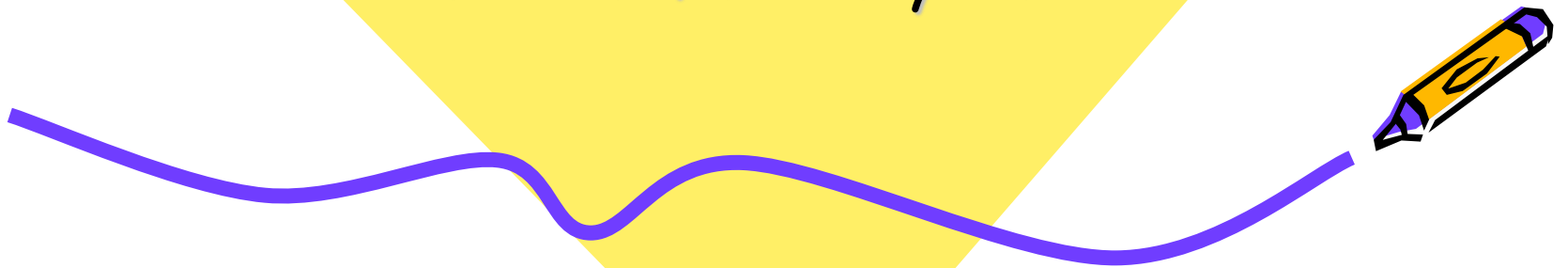




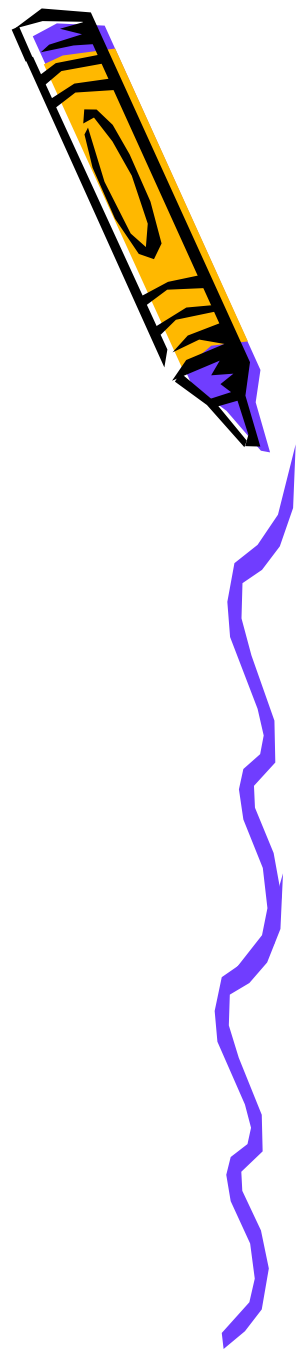
What Infants and Children are Learning

In their first 5 years



WHAT INFANTS and CHILDREN ARE LEARNING

Dr. Vickie Meade



CONTENT

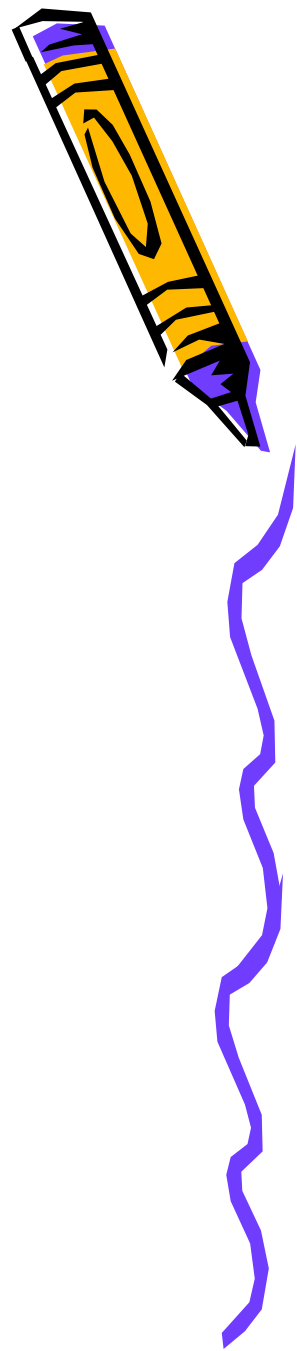
- Introduction
- Early development
- Strategies
- Activities
- Case study



Introduction

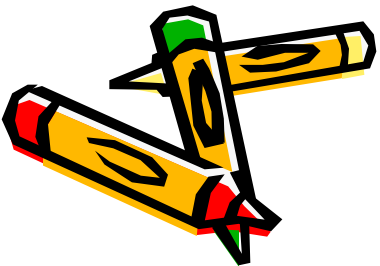
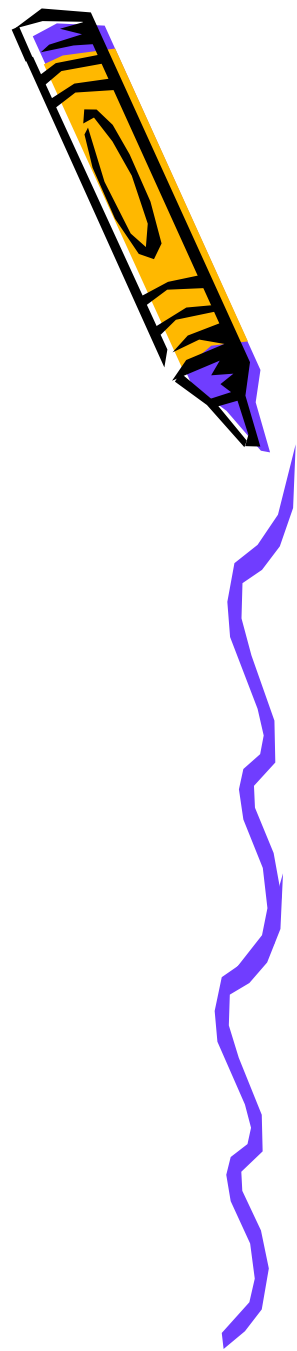
Age 0-2

- Importance of Early Years
- Learning through play
 - Motor: Gross and fine
 - Social-emotional
 - Communication and Language
 - Self-help skills
 - Cognitive thinking skills



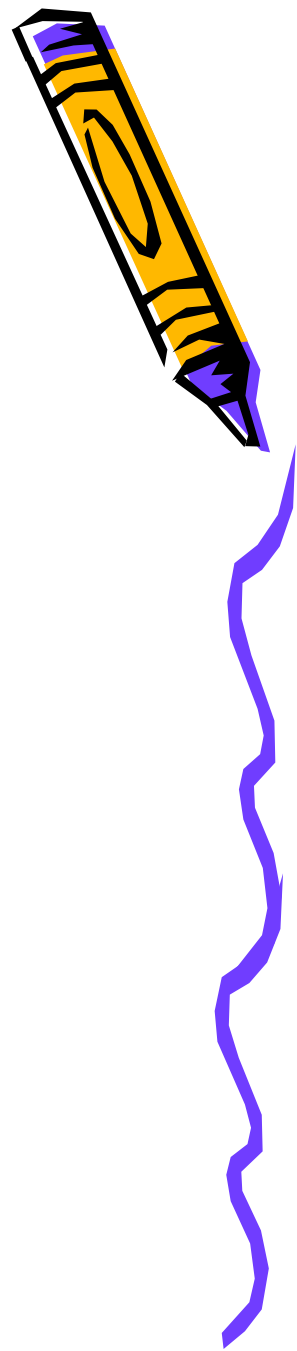
Setting the Stage

- The Parents
- Education
 - Parents are experts on their infant
 - Pregnancy
 - Nutrition
 - A good start
 - Birth Defects
 - Nutrition, medications, infections, parents are too young or too old

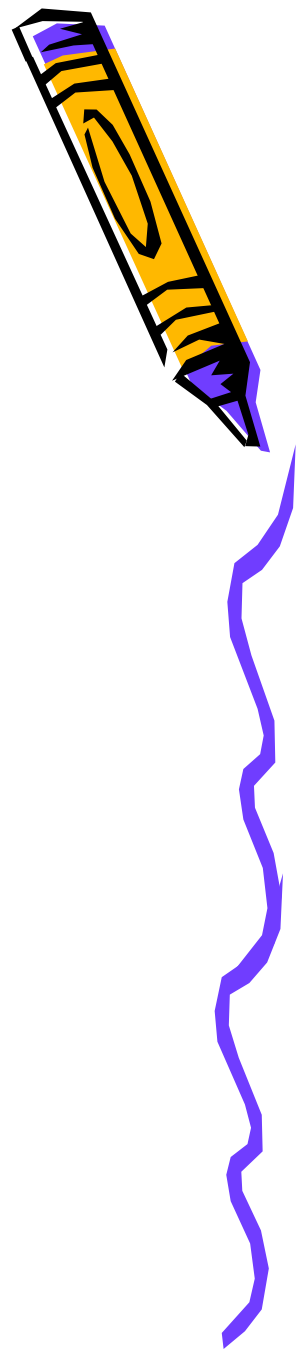


Five Principles

- Principles of Development
 - 1. **Similar** between people
 - Motor
 - Cognitive
 - Social-Emotional
 - Self-Help (Adaptive)
 - Communication
 - 2. **Builds** on earlier learning

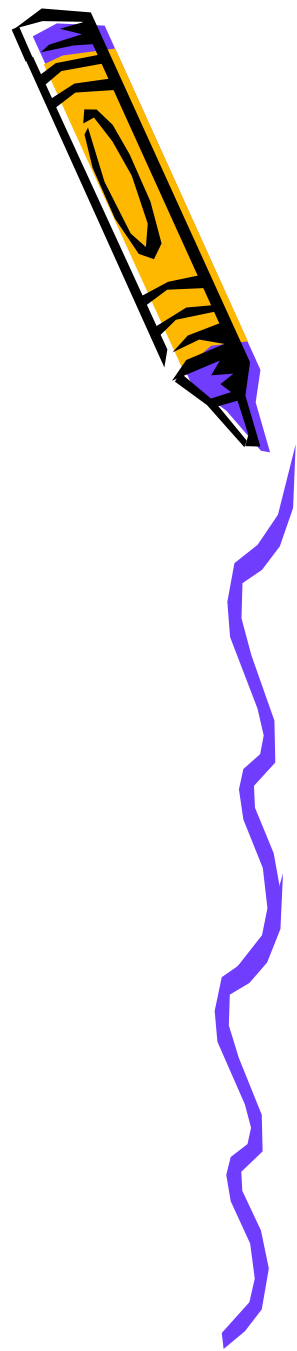


- Principles of Development
 - 3. Proceeds at an individual rate
 - VARIABILITY
 - 4. Areas are interrelated
 - 5. Life long process

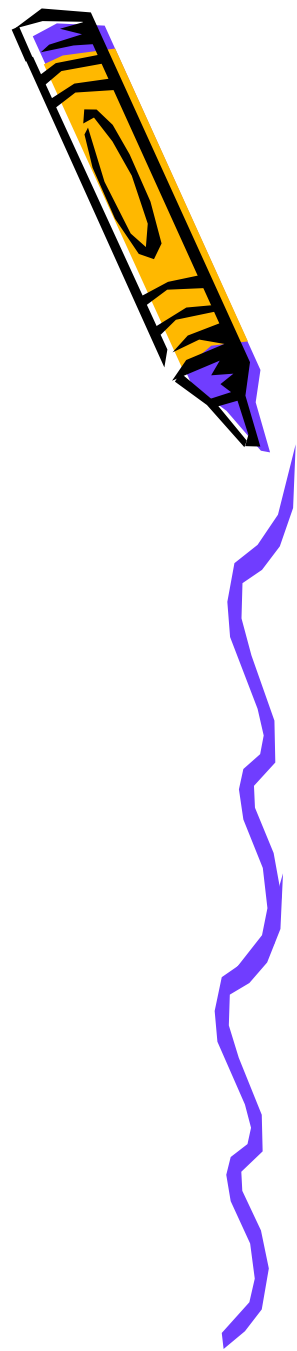


The Early Years

- Importance of the Early Years
 - Unpaved roads
 - Three periods
 - Newborn, Moving, Walking child
- Three questions
 - What are infants learning?
 - How do they learn?
 - How do we help them?



LEARNING

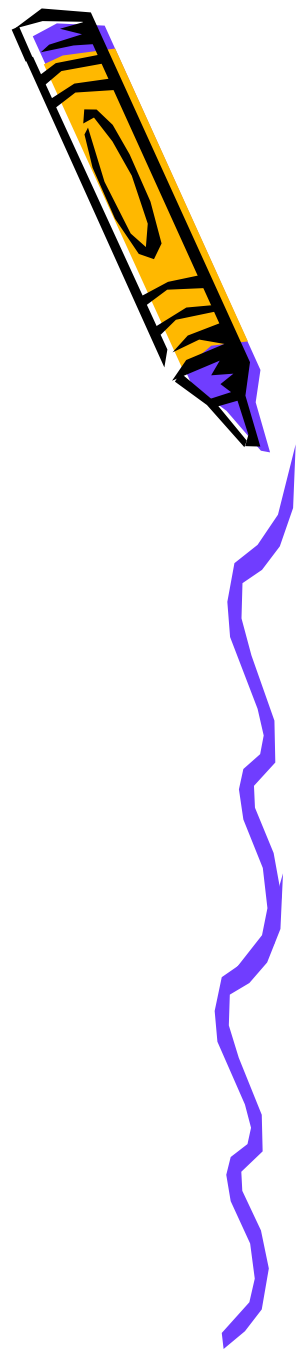


- Infants are learning
 - Sleep patterns
 - Suck, swallow, chew then Self-feed
 - Communicate (gestures, word)
 - Play
 - Explore

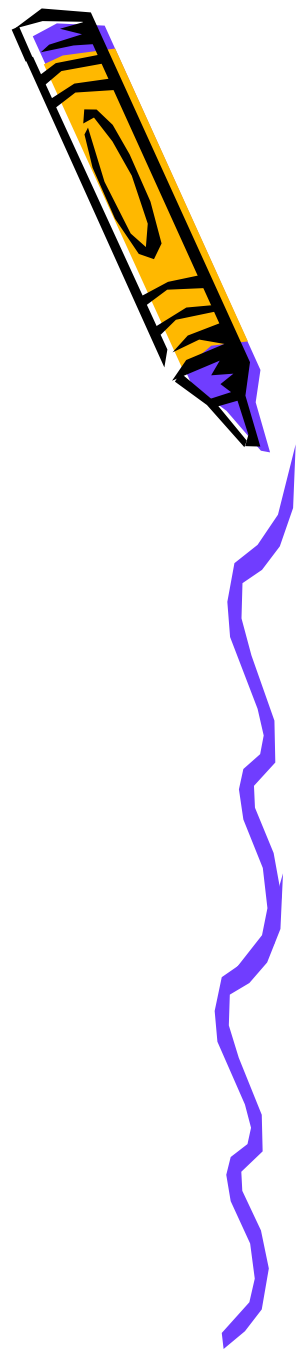


LEARNING

- Developed
 - Sleep cycles
- Feeding
 - Finger feeding
- Communicative Intent
 - Sounds/consonant combo
- Play and cognitive development
 - Plays alone short time; uses toys
- Explores using Movement
 - Sit, crawl, stand up



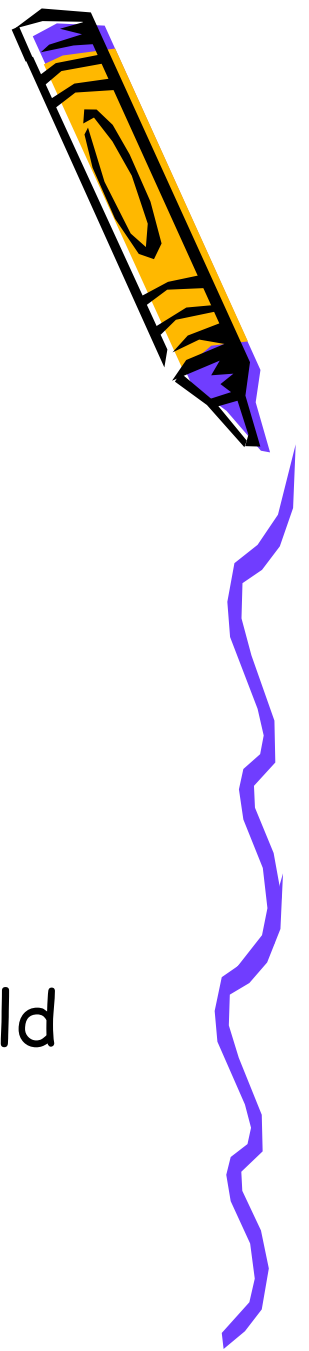
The Newborn Period



- Newborn to Six Months
 - Motor: Gross and fine
 - Social-emotional
 - Communication and Language
 - Self-help skills
 - Cognitive thinking skills



The Newborn Period



- The newborn infants is
 - Totally dependent
 - Vulnerable
- From Newborn
- The fourth trimester
 - Adaptations to the Extrauterine world



Motor

- Flexed
- Curled in from the womb
- Starts to stretch out
- Turns head to each side
- Moves arms
- Kicks legs

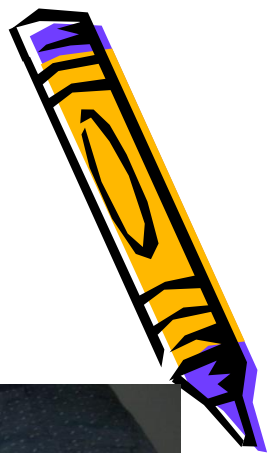


- Starts to hold head when moved
 - 3 months
 - Head to midline
 - Hands touch body



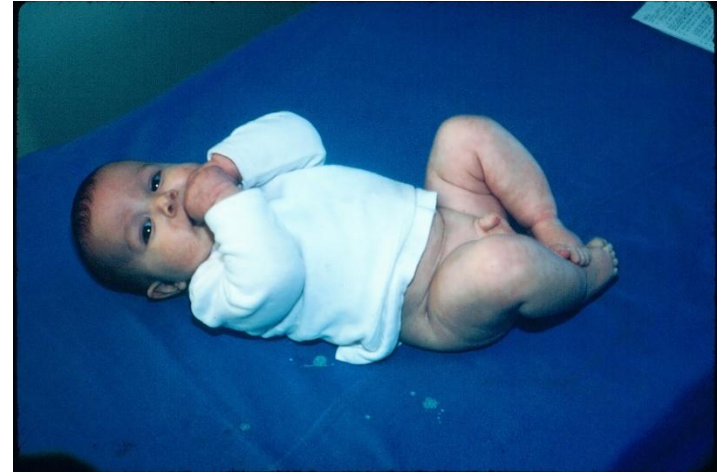
What infants are learning

- Motor:
- Starts to hold head up when placed on the tummy



Three to Six Months

- Motor
- Hands to midline
- Push up on the tummy



- Motor

- SIX months:

- Tummy works to hold pelvis: Legs in air

- May prefer sitting, little balance yet

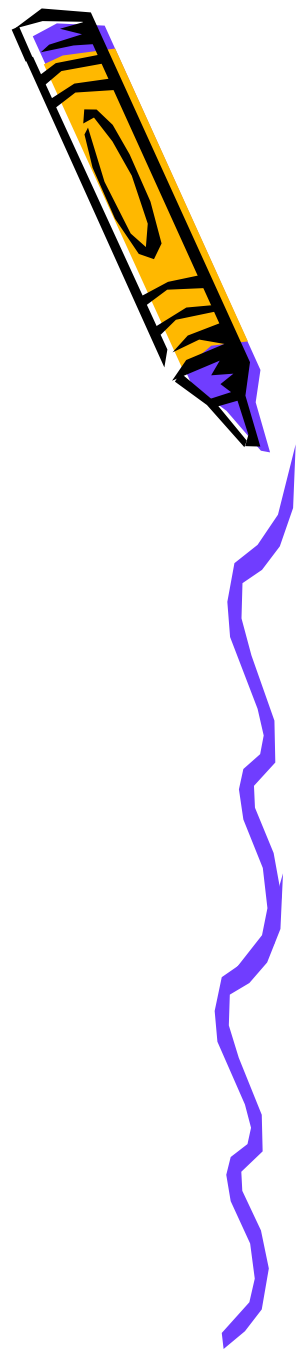
- Stronger in standing

- Will start to roll

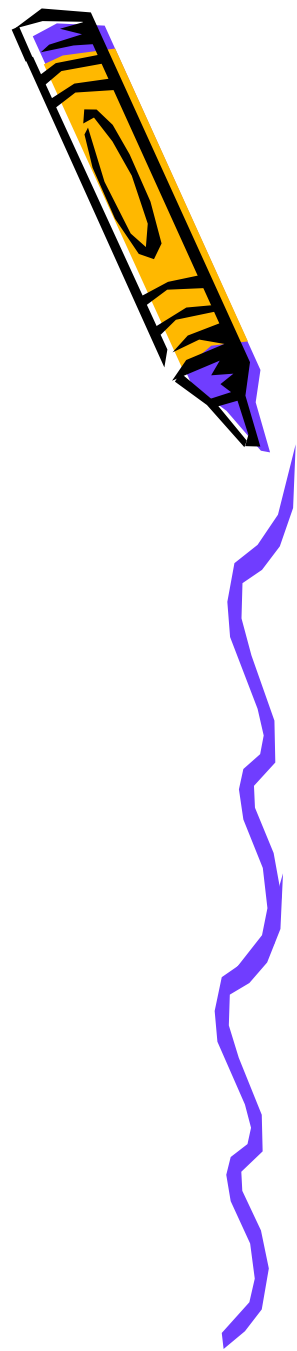


Social-emotional

- Basis for all development (Shonkoff et al. 2000)
 - **First functional task:** rhythm and routines
 - Start needing max control from the environment
 - Move to minimal control as control from within



Newborn to Six Months



- First three months: Transition
- 'Behavioral states' (Prechtl, 1979)
 - Crying
 - Alert
 - Sleep
- Transitions between states



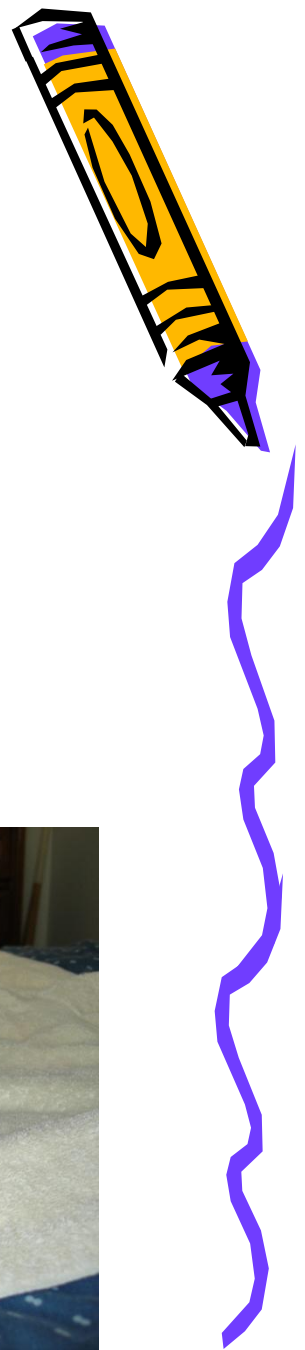
Newborn to 6 months

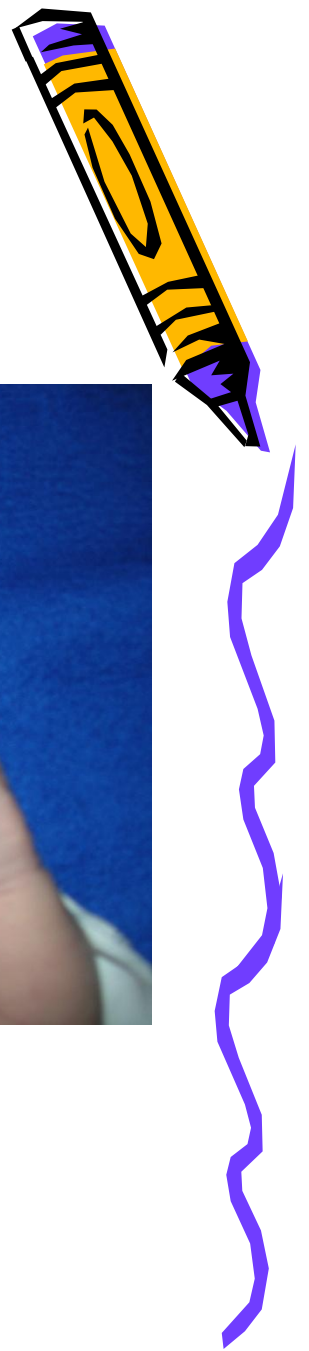
- Communication



Communication

- 'I need help'
 - Frown
 - Yawn
 - Hiccups



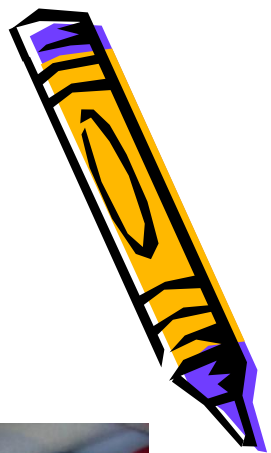


- Self-Help
 - Hand to Mouth
 - Hand to Face

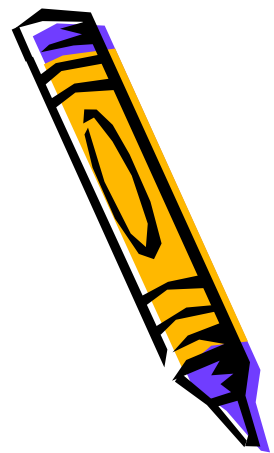


• Self-help

- Sucking
- Going to sleep
- Signals

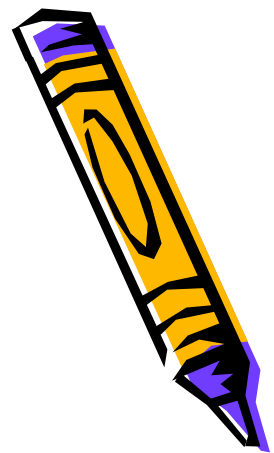


- Organization of sleep patterns developmental
- Difficulty cited by western parents
 - Sleep
 - Behavior
- Other cultures do not describe



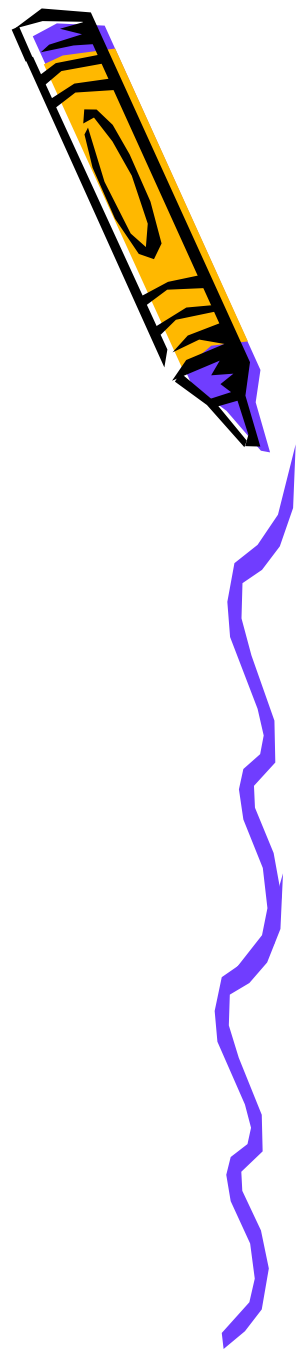
Newborn to 6 months

- All areas interrelated
- Motor: relaxed body calms
- Calm body, eats well, sleeps well
- Social-emotional; needs your help to calm body, eat and sleep
- Communication: tells you that your baby needs you
- Self-help; tries to calm self



WHAT INFANTS ARE LEARNING

- How do they learn when newborns?
 - From the adults responses to their cries for help
 - To move, to eat, to calm for sleep



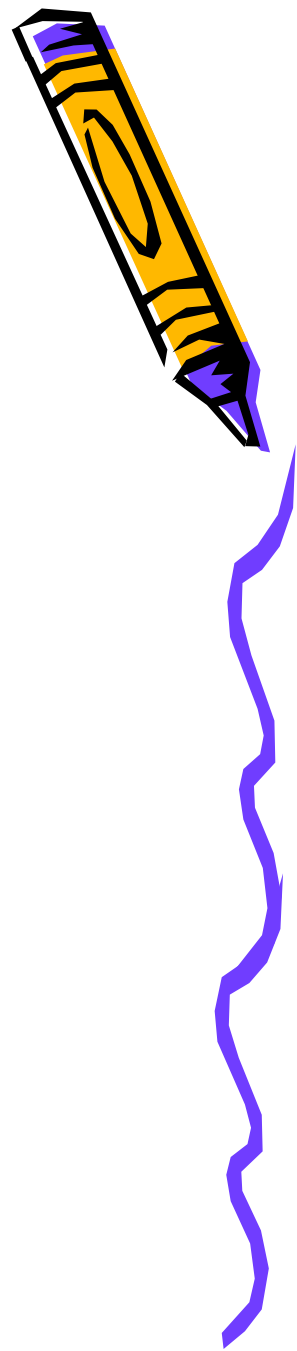
How can we best help?

- Approach to parents: Listen for concerns
 - Parent Evaluation of Development Status-Revised (PEDS-R) 2023
- Appreciation of role of sleep
- What should we be asking?
 - How is their hearing?
 - Handout



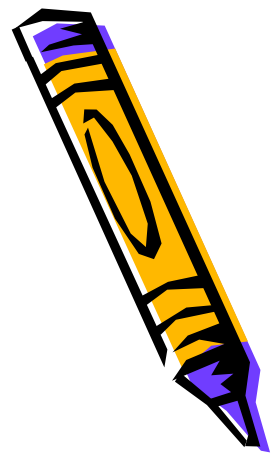
How do we help?

- Understanding what parents think, feel, do!!

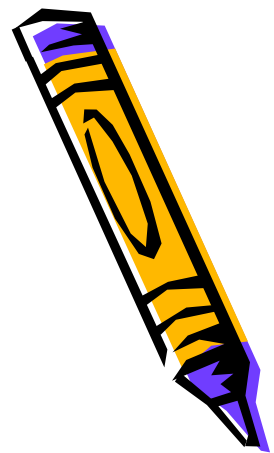


How do we help?

- Assisting Parents to assist infants
 - Do you need any help?



The Moving Child: From 6 to 12 months

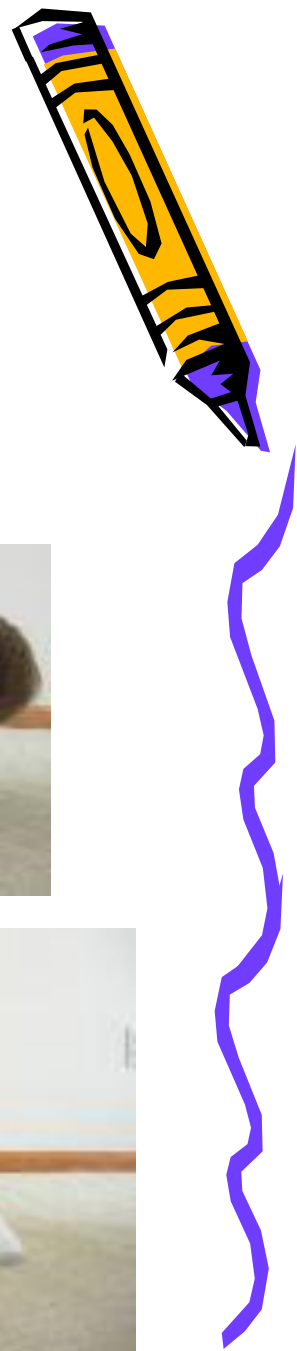


- Motor
- From sidelying play with hands
- To rolling



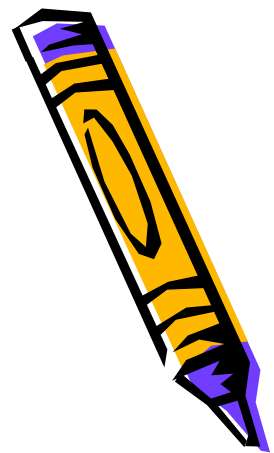
The Moving Child: From 6 to 12 months

- To moving Out of sitting
- Into sitting



The Moving Child: From 6 to 12 months

- Moving into and out of sitting
- To crawling



The Moving Child: From 6 to 12 months

- Ages 8-12
- The CRAWLING Child
- Into and out of standing
 - Increasing trunk rotation; elongation

Over one hip

- Arms as base of support



WHAT INFANTS ARE LEARNING 12 months

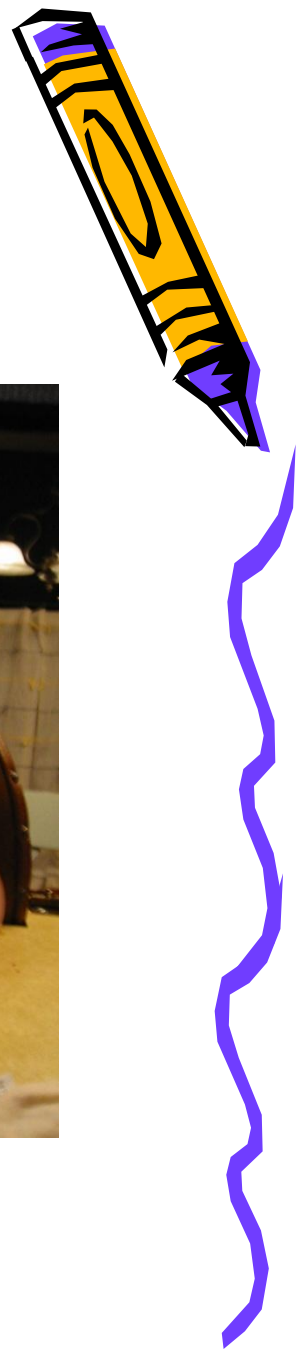


- The upright child
 - Into and out of standing
 - Cruising; letting go; stand alone
 - Beginning steps: 90% 11.5 months
(Canadian norms on Alberta Infant Motor Scale)



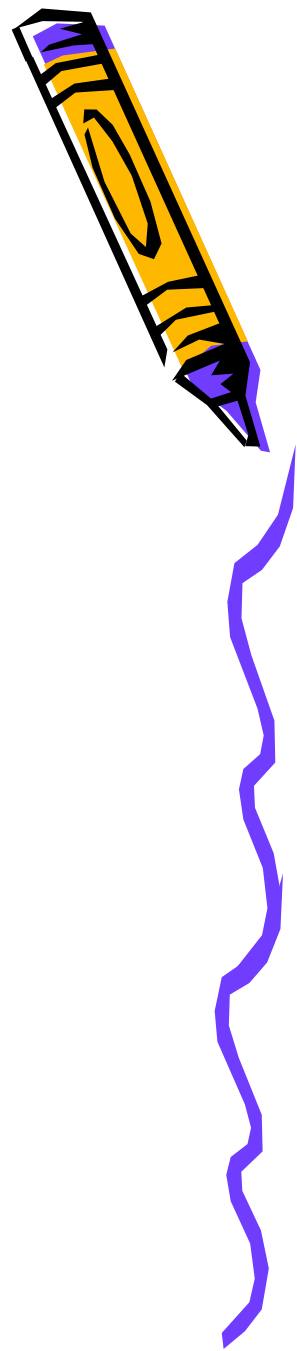
What infants are learning 6-12 months

- Social- Emotional
 - Attached to important people
 - Watches everything
 - Listens!
 - Wants to be a part

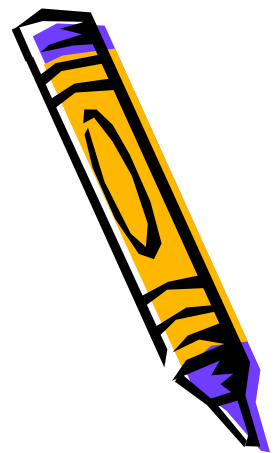


What infants are learning 6-12 months

- Communication
 - Imitates
 - Make Sounds
 - Points
 - Turns to name



What infants are learning 6-12 months

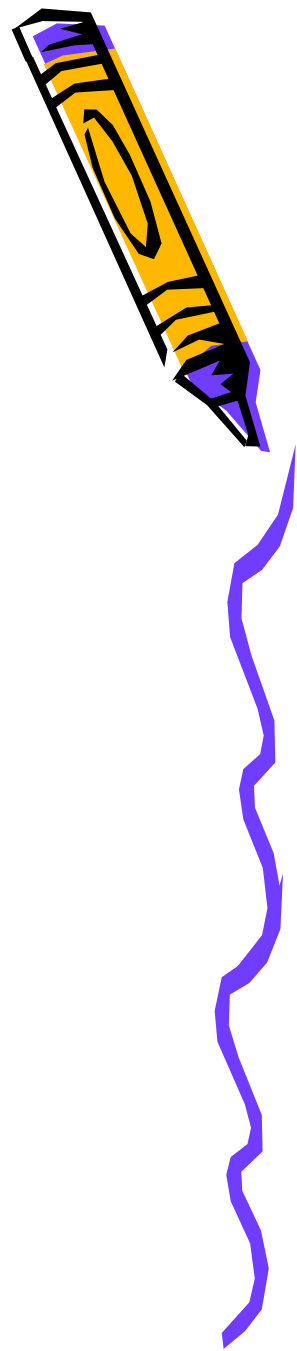


- Self-Help (adaptive)
- Move from Breast only to
- Solid foods

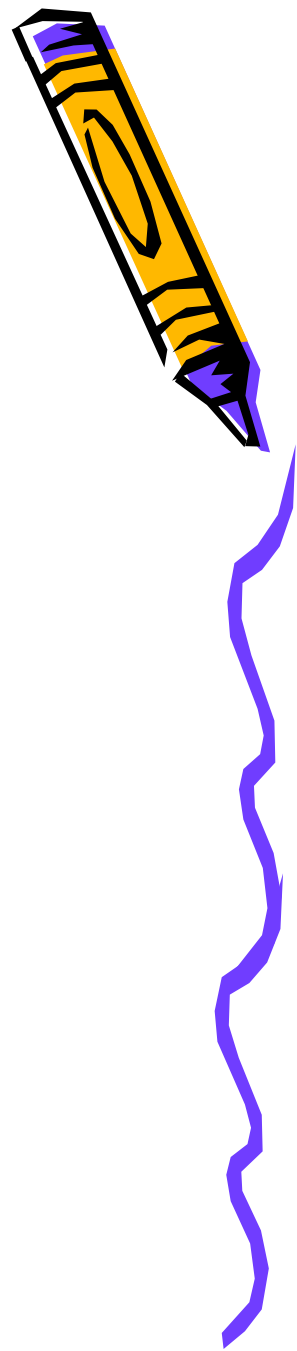


What infants are learning 6-12 months

- Cognitive
 - Understands cause and effect
 - Looks for things when dropped



How do infants learn from 6-12 months?

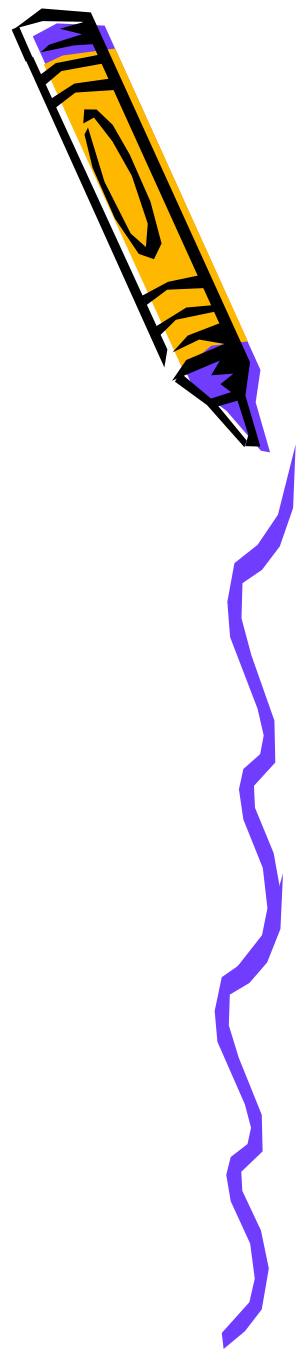


- Interaction with family members
- Listening
- Adults talking to them
- Adults reading to them
- Adults playing with them

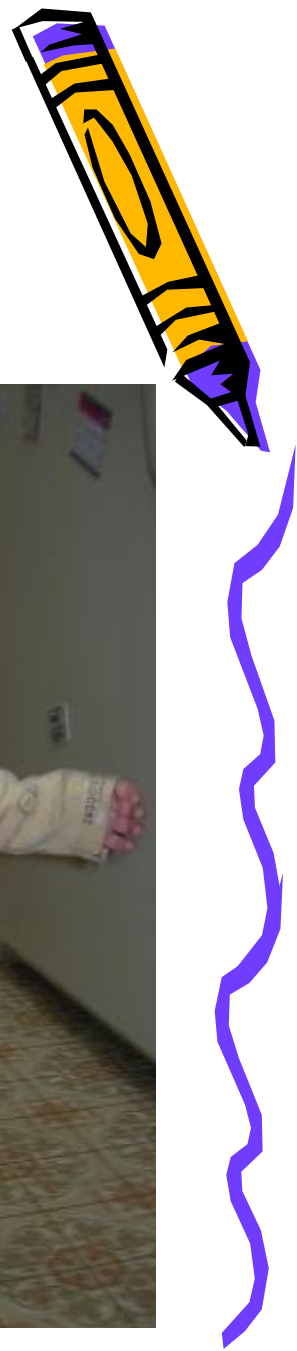


How do we help them?

- Talking activities
- Reading
- Getting hearing checked
- Take them to child find



What infants are learning 12 to 18 months



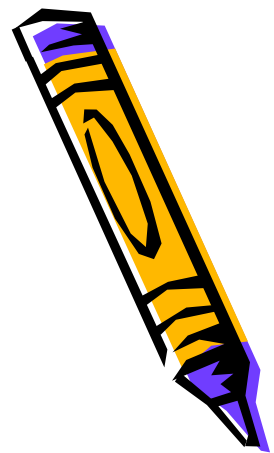
- Motor
- Want to just practice walking!
- 12 football fields each day



- WHAT changes?
 - Postural control
 - Single leg stance
 - Strength of muscles
 - Pelvis narrows: hip
 - Torsion at knee
 - Control of ankle: gastroc strength



What infants are learning 12 to 18 months

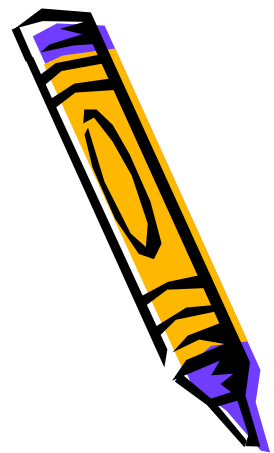


- Social-emotional
 - interactive
 - Does simple things when asked
 - Copies people (imitation)
 - Copies actions



What infants are learning from 12 month to 2

- Social-emotional
 - Ability to learn to wait before acting
 - **Self**-monitoring
 - Acquiring the ability to organize segments of behavior sequentially



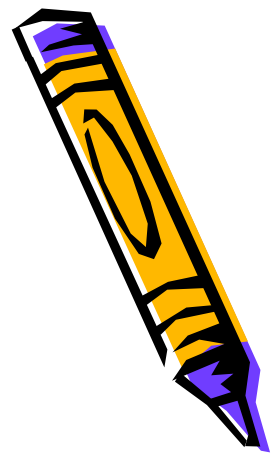
Social-emotional

- Self-regulation: First step to self-control
 - Social-emotional (Strouf, 1979) 'manage tension'
 - Language: 'replace crying with words'
 - Attention; joint attention with caregiver basis
 - Executive Functions (Greenspan) 'impulse control'
 - Movement: exploring their environment



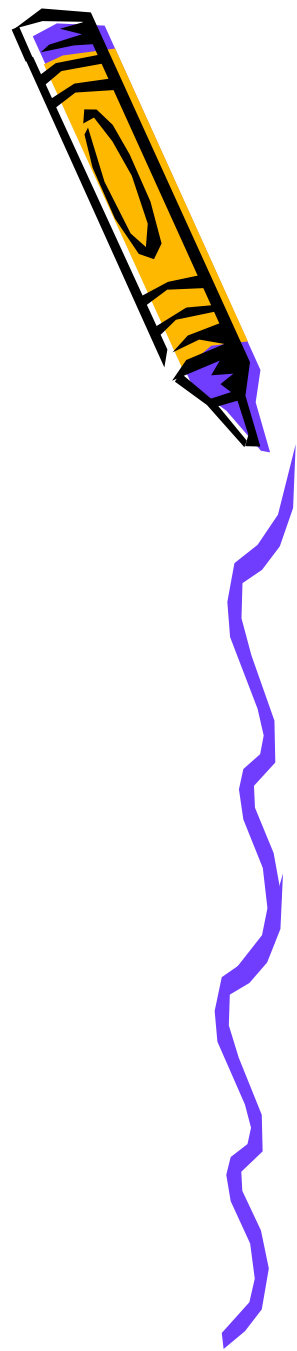
- "How useful is it for a child to have cognitive and language skills if he can't sit still, focus his attention and control his temper?"

- (Shonkoff et al. 2000)



What infants are learning 12 to 18 months

- Communication
 - Single words with meaning
 - Gestures with meaning



What infants are learning 12 to 18 months

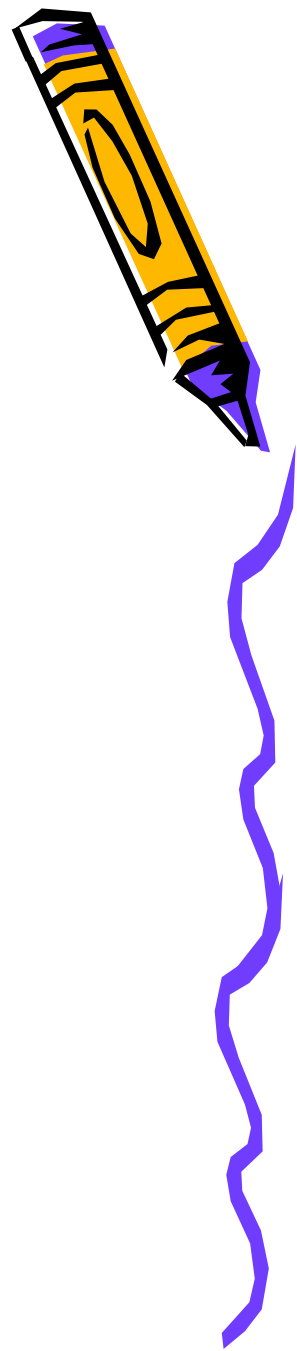


- What infants are learning
- Fine motor
- Self-help



Self-Help

- Feeding (Mares, 2005)
 - Newborn
 - Organizing multiple systems
 - 4-6 months
 - Taking control; interactional
 - 6-12 months
 - Parent attachment





- 18 months
- Fine hand
 - Mature 15 months
 - Self-feeding (Erhardt,1984)

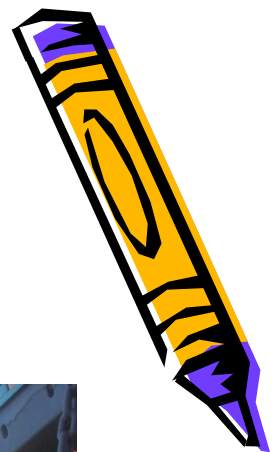




- Motor: Developing Balance
- 18months-2 years months
- The 'squatting' child
 - Stability
 - Eccentric control



- Developing Balance
- Age: Two year old
- The climbing child
 - Walk: Heel strike
narrow pelvic base
(rotation)
 - Stability; can stand still
 - Tries to jump
 - Mobility; runs

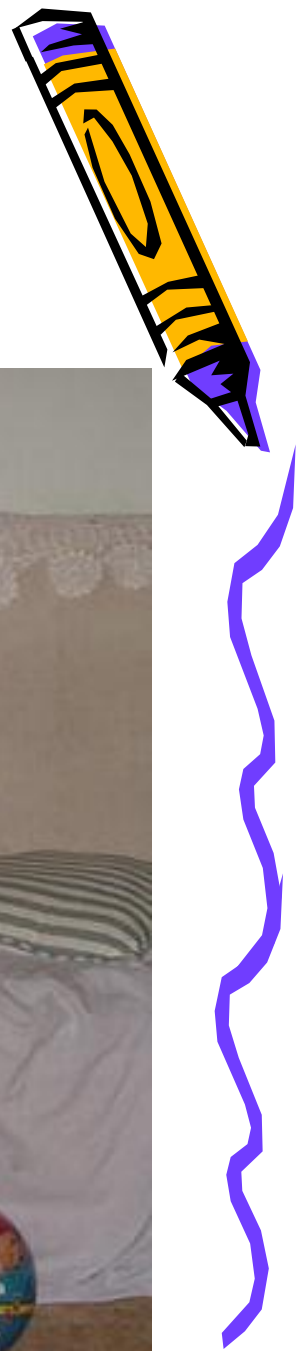


- Developing Balance

Age: 3 years

- Stability: postural control: one leg
- Mobility: Kick
- Function: Dressing
- Mature gait pattern (Sutherland, 2006)

•





- Developing Balance
Ages: Four to Five
(Preschool)
- The exploring child
 - Hop
 - Skip
 - Jump





- Developing Skills
- Ages: 6 to 12 (Elementary Age)
- Timed performance: (Largo et. al. 2003)
 - More complex Motor: later, more variable
 - Repetitive, alternating: Puberty
 - Sequential Finger: >18
 - Dynamic Balance: 18
 - Sideways Balance: 13-15
- The sport child
- Develop advanced skills: lifestyle



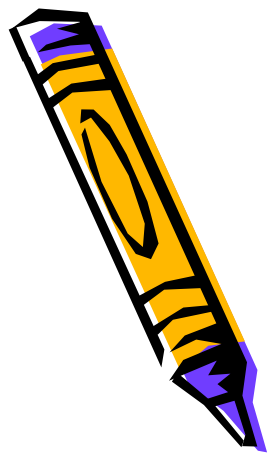
Communication

- Importance: Success with next tasks
 - Language: 'replace crying with words'
 - Attention; joint attention with caregiver basis
 - Starting with single words
 - Points to objects or people when asked
 - Five words by 18 months
 - Putting two words together by 2



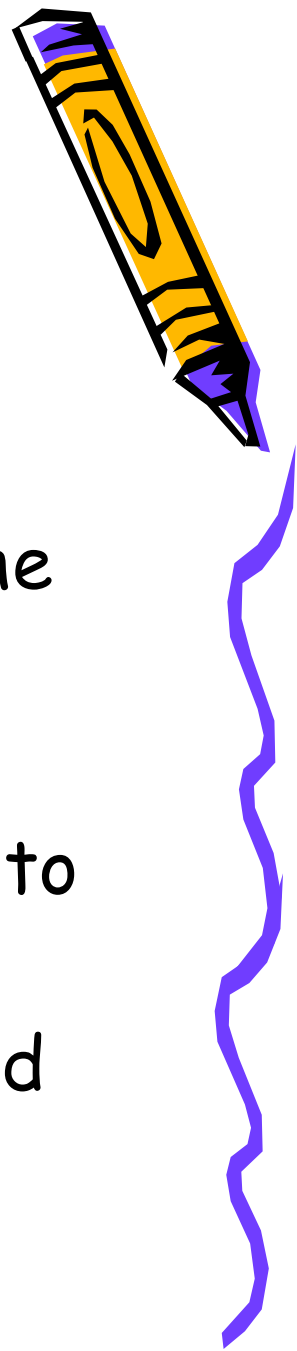
Cognitive

- Importance: Success with next tasks
 - Executive Functions (Greenspan) 'impulse control'
 - Must have to pay attention
 - Pays attention to play activities and books for longer periods
 - Copies simple actions



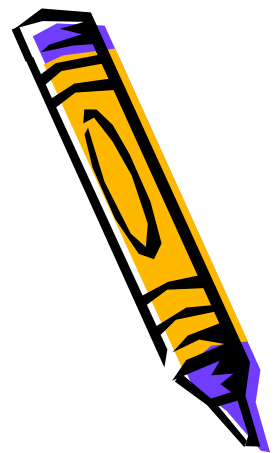
How do we help from 12 months to 2 years?

- Motor: practice, space, play
- Social-emotional: interaction, listen to the child
- Communication: Talk and read activities
- Self-Help: encourage and allow the child to try everything
- Cognitive- words are the 'legs' to the mind



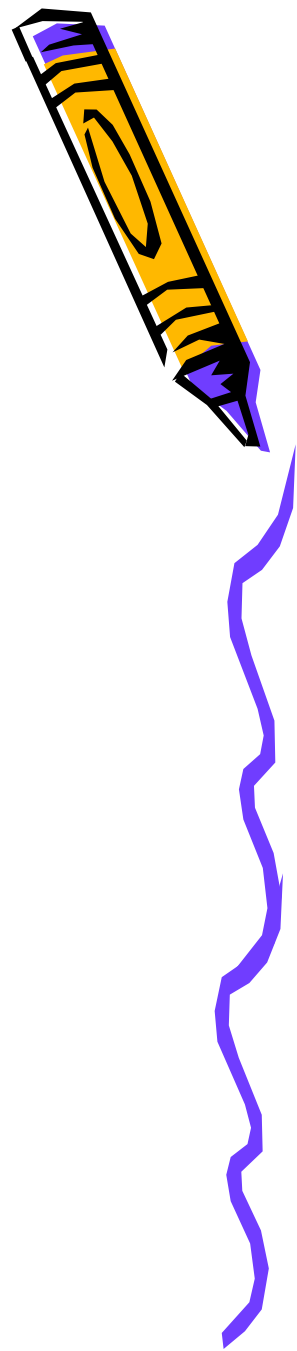
Strategies

- Role: (Mares, 2005)
 - "Ally to the Parent and Advocate for the Child"
- Goal:
 - Support the Parents understanding of their infant
 - Support the Infant's Adaptation
 - Support the Infant's Resiliency



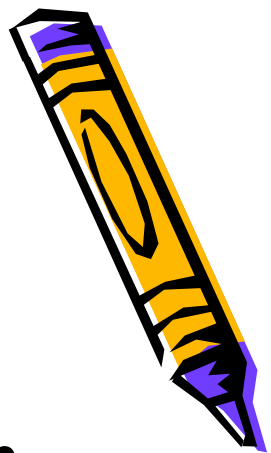
Strategies

- Goal #1 Understanding:
 - Share information
 - Ask the right questions
 - Who is this child?
 - What is he telling us?
 - How do we help?
 - Change knowledge and perceptions
 - Use Observation in assessment: Use 'Conversations' LISTEN carefully
 - What do you see? What do you think?



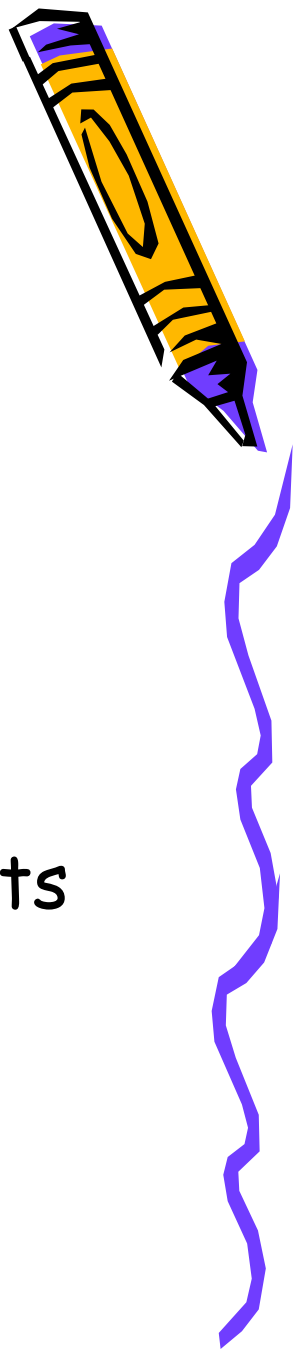
Strategies

- Goal #2 Support infant adaptation
 - For relaxation, calming and sleep
 - Lifting to support development of flexion
 - Carrying to support calming
 - Slings, packs
 - Flexion first, then sidelying only if needed



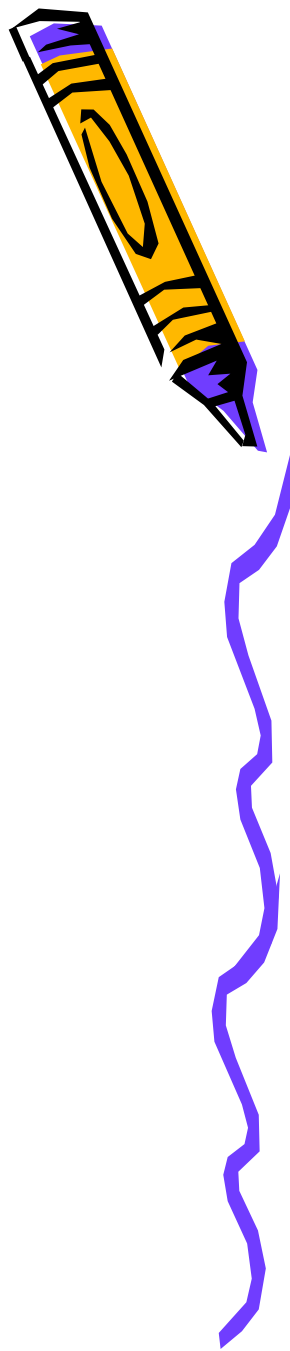
Strategies

- Goal #3 Support infant resiliency
 - Focus on relax body
 - Focus on schedule success for family
 - Focus family on small successes
 - Keep parents positive about the infants attempts to adapt



Case study

- What do you observe?
- Motor?
- Social-emotional?
- Communication?
- Self-help?
- Cognitive?



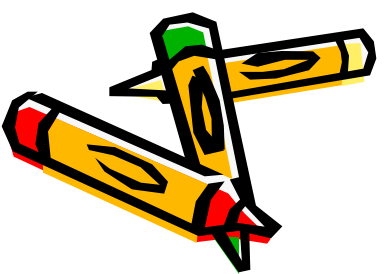
Case Study Assignment



- The Case of A:
- Stroke at birth
- Very social
- Loves to listen
- Loves to eat
- Can't see, can't move



- How would you help the family adapt to her disability?



Finish

Questions?
Contact Vickie
@vickiemeade.c
om

