

## Speech, Language, & Play Development

Speech Matters SLP Services Inc. offers pan-disability, accessible, client- and family-centered speech & language therapy services. Their mission is to equip learners with the tools to communicate and thrive while also empowering them to live authentically. This presentation explores the basics of speech & language development and milestones.





# Welcome



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# Agenda

#### Introductions

- 2 Speech, language, & communication
- Development of the speech sound system
- Phonological disorders vs. articulation disorders
- 5 Motor speech disorders
- 6 Language development: milestones by age
- 7 Developmental language delays & disorders
- Strategies to support speech & language development at home
- **9** Q&A







### About Speech Matters SLP Services

Speech Matter SLP Services is an organization of Speech-Language Pathologists (SLPs) and Occupational Therapists (OTs) providing pan-disability, accessible, and respectful therapy services that honour the cultural and linguistic background of our clients.

We strive to empower our clients and their families by equipping them with the tools and strategies to enhance their communication, increase their participation in play and activities of daily living, and live authentically.

We offer in-person services in Calgary, AB, and teletherapy services across all communities in Alberta and British Columbia.







#### About the Presenters

#### Holly Smith (she/her)

Speech-Language Pathologist

- 12+ years clinical experience
- Registered with ACSLPA and CSHBC
- Certified with SAC
- Experience working with many autistic learners, providing client-centred and autism-affirming services
- Experience working with many Indigenous learners and communities
- Passionate about informed, inclusive, and culturallysensitive practice for Indigenous communities

#### Laurisa Adams (she/her)

Speech-Language Pathologist

- Registered with ACSLPA
- Experience in providing client-centred education and support to pan-disability clients and their families
- Work within various settings (e.g., FSCD home visits, schools, and other educational/daycare settings)
- Passionate about early language development and building successful early communication skills

#### Fright Moore (they/them)

Speech-Language Pathologist

- Registered with ACSLPA and CSHBC
- Certified with SAC
- Proudly autistic
- Experience working with many autistic learners, equipping learners with the tools to communicate and live authentically
- Experience working with Indigenous learners and communities
- Provides client-centred, culturally-sensitive, and autism-affirming services



### Speech, Language, & Communication









#### **SPEECH**

Ability to produce individual sounds that make up words of a specific language (e.g., "g", "é", s-blends).

#### LANGUAGE

Symbolic, rule-governed system to convey a message, using oral, written, and/or signed words.

#### COMMUNICATION

Sharing of information, verbally and non-verbally. using spoken language, written language, gestures, facial expression, behaviour, signs, visual aids, etc.



How do children acquire speech?

#### 0 - 6 WEEKS

Reflexive vocalizations such as crying, sucking, sneezing, and coughing

#### 6 - 16 WEEKS

Infants begin to produce cooing sounds and laughter

#### 16 - 30 WEEKS

Vocal play begins, including vowel sounds and limited consonant sounds in increasingly longer sequences.

#### 6 - 10 MONTHS

Reduplicated babbling begins, containing consonant-vowel (CV) syllables that are repeated

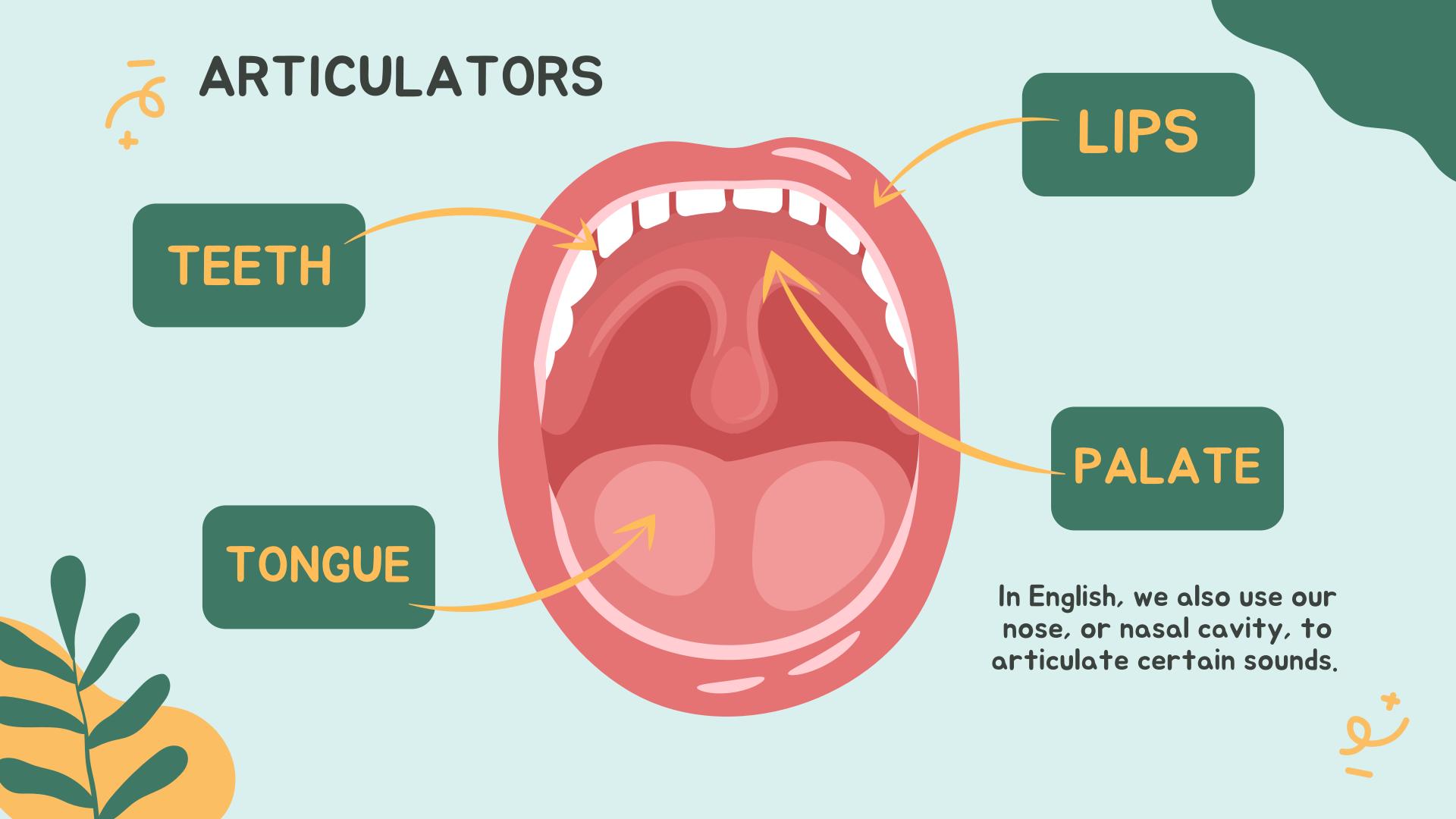
#### 10 - 14 MONTHS

Infants now combine different vowels and consonants into syllable strings (variegated babbling) with various stress and intonation patterns. Children produce 'protowords' and first words.







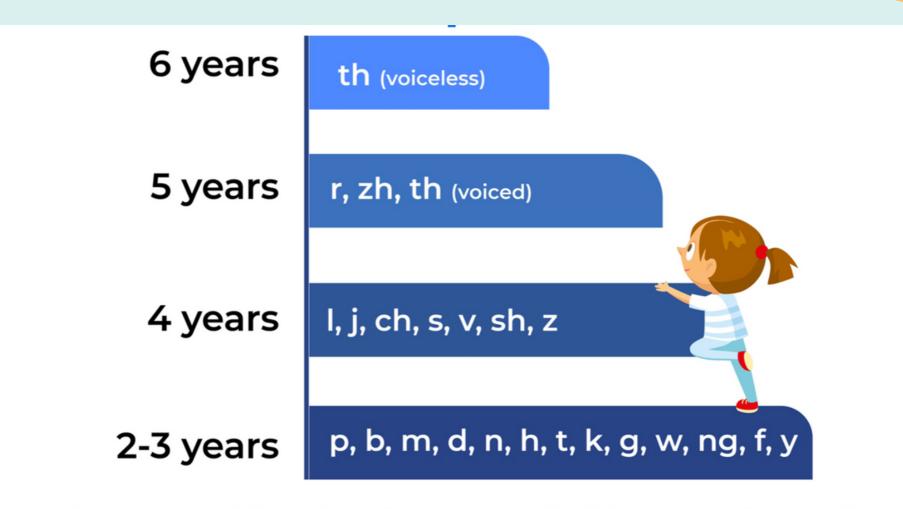




# HOW DO CHILDREN ACQUIRE SPEECH SOUNDS?

English-speaking children typically develop their speech sounds in a predictable order, starting with the most visible sounds (e.g., p, b, m) and working their way up to more complex articulatory movements (e.g., r)

The norms for speech sound acquisition have changed over the years. Based on a 2018 meta-analysis by McLeod and Crowe, we now know that nearly all speech sounds are typically acquired by age 6; many by age 4.



Average age children learn to pronounce English consonants correctly (Based on 15 English speech acquisition studies compiled by McLeod and Crowe, 2018)

McLeod, S. & Crowe, K. (2018). Children's consonant acquisition in 27 languages: A cross-linguistic review. *American Journal of Speech-Language Pathology*. doi:10.1044/2018. AJSLP-17-0100. Available from: https://aislp.pubs.asha.org/article.aspx?articleid=2701897

Chart illustrating the development of speech sounds of Standard English dialect speakers.



# PHONOLOGICAL DISORDERS VS. ARTICULATION DISORDERS











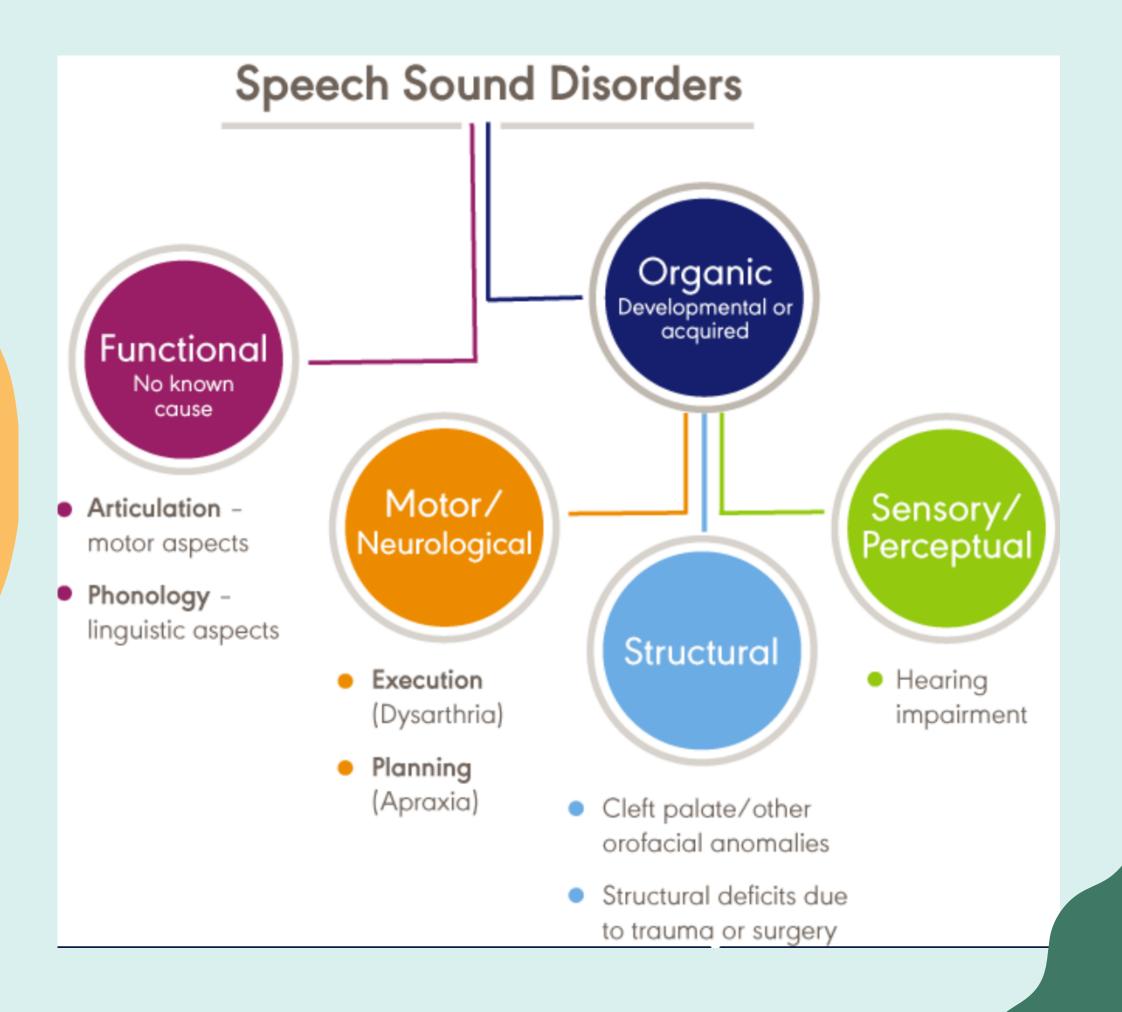
#### PHONOLOGY

Phonological disorders focus
on errors that impact more
than one sound and follow
predictable, rule-based errors
(e.g., final consonant deletion
where a learner may delete all
final sounds)

#### ARTICULATION

Articulation disorders focus on errors in the individual speech sounds (e.g., distortions such as a frontal lisp or substitutions such as w/r)

Both articulation and phonological disorders are functional speech sound disorders with no known cause (idiopathic).





# MOTOR SPECH DISORDERS

Motor speech disorders are characterized by difficulty moving the articulators to produce speech whether due to muscle weakness, reduced coordination, or difficulties with motor planning.



### CHILDHOOD APRAXIA OF SPEECH (CAS)

Manifests as difficulty translating messages from the brain to the mouth where the sounds are produced, i.e., difficulty with motor planning.

#### **DYSARTHRIA**

Manifests as slow, imprecise, and/or distorted speech, resulting from weakness, paralysis, spasticity, or the inability to coordinate speech articulators.

### How do children acquire language?





## DO PARENTS TEACH THEIR CHILDREN TO TALK? No.

Children acquire language quickly and easily without formal teaching. It happens automatically, whether their parents try to teach them or not.

CHILDREN ACQUIRE LANGUAGE
THROUGH INTERACTION, with
adults and with other children.
Typically-developing children will
acquire the language that is being
used around them. This also
applies to multilingual households,
as long as there is regular
interaction in the target
languages.

### HOW DO ADULTS SUPPORT LANGUAGE ACQUISITION?

Studies show that the 'baby talk' that adults naturally use with infants and toddlers tends to be just a bit ahead of the level of the child's own language development. 'Baby talk' has simpler vocabulary and sentence structure, exaggerated intonation and sounds, and lots of repetition and questions. All of these features help the child to learn language.



#### LANGUAGE MILESTONES BY AGE

#### 6 - 11 MONTHS

Starting to understand limited simple, common words, like "no" and "yes". Begins communicating with gestures, like pointing.

#### 12 - 17 MONTHS

Answering very simple questions non-verbally or with single words. Vocabulary of 4-6 words, with unclear pronunciation.

#### 18 - 23 MONTHS

Begins using 2-word phrases, including names for common foods, animals, and objects. Vocabulary of ~50 words, with unclear pronunciation.

#### 2 - 3 YEARS

Using 3-word phrases, including limited: spatial concepts, pronouns, descriptive words, plurals, and regular past tense verbs.

Able to answer simple wh-questions verbally or non-verbally.

Speech is becoming clearer, though strangers may still have trouble understanding. Can follow 2-step directions.









#### LANGUAGE MILESTONES BY AGE

#### **3 - 4 YEARS**

Beginning to understand and identify object groups, colours, functions.

Most people can understand their speech, but may struggle with some difficult speech sounds.

Begins speaking about things not present or tangible, like thoughts and feelings.

Using more action words with "-ing".

Using 1-4-word phrases.

#### 4 - 5 YEARS

Understanding and using more spatial concepts, like "behind" and "near".

Speech is mostly clear, with some difficulties with complex, multi-syllabic words.

Understanding more complex questions, such as "why?" and "how?" questions.

Begins using simple irregular past tense words, like "ran" and "fell".

#### 5 YEARS

Understanding and using some sequential concepts (e.g., first, second, last). Can follow 3-step directions.

Beginning to understand rhyme and word play.

Using compound and complex sentences, 1-8+ words in length.

Can engage in conversation.



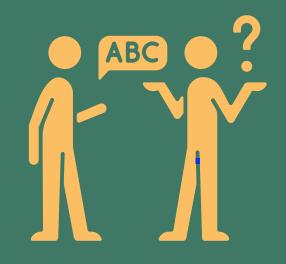






### LANGUAGE DELAYS & DISORDERS ()





#### Receptive Language Disorder

Difficulties with understanding language and what is said or asked

For example, following directions or attending to a teacher in class



#### **Expressive Language Disorder**

Difficulties with using language to express oneself.

This can be seen in verbal speech, writing, sign language, or AAC devices



#### **Developmental** Language Disorder

A newer label (once called SLI) for the challenges seen in understanding and/or using language.

No known cause and can impact educational growth as well





# SOCIAL COMMUNICATION

Social communication is the use of language in social contexts. Skills in this area include the ability to take the perspective of others, understand and appropriately use the rules for verbal and nonverbal communication, and vary speech style.



### SOCIAL COMMUNICATION DISORDERS

These disorders are characterized by difficulties with the use of verbal and nonverbal language, affecting social interaction and pragmatics. This may manifest as difficulties with:

- communicating in ways that are appropriate for the particular social context
- changing communication to match the needs of the listener
- following rules for conversation (e.g., taking turns)
- understanding what is not explicitly stated



### Social Communication Benchmarks





1-2 YEARS





- Prefers looking at human faces and listening to human voice
- Smiles back at caregiver
- Follows caregiver's gaze
- Participates in vocal turntaking with caregiver
- Demonstrates joint attention skills, i.e., sharing attention
- Uses gestures to make requests and direct attention
- Plays simple interactive games

- Communicates with gestures and limited words
- Begins to participate in communicative rituals
- Responds to the speech of others with eye contact
- Participates in verbal turn-taking with limited number of turns
- Demonstrates simple topic control
- Interrupts at syntactic junctures or in response to prosodic cues

- Engages in short dialogues
- Verbally introduces and changes topic
- Expresses basic emotions
- Begins to use language in imaginative way
- Begins to provide descriptive details to enhance listener understanding
- Clarifies and asks for clarification
- Begins to demonstrate some adaptation of speech to different listeners

- Engages in longer dialogues
- Anticipates next turn at talking
- Can initiate and terminate conversations
- Begins code-switching and uses simpler language when talking to very young children
- Requests permission
- Begins using language for fantasies, jokes, teasing
- Makes conversational repairs when not understood and corrects others
- Starts using primitive narratives

### SOCIAL COMMUNICATION FOR SCHOOL-AGE





By preschool and kindergarten, children begin using the following skills:

- Making indirect requests
- Correctly using deictic terms, like here and that
- Discussing emotions and feelings more effectively
- Telling stories using a sequence of events format

Children also begin developing a basic understanding of Theory of Mind (ToM).



#### In grade school, children develop:

- Increased understanding of ToM (e.g., read body language, facial expressions)
- Improved ability to use and understand nonverbal communication
- Altruism and the ability to provide assistance to others
- Use of "story grammar" when producing narratives (e.g., characters, setting, problem, solution)
- Improved conversational skills (e.g., topic maintenance, repair, and increased number of turns), with expanded conversational topics
- Use of language to persuade and express opinion



#### The 6 Stages of Play



Unoccupied Play

0-3 months

When baby is making movements with their arms, legs, hands, feet, etc. They are learning about and discovering how their body moves.



Solitary Play 0-2 years

When a child plays alone and are not interested in playing with others quite yet.



Spectator/ Onlooker Behavior

2 years

When a child watches and observes other children playing but will not play with them.



Parallel Play 2+ years When a child plays alongside or near to others but does not play with them.



Associate Play

3-4 years When a child starts to interact with others during play, but there is not much cooperation required.

For example, kids playing on the playground but doing different things.



Cooperative Play

4+ years When a child plays with others and has interest in both the activity and other children involved in playing.



# HOW DOES PLAY DEVELOP?

Play in the early childhood years is often centered around the use of objects:

- **Sensorimotor play**, or exploratory play during which a child engages in repetitive movements to learn how their muscles work
- Constructive play
- **Dramatic play**, which requires (A) representational skills, when a child begins to use objects to pretend, and (B) role playing, when the child takes on a pretend role

As children develop their social skills, their play becomes more person-focused and language-heavy.







# Strategies to Support speech & language at home







#### CREATE A LANGUAGE-RICH HOME ENVIRONMENT BY...

Quantity - Hearing lots of words in the first three years is strongly associated with language and vocabulary development.

Quality - Being exposed to varied vocabulary words and different sentence structures also supports language development.

Acknowledge all the ways your child is trying to communicate Look for body language, signs, gestures, eye gaze, facial expressions, etc.

**Play!** Follow their lead, include their interests, imitate their actions, get down on their level.

Model self-talk and narrate what you are doing and thinking.

Comments over questions Questions tend to limit a child to
short answers, and set children up
to be responders rather than
initiators.



### TIPS FOR ENCOURAGING INTERACTION 1



Say Less - Stress - Go Slow - Show

Observe - Wait - Listen





Include - Interpret - Imitate - Intrude

Repeat - Offer - Cue - Keep it going

R.O.C.K. Strategy





# STRATEGIES TO SUPPORT SPEECH DEVELOPMENT





Model & Recast

Use the speech sounds how you want your child to use them



Cue & Prompt

- Tactile cues
- Verbal Cues
- Visual Cues



Have Fun!

- Name the sounds
- Pick sounds out
   of your everyday
   activities



Reinforce & acknowledge efforts

"Good trying!"

"I saw your tongue in its special spot that time!"



# STRATEGIES TO SUPPORT EARLY LANGUAGE DEVELOPMENT

Only ask one question at a time

Use expansions and recasting

Use serve and return interactions

Make reading a part of your routine

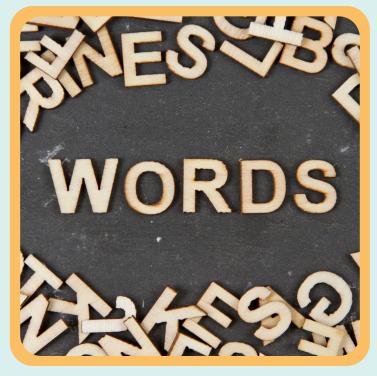
Give lots of wait time



Create communication opportunities



# STRATEGIES TO SUPPORT EARLY LANGUAGE DEVELOPMENT



#### Repeat Repeat Repeat

Repeat words lots and use them in different ways and within various activities.



Proper Grammar

Model good sentence structure and grammar to help understanding of what makes good language



Show & Tell Language

Rephrase "Can you"
questions to "Show
me" or "Tell me"
statements - helps
to grow language
interactions



Don't Ask

Try not to ask your child to copy or repeat a word or phrase.

Just model it yourself

# STRATEGIES TO SUPPORT SCHOOL-AGE LANGUAGE DEVELOPMENT



#### Pay Attention

Make sure to show your child active listening and acknowledge you understand



#### **Gain Attention**

Make sure you have the attention of the child you are speaking to



#### Use routines

Using activities that a child is already familiar with helps support the new language learning



#### Use their interests

Make the interaction meaningful and motivating to particiapte in







# References



- Bowen, C. (1998). Typical speech and language acquisition in infants and young children. Retrieved from http://www.speechlanguage-therapy.com/ on [March 2, 2022].
- How Does Your Child Hear and Talk? (n.d.). American Speech-Language-Hearing Association. https://www.asha.org/public/speech/development/chart/
- McLeod, S. & Crowe, K. (2018). Children's Consonant Acquisition in 27 Languages: A Cross-Linguistic Review. *American Journal of Speech-Language Pathology*, 27(4), 1546-1571. https://doi.org/10.1044/2018\_AJSLP-17-0100
- Age-Appropriate Speech and Language Milestones (n.d.).

  Stanford Children's Health.

  https://www.stanfordchildrens.org/en/topic/default?id=age-appropriate-speech-and-language-milestones-90-P02170
- Social Communication Benchmarks (n.d.). American Speech-Language-Hearing Association. https://www.asha.org/practice-portal/clinical-topics/social-communication-disorder/social-communication-benchmarks/
- Weitzman, E. (n.d.). Why Interaction Must Come Before
  Language. The Hanen Centre. Retrieved March 8, 2022, from
  http://www.hanen.org/Helpful-Info/Articles/Why-InteractionMust-Come-Before-Language.aspx
- Heidemann, S., & Hewitt, D. (1992). The Basics of Play. In, *Pathways to Play.* Redleaf Press, St. Paul, Minnesota.
- Suggestions For Parents: Speech and Language Development (n.d.). American Speech-Language-Hearing Association. https://www.asha.org/public/speech/development/suggestions/



# References



Lowry, L. (n.d.). Tap into Your Child's Natural Way of Learning Language. The Hanen Centre. Retrieved March 14, 2022, from http://www.hanen.org/Helpful-Info/Articles/Tap-Your-Childs-Natural-Way-of-Learning-Language.aspx