

# ### Comprehensive Science of Reading Framework with Expanded Terminology and Examples

## #### 1. \*\*Foundational Understanding of Print\*\*

- **Concepts of Print**: Teach children that print carries meaning and represents spoken language. Example: Show a child that the word "dog" represents the animal they see.
- **Letter Recognition**: Teach the alphabet, focusing on letter names, shapes, and sounds. Example: Use flashcards with the letter "A" and images of an apple to connect the sound (/a/) to the letter.

## #### 2. \*\*Phonological Awareness

- **Definition**: The ability to recognize and manipulate units of oral language, such as sounds, syllables, onset-rime, and rhyming.
- **Instructional Strategies**:
  - Rhyming games: Have students identify words that rhyme, e.g., \*cat\* and \*hat\*.
  - Clapping syllables: Clap for each syllable in a word like "ba-na-na" (3 claps).
  - Onset-rime practice: Split words into beginning sounds (onset) and the rest of the word (rime), e.g., \*c\* + \*at\* = \*cat\*.

## #### 3. \*\*Phonemic Awareness

- **Definition**: A subset of phonological awareness; the ability to identify and manipulate individual phonemes (smallest units of sound) in words.
- **Skills**:
  - **Segmenting**: Break a word into individual sounds, e.g., \*cat\* → C (kuh), A (ah), T (tuh).
  - **Blending**: Combine phonemes to form words, e.g., C + A + T → \*cat\*.
  - **Deleting**: Remove sounds to modify words, e.g., \*cat\* → \*at\* (remove the /k/ sound).
  - **Substituting**: Change one sound for another, e.g., \*cat\* → \*bat\* (replace /k/ with /b/).
- **Examples**:
  - Use Elkonin Boxes where each box represents a phoneme. For \*ship\*, students place three markers: S, H, and IP.

- Count phonemes with chips: For "dog," students place 3 chips for /d/, /o/, /g/.

#### #### 4. **Progression of Phonological Skills**

- **Easier Skills**:
  - Identifying rhymes: "What rhymes with \*cat\*?"
  - Counting syllables: "How many beats are in the word \*butterfly\*?"
- **Harder Skills**:
  - Manipulating phonemes: Change \*cat\* to \*cut\* by altering the middle sound.
  - Insertion: Add a sound, e.g., \*pat\* → \*prat\* (insert /r/).
  - Deletion: Remove a sound, e.g., \*plane\* → \*lane\* (remove /p/).

#### #### 5. **Phonics Instruction**

- **Definition**: Systematic instruction connecting sounds (phonemes) to written symbols (graphemes).
- **Key Concepts**:
  - **Decoding**: Translating written text into spoken words (reading).
  - **Encoding**: Writing spoken words into text.
  - **Blending**: Part of decoding (e.g., /c/, /a/, /t/ → \*cat\*).
  - **Segmenting**: Part of encoding (e.g., \*cat\* → /c/, /a/, /t/).

#### #### 6. **Phonics Terms Expanded**

- **Digraphs**: Two letters forming a single sound. Examples:
  - \*sh\* in \*ship\*.
  - \*th\* in \*think\*.
  - \*ea\* in \*bead\*.
- **Blends**: Two or more consonants retaining individual sounds. Examples:

- \*bl\* in \*blue\*.
- \*st\* in \*stop\*.
- **Complex Vowel Patterns**:
  - **Diphthongs**: Vowel sounds where the tongue glides. Examples: \*sky\*, \*boy\*, \*out\*.
  - **R-controlled Vowels**: Vowel sounds altered by an "R." Examples: \*car\*, \*fern\*, \*bird\*.

#### #### 7. **Syllable Types with Examples**

- **Closed Syllable**: Ends in a consonant, making the vowel sound short. Examples: \*cat\*, \*rabbit\*, \*picnic\*.
- **Open Syllable**: Ends in a vowel, making the vowel sound long. Examples: \*he\*, \*go\*, \*tiger\*.
- **Vowel-Consonant-E**: Silent E makes the vowel sound long. Examples: \*cake\*, \*tote\*.
- **Vowel Teams**: Two vowels working together. Examples:
  - \*seat\* (long vowel).
  - \*out\* (variant vowel).
- **R-controlled Syllable**: A vowel followed by an "R" alters the sound. Examples: \*star\*, \*bird\*.
- **Consonant-le Syllable**: The schwa sound precedes "le." Examples: \*candle\*, \*table\*.

#### #### 8. **High-Frequency Words (Sight Words)**

- **Definition**: Words that do not follow standard phonetic rules. Examples: \*said\*, \*was\*, \*the\*.
- **Strategies**: Repeated exposure through reading and writing activities.

#### #### 9. **Word Analysis Strategies**

- **Structural Analysis**: Use prefixes, suffixes, and inflectional endings. Examples:
  - Prefix: \*unhappy\* → \*un\* means "not."
  - Suffix: \*played\* → \*ed\* indicates past tense.

- **Contextual Analysis**: Infer meaning from surrounding text. Example: "The *carnivore* ate the meat." Context suggests it's a meat-eater.
- **Morphological Clues**: Use roots and affixes. Examples:
  - Latin Root: *scrib* → "to write" (e.g., *describe*, *inscription*).

#### #### 10. **Fluency Development**

- **Components**:
  1. **Accuracy**: Correctly reading words.
  2. **Rate**: Reading speed (words per minute).
  3. **Prosody**: Expression and intonation.
- **Strategies**:
  - Repeated readings: Practice passages multiple times.
  - Echo reading: Teacher reads, student echoes.
  - Reader's Theater: Perform scripts to practice fluency.

#### #### 11. **Supporting Struggling Learners**

- **Interventions**:
  - **Orton-Gillingham**: Multisensory phonics approach.
  - Small groups targeting specific skills.
  - Running records: Track and analyze errors.
  - Decoding inventories: Identify gaps in phonics knowledge.

#### #### 12. **Vocabulary Development**

- **Definition**: Building a rich word bank to enhance comprehension and communication.
- **Activities**:

- Semantic Mapping: Create diagrams connecting related words.
- Morphological Analysis: Break down words into roots and affixes.
- Contextual Learning: Teach words in the context of sentences or stories.

#### #### 13. **Assessment and Progress Monitoring**

- **Fluency**: Measure words per minute (WPM) to track progress.
- **Phonics Mastery**: Use decoding and encoding tasks to evaluate understanding.
- **Error Analysis**: Use running records or miscue analysis to identify patterns in errors and adjust instruction.

This expanded framework provides clear examples for all key terms, ensuring a thorough understanding of the science of reading and practical applications for instruction.