders: A Clinical Focus**

**Sixth Edition**

**Jacqueline Bauman-Waengler, Speech/Language Specialist**

Boston Columbus Indianapolis New York San Francisco Hoboken

Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montreal Toronto

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ISBN-10: 0-13-518491-6

ISBN-13: 978-0-13-518491-2



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# Chapter 1

## Clinical Framework:

### Basic Terms and Concepts

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#### LEARNING OBJECTIVES

When you have finished this chapter, you should be able to:

- Define communication, speech, and language.
  - Define disorders of communication, speech, and language.
  - Distinguish between articulation and speech sounds (phones), phonology, and phonemes.
  - Define speech sound disorder and understand its relationship to articulation and phonological disorders.
  - Classify speech sound disorders according to specific parameters.
- 

#### CHAPTER OVERVIEW

This chapter introduced the reader to several fundamental terms that are important when assessing and treating speech sound disorders. Introductory terms such as communication, speech, and language were defined based on their normal processes and what a disorder of each would entail.

Language divisions of phonology, morphology, syntax, semantics, and pragmatics provided a further delineation which could aid the reader in understanding these basic concepts. Speech sound form versus linguistic function were used to distinguish between the speech sound and the phoneme. Also new to this chapter is the definition of Speech Sound Disorders (ASHA practice portal, n.d. American Speech-Language-Hearing Association).

Based on this definition, a differentiation between speech sound, articulation, and phonological disorders were presented as well as nomenclature that is widely used in clinic and research relative to these terms.

New to this chapter are two ways that speech sound disorders can be classified. The first is based on subtypes and etiological factors (Shriberg et al., 2010) and the second is a differential diagnosis system which was proposed by Dodd (1995, 2005). Both of these systems were examined, their clinical applicability discussed.

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## PRESENTATION OUTLINES

1. Review basic terms and concepts, such as communication, language, and speech. These terms were defined according to their professional usage, for example, as referenced by the American Speech-Language-Hearing Association (n.d.), and their practical application.
2. Examine the subdivisions of language: phonology, morphology, syntax, semantics, and pragmatics. Definitions were given as well as the application of these terms to the specific areas of language.
3. Define the broader term communication disorder as well as speech sound and language disorder. These divisions will be relevant within our clinical practice.
4. Introduce the concepts of articulation and speech sounds versus phonology and phonemes. This is a delineation which will be important in the discussion of speech sound disorders as well as phonological disorders.
5. Define and delineate the phoneme, allophone, phonotactics and minimal pairs as they apply to phonology.
6. Classify speech sound disorders according to subtypes and etiological factors (Shriberg et al., 2010) and a differential diagnosis system (Dodd, 1995, 2005).
7. Define several terms that are used in clinical and research settings to discuss speech sounds and speech sound disorders.

---

## KEYWORD DEFINITIONS

**Communication** is any act in which information is given to or received from another person concerning facts, thoughts, ideas, and feelings (p. 1). Communication refers to any way that we convey information from one person to another.

**Speech** is the communication or expression of thoughts in spoken language (p. 1). It is oral, verbal communication. Speech can be further divided into articulation, fluency, and voice.

**Language** can be defined as a complex and dynamic system of conventional symbols that is used in various modes for thought and communication (p. 3). It is rule governed, includes variability and change, and can be used to communicate in many different ways. Language is described by at least five linguistic parameters: phonology, morphology, syntax, semantics, and pragmatics.

**Phonology** is the study of the sound system of language, and includes the rules that govern its spoken form (p. 2). Phonology a) analyzes which sound units are within a language, b) examines how these sounds are arranged, their systematic organization and rule system.

**Morphology** studies the structure of words; it analyzes how words are built out of morphemes, the basic unit of morphology (p. 2).

**Morpheme** is the smallest meaningful unit of a language (p. 2).

**Syntax** consists of organizational rules denoting word, phrase, and clause order. It also examines the organization and relationship between words, word classes, and other sentence elements (p. 2).

**Semantics** is the study of linguistic meaning and includes the meaning of words, phrases, and sentences (p. 2).

**Pragmatics** is the study of language used to communicate within various situational contexts (p. 2). Pragmatics examines language use in context.

**Communication disorder** is the impairment in the ability to receive, send, process, and comprehend concepts including verbal, nonverbal, and graphic symbol systems (p. 3).

**Speech disorder** indicates oral, verbal communication that is so deviant from the norm that it is noticeable or interferes with communication (p. 3). According to the American Speech-Language-Hearing Association (1993), speech disorders are divided into articulation, fluency, and voice disorders.

**Language disorder** refers to impaired comprehension and/or use of spoken, written, and/or other symbol systems (p. 3). A language disorder may involve one or more of the following areas: phonology, morphology, syntax, semantics, and pragmatics.

**Hearing impairment** results from impaired auditory sensitivity (p. 3). Individuals with hearing impairments are typically classified as either hard of hearing or deaf.

**Central auditory processing disorder** result in difficulties with information processing of auditory signals that are not related to impaired sensitivity of the auditory system.

**Articulation** refers to the totality of motor processes that result in speech (p. 4). It represents a highly complex activity in which - respiratory, phonatory, resonatory, and articulatory mechanisms included - as many as 100 muscles may be involved. In the articulatory mechanism alone up to 22 muscles may alter their degree of tension many times during the utterance of a simple sentence (Hanson, 1983). The sequencing and timing of speech muscle activity is an integral portion of articulation.

**Speech sounds** represent physical sound realities; they are end products of articulatory motor processes (p. 5).

**Phones** are another name for speech sounds (p. 5). They also represent physical sound realities

**Phoneme** is the smallest linguistic unit that is able, when combined with other such units, to establish word meanings and distinguish between them (p. 5). For example, in General American English /p/ and /s/ are phonemes because they function to distinguish between words such as "pat" and "sat". On the other hand, in General American English the aspiration of stop/plosives does not have phonemic relevance. The two words [p<sup>h</sup>it] and [pit], in spite of their differences in production, do not result in two words with different meanings. However, aspiration versus nonaspiration of stop/plosives is phonemically relevant in many languages. For example, in Swahili [pa] is the word for "climb", however, with an aspirated [p<sup>h</sup>a], signifies the name for a specific type of antelope. As linguistic units, phonemes characterize how speech sounds function within a language to differentiate word meaning. In everyday usage, professionals often do not distinguish between the terms speech sound and phoneme. One could hear someone say that they transcribed a particular phoneme, for example. However, theoretical and definitional differences do exist; these terms represent two distinct concepts. While the technical term speech sound stands for the physical reality of sound form, the term phoneme refers exclusively to how these forms function within a given language as linguistic units to differentiate between word meanings.

**Allophones** are variations in phoneme realizations that do not change the meaning

of a word when they are produced in differing contexts (p. 5).

**Phonotactics** refers to the description of the allowed combinations of phonemes and in a particular language (p. 6). Both the inventory of phonemes and their possible combinations are unique and vary according to the particular language.

**Phonetic variation** is another label for speech sound (p. 7).

**Minimal pairs** are two words that differ in only one phoneme value (p. 7). The words “cat” and “hat” are minimal pairs.

**Speech disorder** exists when difficulties making certain speech sounds continues past an age-appropriate time frame (pp. 7-8)

**Articulation disorder** as a subcategory of a speech disorder, is atypical production of speech sounds characterized by substitutions, omissions, additions, or distortions. It designates difficulties with the motor production aspects of speech, or an inability to produce certain speech sounds (pp. 8-9).

**Phonetic inventory** is a list of all phones within a child’s inventory (p. 9). It includes the sounds and their variations, thus, typically the phonetic marker and any diacritics noted.

**Phonological disorder** refers to impaired comprehension of the sound system of a language and the rules that govern the sound combinations (p. 9). Several reports (for example Fey, 1992; Pollack and Rees, 1972) have documented that children with phonological disorders can say the particular sound (thus, they do not have difficulties with the actual speech sound production) but, for some reason, do not understand the pattern of phoneme usage within the language system.

**Phonemic inventory** is the inventory of all phonemes within a child’s system (p. 9). These are phonemes which are used to contrast and differentiate meaning for the child.

**Phonotactic constraints** refers to a limited use of phonemes and the phonemes/phones that are possible in word positions (p. 9).

**Constraints** are any patterns noted that seem to limit or restrict the productional possibilities of our clients (p. 9). For example, if a child uses a correct [s] at the beginning of a word but deletes [s] at the end of a syllable or word, this would be considered a constraint.

## LEARNING MATERIALS: ANSWERS TO QUESTIONS

### FROM TEXTBOOK THINK CRITICALLY (PAGE 16)

The following small speech sample is from Tara, age 4;3.

rabbit	[wæbət]	ready	[wɛdi]
feather	[fɛdɜ]	arrow	[ɛwou]
green	[gwin]	toothbrush	[tutbwɜʃ]

this	[ðɪs]	thinking	[θɪŋkɪŋ]
that	[ðæt]	round	[waʊnd]
rope	[wɒp]	bridge	[brɪdʒ]
rooster	[wʊstə]	street	[stri:t]
bathing	[beɪdɪŋ]	thin	[θɪn]
nothing	[nʌtɪŋ]	them	[ðem]
bath	[bæt]	breathe	[bri:t]

Which speech sound errors are noted in this sample?

**Answer:** Sounds in error are [ɹ], [θ], and [ð]. The [ɹ] is in error at the beginning of a word and in consonant clusters with [ɹ]. However, the vocalic [ə] is produced correctly. The [θ] and [ð] errors occur within a word or at the end of a word. Both [θ] and [ð] are produced correctly at the beginning of a word.

Which sounds are substituted for the sounds in error?

**Answer:** Substituted sounds are [w] for [ɹ], [d] for [ð], and [t] for [θ].

Can any phonotactic restraints be noted in the correct productions of “th” and “r”?

**Answer:** The [θ] and [ð] are produced correctly at the beginning of a word, however, [d] and [t] are used as substitutions when the sound is in the middle of a word or at the end of the word. The [w] is used as a substitution for [ɹ] initiating a syllable and in consonant clusters. It should be noted that the central vowel with r-coloring [ə] is produced correctly.

Based on this limited information, do you think the child has an articulation or a phonological disorder? Why?

**Answer:** An articulation disorder. The [ɹ] is a later developing sound and could be an articulation error. The fact that the child can produce the central vowel with r-coloring would support the fact that this sound is gradually appearing in Tara’s speech. Although phonotactic constraints can be noted on [θ] and [ð] productions, these errors could also be articulation-based. It is an easier task in the speech sound development of children to produce the sound correctly at the beginning, as opposed to the middle or end of words.

## ADDITIONAL LEARNING MATERIALS

### DISCUSSION TOPICS AND CLINICAL APPLICATIONS

1. Discuss why the child's production of minimal pairs could be used in determining a phonological disorder?
2. What information could be a portion of the phonemic inventory? Discuss how you would gather information about the inventory of phonemes and phonotactic constraints.
3. What type of material could you use to examine the phonotactics of a child's inventory if the child has difficulties with the production of "s" in consonant clusters? Which words would test the possible phonotactics of s-clusters in American English occurring at the beginning and end of syllables?
4. Based on the results of a standardized speech assessment and/or a spontaneous speech sample have the students determine the phonetic inventory, the phonemic inventory, and the phonotactics of a child with an articulatory or phonological impairment. Note any patterns or constraints which are demonstrated.
5. Give one example of what could be assessed within each of the five areas of language (phonology, morphology, syntax, semantics, and pragmatics).
6. The following is a portion of a language sample from Jeannette, age 4;6.

I want some jelly beans and some chocolate.

[aɪ wʌn sʌm ʒɛli bɪns æn sʌm sʌklət]

I don't know.

[aɪ daʊn noʊ]

I don't know who that is.

[aɪ daʊn noʊ hu dæt ɪs]

Ninja turtles fight the evil Ninjas.

[nɪnʒə tʊtəls faɪt də ɪvəl nɪnʒəs]

Then Shredder just comes.

[ðɛn ʃɹɛdər ʒʌst kʌms]

And all of these other things.

[æn ɔl əf dis ʌvə tɪŋs]

- a. Write down the phonemic inventory of Jeanette using both the vowels and consonants that are presented in this small sample.
- b. Note which vowels and consonants that are normally a portion of the American English inventory are not demonstrated in Jeanette's speech sample.
- c. Make a list of the words that Jeanette pronounces differently than would be expected when compared to the adult model of pronunciation.
- d. Note any consistent patterns of substitution of one sound for another.

## MULTIPLE CHOICE QUESTIONS

1. The totality of motor processes involved in the planning and execution of sequences of overlapping gestures which result in speech refers to
  - a) phonology
  - b) phonetics
  - c) articulation
  - d) phonotactics
2. The subdivision of language dealing with the meaning of words, phrases, and sentences is
  - a) morphology
  - b) syntax
  - c) semantics
  - d) pragmatics
3. The end products of articulatory motor processes that represent physical sound realities are called
  - a) phonetic variations
  - b) speech sounds
  - c) allophonic variations
  - d) all of the above
4. The repertoire of phonemes which are used contrastively by an individual is the
  - a) phonetic inventory
  - b) phonemic inventory
  - c) phonotactics of a language
  - d) allophonic variations of a language
5. The clusters [sk] and [ks] cannot occur in the same word positions in General American English. This is an example of the
  - a) phonetic inventory
  - b) phonemic inventory
  - c) phonotactics of a language
  - d) allophonic variations of a language



6. Minimal pairs are exemplified by which of the following set of words?
  - a) [hit] and [sit]
  - b) [sit] and [sut]
  - c) [lun] and [mun]
  - d) all of the above
7. Which one of the following concepts would be associated with the assessment of a phonological impairment?
  - a) phonemic inventory
  - b) phonotactics
  - c) phonotactic constraints
  - d) all of the above would be important in assessing a phonological impairment
8. Articulation disorders reflect difficulties with
  - a) central linguistic abilities
  - b) phoneme function
  - c) relatively peripheral motor processes
  - d) phonemes and phoneme patterns within a particular language
9. Communication disorders include which of the following?
  - a) speech disorders
  - b) language disorders
  - c) hearing disorders
  - d) all of the above
10. Which one of the following is *not* a typical phonotactic possibility of General American English?
  - a) [sk] at the beginning of a word or syllable
  - b) [ŋz] at the end of a word or syllable
  - c) [lt] at the beginning of a word or syllable
  - d) [mp] at the end of a word or syllable

## TRUE/FALSE QUESTIONS

1. Articulation difficulties result from an impairment of central linguistic abilities.
2. Three subdivisions of language include pragmatics, articulation, and syntax.
3. Phonetic variations and allophonic variations represent phonemes.
4. Speech sounds and phonemes represent exactly the same concepts.
5. Impaired comprehension of the sound system of a language and the rules that govern the sound combinations represent a phonological disorder.
6. Speech sounds are transcribed using brackets [ ] while phoneme values are symbolized by slanted lines or so-called virgules / /.
7. The Differential Diagnosis System can adequately be used to classify speech sound disorders.
8. Phonology is not related to the other constituents of the language system such as morphology, syntax, semantics, or pragmatics.



9. The phonetic inventory includes all the speech sounds the individual uses including their specific production features.
10. Articulation and phonological disorders never co-occur.

## SHORT ANSWER QUESTIONS

1. Define communication disorder.
2. Explain why a child with “s” difficulties, might have problems in the area of morphology.
3. Contrast the terms speech sound and phoneme.
4. Contrast the terms articulation disorder versus phonological disorder.
5. Write a brief definition and give an example of each of the following terms: phonology, morphology, syntax, semantics, and pragmatics.

## ESSAY QUESTIONS

1. Discuss how articulation disorders represent difficulties with the physical production aspects of speech sounds. Utilize the terms "articulation, "physical sound realities", and "speech sounds" when developing your discussion.
  2. Discuss how phonological disorders represent difficulties with the linguistic function of phonemes. Utilize the terms "phoneme" and "phonology" when developing your discussion.
  3. Discuss the differences between a language and a speech disorder. Give specific examples for each.
  4. Articulation errors are referenced by a child's age. Referring to the definition and characteristics of the term “articulation” state why this is a meaningful reference point.
  5. Briefly discuss the differences between the Speech Disorders Classification System (Shriberg et al., 2010) and the Differential Diagnosis System (Dodd, 1995, 2005).
-

## REFERENCES

- American Speech-Language-Hearing Association. (n.d.). *Speech sound disorders: Articulation and phonology* (Practice Portal). Retrieved from <http://www.asha.org/Practice-Portal/Clinical-Topics/Articulation-and-Phonology>
- American Speech-Language-Hearing Association. (1993). *Definitions of communication disorders and variations* [Relevant Paper]. Retrieved from <http://www.asha.org/policy>
- Dodd, B. (1995). *Differential diagnosis and treatment of children with speech disorder*. London, UK: Whurr.
- Dodd, B. (2005). *Differential diagnosis and treatment of children with speech disorder* (2nd ed.). London, UK: Whurr.
- Fey, M. (1992). Clinical forum: Phonological assessment and treatment. *Articulation and Phonology: Inextricable constructs in speech pathology. Language, Speech, and Hearing Services in Schools*, 23, 225-232.
- Hanson, M. L. (1983). *Articulation*. Philadelphia: W. B. Saunders.
- Pollack, E., & Rees, N. (1972). Disorders of articulation: Some clinical applications of distinctive feature theory. *Journal of Speech and Hearing Disorders*, 37, 451-461.
- Shriberg, L. D., Fourakis, M., Hall, S. D., Karlsson, H. B., Lohmeier, H. I., McSweeney, J. L., . . . Wilson, D. (2010). Extensions to the speech disorders classification system (SDCS). *Clinical Linguistics and Phonetics*, 24, 795–824.

# Chapter 1

## Clinical Framework

### Basic Terms And Concepts

---

#### DISCUSSION TOPICS AND CLINICAL APPLICATIONS

1. Discuss why the child's production of minimal pairs could be used in determining a phonological disorder? See pages 7 minimal pairs and pages 9-10 phonological disorder.
2. What information could be a portion of the phonemic inventory? Discuss how you would gather information about the inventory of phonemes and phonotactic constraints. See page 9, phonemic inventory and phonemic constraints.
3. What type of material could you use to examine the phonotactics of a child's who has difficulties with the production of "s" in consonant clusters? Which words would test the possible phonotactics of s-clusters in American English occurring at the beginning and end of syllables? See pages 287, Table 9.2 and 288, Table 9.3, Chapter 9 for a list of consonant clusters.
4. Based on the results of a standardized speech assessment and/or a spontaneous speech sample have the students determine the phonetic inventory, the phonemic inventory, and the phonotactics of a child with an articulatory or phonological impairment. Note any patterns or constraints which are demonstrated. See page 9 for phonetic and phonemic inventory as well as phonological constraints.
5. Give one example of what could be assessed within each of the five areas of language (phonology, morphology, syntax, semantics, and pragmatics). See page 2, Figure 1.1 for the subdivisions of language with specific examples. Have the students generate new examples.

The following is a portion of a language sample from Jeannette,  
age 4;6.

Vowels: [i, ɪ, ε, ə, u, ʊ, ʌ, ɑ, æ, aɪ, ou]

Consonants: [w, l, ɹ, m, n, ŋ, b, t, d, k, h, f, v, s, ʃ, ʒ]

Vowels Not in inventory: [ə, ɜ, aʊ/ɑʊ, eɪ, aʊ/ɑʊ, ɔɪ ]

Consonants: [p, g, j, z, tʃ, dʒ, ð, θ]

Make a list of the words that Jeanette pronounces differently than would be expected when compared to the adult model of pronunciation.

jelly, chocolate, turtles, the, then, that, Shredder, just, these, other, things.  
In addition, there is final consonant deletion on "want", "and", "don't" as well as devoicing of the final [z] on "beans", "is", "Ninjas", "comes", "things". Devoicing of [v] occurs on "of".

Note any consistent patterns of substitution of one sound for another:

[t/θ], [v, d/ ð], [ʒ/dʒ], [s/]

## MULTIPLE CHOICE QUESTIONS

- |      |      |      |      |       |
|------|------|------|------|-------|
| 1) c | 2) c | 3) d | 4) b | 5) c  |
| 6) d | 7) d | 8) c | 9) d | 10) c |

## TRUE/FALSE QUESTIONS

- |          |          |          |          |           |
|----------|----------|----------|----------|-----------|
| 1. FALSE | 2. FALSE | 3. FALSE | 4. FALSE | 5. TRUE   |
| 6. TRUE  | 7. TRUE  | 8. FALSE | 9. TRUE  | 10. FALSE |

## SHORT ANSWER QUESTIONS

- Define communication disorder. See page 3.
- Explain why a child with "s" difficulties, might have problems in the area of morphology. See pages 2-3 for the definition of morphology. Refer to plural –s, third person singular "s", for example.
- Contrast the terms speech sound and phoneme. See pages 5-6.
- Contrast the terms articulation disorder versus phonological disorder. See pages 7-9.
- Write a brief definition and give an example of each of the following terms: phonology, morphology, syntax, semantics, and pragmatics. See pages 2-3.

## ESSAY QUESTIONS

- Discuss how articulation disorders represent difficulties with the physical production aspects of speech sounds. Utilize the terms "articulation, "physical sound realities", and "speech sounds" when developing your discussion. Refer to pages 8 and 9.

2. Discuss how phonological disorders represent difficulties with the linguistic function of phonemes. Utilize the terms "phoneme" and "phonology" when developing your discussion. Refer to Figure 1.3, page 8 and page 9.
  3. Discuss the differences between a language and a speech disorder. Give specific examples for each type. Refer to page 4 and Figure 1.2.
  4. Articulation errors are referenced by a child's age. Referring to the definition and characteristics of the term "articulation" state why this is a meaningful reference point. Refer to pages 4 and 5.
  5. Briefly discuss the differences between the Speech Disorders Classification System (Shriberg et al., 2010) and the Differential Diagnosis System (Dodd, 1995, 2005). See pages 10-13.
-