

Chapter 3



What children Learn



Language of Literacy

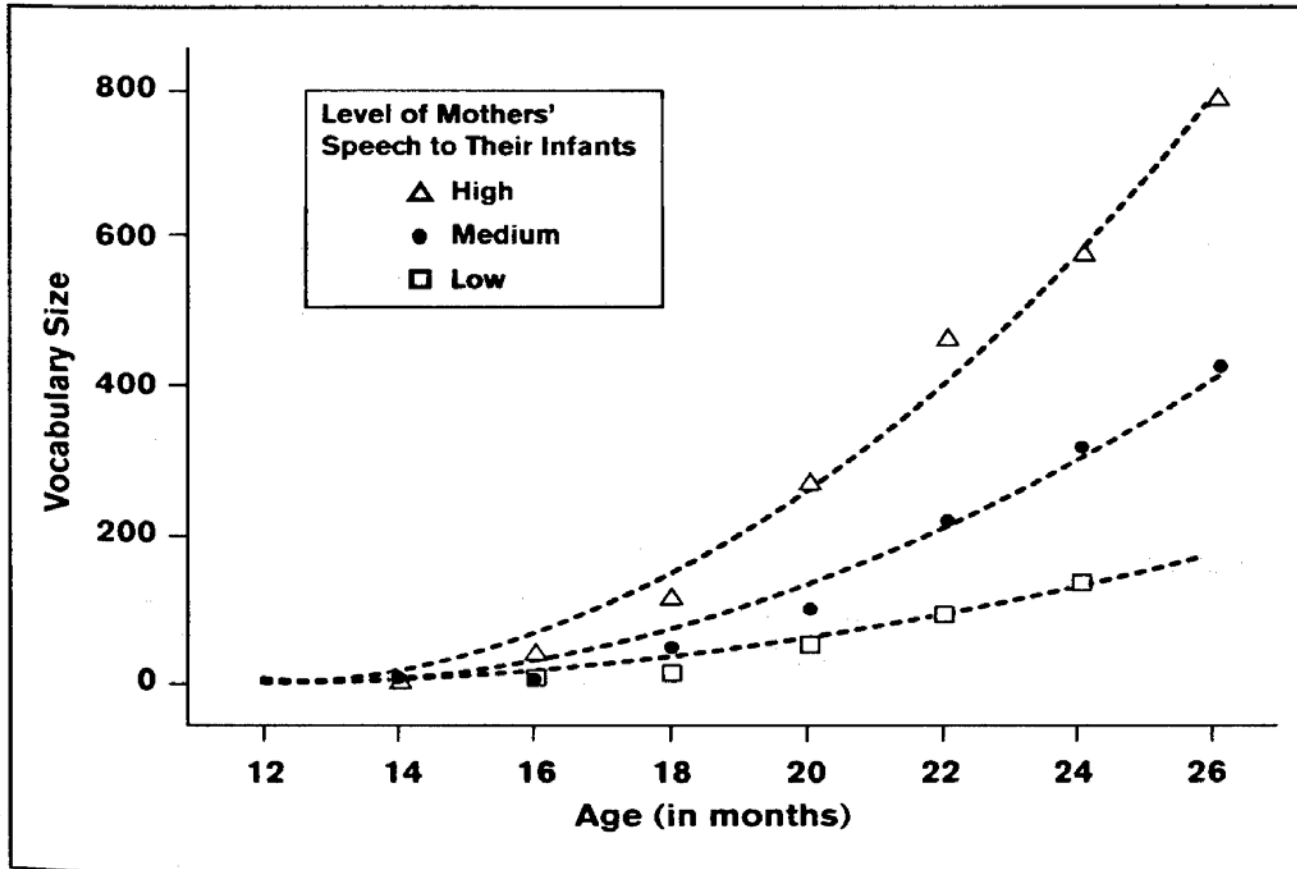


- Phoneme
- The smallest part of spoken language that makes a difference in the meaning of words. English has about 41 phonemes. The word "if" has two phonemes (/i/ /f/).
- The word "check" has three phonemes (/ch/ /e/ /ck/). Sometimes one phoneme is represented by more than one letter.
- Phonemic Awareness
- The ability to hear, identify, and manipulate the individual sounds (phonemes) in spoken words.
- Phonological Awareness
- The understanding that spoken language is made up of individual and separate sounds. A broad term that includes phonemic awareness in addition to work with rhymes, words, syllables, and beginning sounds.

- Grapheme
- The smallest part of written language that represents a phoneme in the spelling of a word.
- A grapheme may be just one letter, such as b, f, p, s, or several letters such as ch, sh, ea, igh.
- Phonics
- The understanding that there is a predictable relationship between phonemes (the sounds of the *spoken* language) and graphemes (the letters and spellings that represent those sounds in *written* language).
- Syllable
- A word part that contains a vowel or, in spoken language, a vowel sound.
- From *Put Reading First: The Research Building Blocks for Teaching Children to Read*, U.S. Department of Education, 2001. Downloadable at National Institute for Literacy www.nifl.gov



EFFECTS OF MOTHERS' SPEECH ON INFANT VOCABULARY



Janellen Huttenlocher, Wendy Haight, Anthony Bruk, Michael Seltzer, and Thomas Lyons (University of Chicago), "Early Vocabulary Growth: Relation to Language Input and Gender," *Developmental Psychology*, 1991, Vol. 27, No. 2.



Reading is FUN!!!!



Skill Domains in Mathematics



Numbers & Operations



Numbers can be used to tell us how many, describe order, and measure

Geometry



Geometry can be used to understand and to represent the objects directions, locations in our world and relationships between them

Measurement



Comparing and measuring can be used to specify "how much" of an attribute (e.g. length) objects possess.

Data Analysis



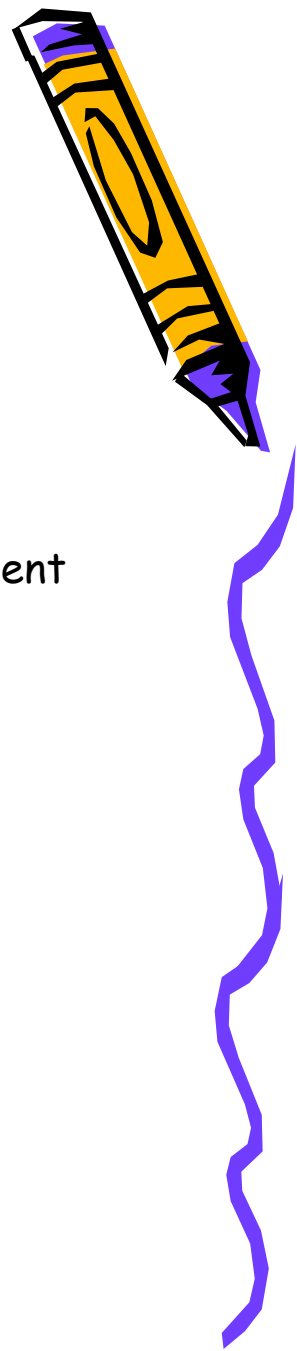
Data analysis can be used to classify, represent, and use information to ask and answer questions.

Algebra



Patterns can be used to recognize relationships and can be extended to make generalizations.

Science



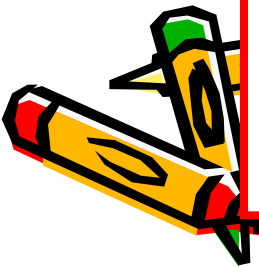
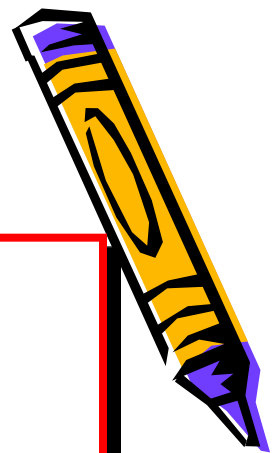
- Science is not just a collection of facts. Facts are a part of science. We all need to know some basic scientific information: water freezes at 32 degrees Fahrenheit (or 0 degrees Celsius), and the earth moves around the sun. But science is much more. It includes:
 - Observing what's happening;
 - Predicting what *might* happen;
 - Testing predictions under controlled conditions to see if they are correct; and
 - Trying to make sense of our observations.
- Components of Science
 - Physical Science
 - Life Science
 - Earth and the environment



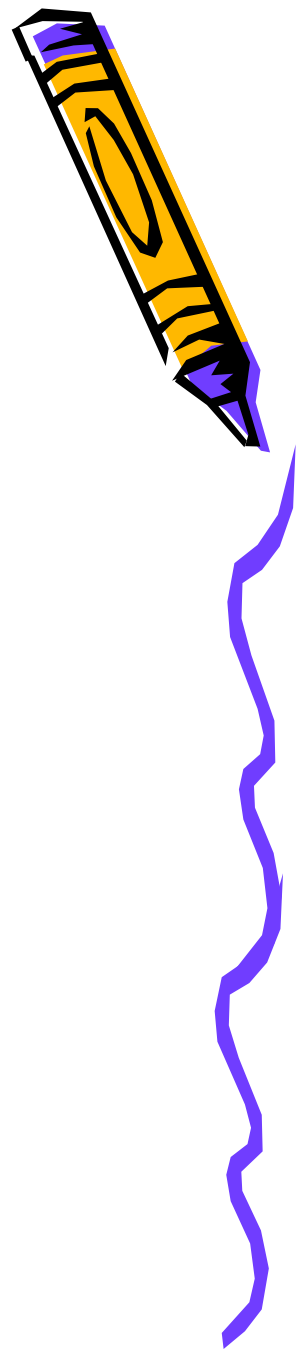
Social Studies



People



Teaching In and Through the Arts



- **Honors**
 - - Individual strengths
 - - Prior Knowledge
 - -Active learning
- **Promotes**
 - • Learning processes-Brain research
 - • Differentiated Instruction
 - • Learning styles and modalities
 - • Language acquisition



Music and the Mind



- The relationship between musical and linguistic stimulus processing has been examined on a neurophysiological level in various studies and using various techniques, which reveal that both words and musical tones caused similar activity in the brain.
- It has also been shown that the primary auditory regions and supplementary motor areas respond similarly to linguistic and musical stimuli. Binder, Frost, Hammeke, Rao, & Cox. 1996. function of the left planum temorale in auditory and linguistic processing. Brain, 119 (4) 1239-1247



Technology



Dramatic Play Technology

- What other types of technology are used in the classroom?

