Read the following paragraphs and respond to the questions following them.

Give your answers on the ANSWER SHEET.

**Reading passage

(Words underlined appear in the questions; superscripts index question item number.)

Recent theories of phonological development suggest that, as language is acquired, the growing number of similar sounding words in the mental lexicon (*phonological neighborhood density*; henceforth, *N*) creates a pressure to represent words in a phonologically well specified manner to support [B1]efficient discrimination (Metsala & Walley, 1998). The proposal is that [A4]phonological awareness (the ability to manipulate components of spoken words in tasks including word segmentation and sound categorization) may emerge as the result of spoken vocabulary growth and associated changes in inter-item phonological similarity relations ([A2]lexical restructuring theory, or LRT; see Metsala, 1999; Metsala & Walley, 1998). When vocabulary size is small, phonological similarity between words is thought unlikely to interfere with efficient access, and so it is assumed that there is no need to represent words in a phonologically detailed manner. Early word representations are thus claimed to be [A3]holistic (i.e., to represent global phonological characteristics; e.g., Ferguson, 1986; Jusczyk, 1986, 1993; Walley & Flege, 1999). As vocabulary grows, children need to distinguish between more and more words that sound similar to each other, and this eventually creates a [B2]developmental pressure to represent smaller segments of speech, such as syllables and, ultimately, phonemes (Fowler, 1991; Metsala & Walley, 1998; Walley, 1993). By adulthood, it is assumed that all words are represented as linear sequences of phonemes (e.g., *prince* is represented as /p/ /r/ /i/ /n/ /s/). Neighborhood density effects in speech processing tasks in adults (typically, words from sparser neighborhoods are recognized more quickly) are usually taken as evidence for such phoneme-based representations.

The developmental lexical restructuring process postulated by Metsala and Walley (1998) is thought to be relatively [B3]word specific, depending on such factors as overall vocabulary size and the number of similar-sounding words in the lexicon. For example, words with many similar-sounding neighbors (words with *dense N*) are thought to experience more pressure for phoneme-level restructuring than do words with few similar-sounding neighbors (words with [A1]*sparse N*). Hence, [B4]early in development, words with dense *N* should be processed **more accurately in speech-based tasks**. Consistent with this prediction, Logan (1992) found that 2-year-olds were better at identifying (by pointing to pictures) familiar words from dense neighborhoods than those from sparse neighborhoods. [B5]This density effect had **disappeared by age 4**. In addition, Metsala (1999) found that 3- and 4-year-old children performed significantly better in a simple phoneme-blending task when the target words were from dense neighborhoods, rather than from sparse neighborhoods.

** Source: De Cara B., Goswami U. (2002). Similarity relations among spoken words: the special status of rimes in English. *Behavior Research Methods, Instruments, & Computers, 34*, 416–423.

Respond to the following questions based on the content of the two read paragraphs. Where ideas, definition, or arguments are cited from the reading passage, state them **IN YOUR OWN WORDS**. Note that your performance will be scored by both the **accuracy in your reading comprehension** and the **quality of your writing**. Give your answers on the ANSWER SHEET.

A. Based on the passage, define the following terms in ONE SENTENCE. Direct copying of the original texts (except for special terms) will result in loss of scores, the extent of which depends on the degree of direct copying. 20% (5% each).

1. Sparse N
2. Lexical restructuring theory
3. Holistic representation
4. Phonological awareness

B. Short Q & A. Respond to the following questions. Limit your answers to **five sentences** or less. As long as the answer is correct and sufficient, the shorter the responses, the better the scores. 70% (15% for items 2-5; 10% for item 1).

1. In line 4, paragraph 1, it is hypothesized that well specified phonological representation is supportive of "efficient discrimination." WHAT is it that is descriminated?
2. What are the direct and indirect causes of the "developmental pressure" mentioned in the passage?
3. In line 2, paragraph 2, what does the phrase "relatively word specific" mean in the context of the passage?
4. (In paragraph 2) WHAT has led the authors to conclude that "early in development, words with dense N should be processed more accurately in speech-based tasks"? What are the reasons?
5. (Later in paragraph 2) What do the authors **imply** in the statement that "This density effect had disappeared by age 4" in terms of the **vocabulary size** of four-year-olds in Logan (1992)?

C. Summary. 10% (5% each)
1. Give the summary of paragraph 1 in **no more than** two sentences.
2. Give the summary of paragraph 2 in no more than two sentences.