

N433 Focus Sheet 1, Part 1- Fall 2019

Developmental Chart- Infant through Preschool

RKC Ch 25, 26, & 27 and ATI Ch 3, 4, & 5 and Vital sign variation handout from clinical packet

	Newborn to 2 months	Infant - 4 months	Infant - 6 months	Infant - 8 months	Infant - 10 months	Infant - 1 year	Toddler - 15 months	Toddler - 2 years	Preschool 1- 3 years	Preschool 1- 4 years
Vital Signs (See normal/abnormals PPT)	99.5F(37.5 C) 80 to 180/min 30 to 35/min 65-78/41-52	99.5F(37.5C) 70 to 150/min 30 to 35/min 65-78/41-52	99.9F(37.7C) 70 to 150/min 25 to 30/min 83-114/38-67	99.9F(37.7C) 70 to 150/min 25 to 30/min 83-114/38-67	99.9F(37.7C) 60 to 110/min 21 to 25/min 83-114/38-67	99.0F(37.2C) 60 to 110/min 21 to 25/min 86-117/47-76	99.0F(37.2C) 60 to 110/min 21 to 25/min 86-117/47-76			
Weight	3.4000 kg (7.5 lb)	6.8 kg (15 lb)	7.26 kg (16 lb)	Baby continues to gain weight.	Baby continues to gain weight.	9.75 kg(21.5 lb)	Toddler continues to gain weight.	13.6 kg (30 lb)	14.5 kg(32 lb)	16.5 kg(36.5 lb)
Height (Length)	50 cm (20 in)	57.5 cm (23 in)	62.5 cm (25 lb)	Baby continues to grow.	Baby continues to grow.	100 cm (40 in)	Baby continues to grow.	Baby continues to grow.	95 cm (37.5 in)	103 cm (40.5 in)

Neurologic	Critical brain growth and continued myelination of the spinal cord occur over the first year. Reflexes that are present at birth are Moro, root, suck, asymmetric tonic neck, plantar and palmar grasp, step, and Babinski.	Critical brain growth and continued myelination of the spinal cord occur over the first year. Protective reflexes develop which include the righting and parachute reactions.	The brain weighs half that of the adult brain.	Infant parachutes forward which is a protective extension with the arms when held up in the air and moved forward. The infant catches itself.	Infant reflexively grasps with bottom of foot when pressure is applied to plantar surface. The anterior fontanel may close at 9 months.	The brain has grown considerably, weighing 2 ½ times what it did at birth.	Brain growth continues.	Head circumference reaches about 90% of its adult size.	Myelination of the spinal cord is complete.	The length of the skull increases slightly.
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Respiratory	Breathes irregularly with periodic pauses.	The nasal passages are narrower.	The trachea and chest wall are more compliant.	The bronchi and bronchioles are shorter and narrower. There are significantly fewer alveoli.	The larynx is more funnel shaped.	The alveoli continue to increase.	The tongue is relatively large compared to the size of the mouth.	Tonsils and adenoids are large, and the Eustachian tubes are relatively short and straight.	The respiratory structures continue to grow in size.	The eustachian tubes remain relatively short and straight.
Cardiovascular	Heart rate is between 120 to 140.	The capillaries are closer to the surface of the skin making them more susceptible to heat loss.	Blood pressure increases.	Thermoregulation becomes more effective.	The heart doubles in size.	The heart rate decreases.	The blood pressure increases.	Blood vessels are close to the skin surface and so are compressed easily when palpated.	Heart rate is still decreasing.	The blood pressure is still increasing.
Gastrointestinal	The infant is born with one or more teeth. The liver is immature.	Small amounts of saliva are present. Some infants may not have bowel movement.	May cry while trying to have a bowel movement.	The first primary teeth begin to develop.	The stomach can accommodate three full meals.	The stomach increases in size.	Stool passes decrease in frequency to one or more per day.	Pepsin production matures.	Bladder and bowel control are almost complete.	Stool passes occur once or twice per day.

		nts for several days.								
Genitourinary	Extracellular fluid accounts for 35% of body weight.	Intracellular fluid accounts for 40%.	The infant is more susceptible to dehydration.	Infants urinate frequently and urine has a low specific gravity.	The renal structures are immature.	Bladder capacity increases .	Bladder and kidney function reach adult level.	The urethra remains short which makes them more susceptible for UTIs.	Stool passes occur once or twice per day.	Has generally adequate bowel control.

Musculoskeletal	Length, position, and size of extremities are symmetric.	Joints are stable and symmetric.	Joints have full range of motion with no crepitus or redness.	Spines do not have dimples or tufts of hair.	The spine should be midline with an overall C-shaped lateral curvature .	The bones increase in length.	The muscles mature and become stronger.	The musculature is weak resulting in a pot-bellied appearance.	The musculature strengthens and the abdomen is flatter in appearance.	The muscles begin strengthening and mature the presence is still susceptible to injury.
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Gross Motor	Demonstrates head lag, lifts head off mattress when prone.	Raises head and shoulders off mattress when prone, only slight head lag, and rolls from back to side.	Rolls from front to back, and rolls from back to front.	Bears full weight on feet, sits, leaning forward on both hands, and sits unsupported.	Pulls to standing position, creeps on hands and knees instead of crawling, changes from a prone to a sitting position.	Cruises or walks while holding onto something, walks with one hand held, and sits down from a standing position without assistance.	Walks without help, creeps up stairs, runs clumsily, falls often, throws a ball overhand, jumps in place with both feet, and pulls and pushes toys.	Jumps up and down stairs by placing both feet on each step.	Rides a tricycle, jumps off bottom step, and stands on one foot for a few seconds.	Skips, hops, one foot throw ball overhand, and catch ball reliably.
Fine Motor	Has a strong grasp reflex, holds hands in an open position, and grasp reflex fades.	No longer has a grasp reflex, keeps hands loosely open, and grasps objects with both hands.	Uses palmar grasp dominantly and holds bottle.	Moves objects from hand to hand and begins using pincer grasp.	Has crude pincer grasp, dominant hand preference evident, and grasps rattle by its handle.	Places objects into a container, neat pincer grasp, tries to build a two-block tower without success, and can turn pages in a book.	Uses a cup well, builds a tower of two blocks, manages a spoon without rotation, turns pages in a book two or three at a time, builds tower of three or four blocks.	Builds a tower of six or seven blocks and turns pages of books one at a time.	Copies figures on paper.	Dresses independently.

Sensory	Nearsighted. Prefer the human face to other objects.	The ability to fuse two ocular images into one cerebral picture is well established.	The infant will accept non sweet flavors.	Learn to understand their caregiver's mood.	Color vision develops.	Vision should be 20/50 to 20/40 in both eyes.	The sense of smell continues to mature.	Taste discrimination is not fully developed but they have preferences for flavors of food.	The sense of smell continues to mature, and they will comment if they do not like a scent.	Visual acuity continues to progress and should be equal bilaterally.
Communication/Language	Infants cry for up to 1 to 1 ½ hour each day up to 3 weeks of age and build up to 2 to 4 hours by 6 weeks.	Crying decreases by 12 weeks of age. Vocalizes with cooing noises.	Squeals and laughs.	Begins speaking two-word phrases and progresses to speaking three-word phrases.	Comprehend the word "no" and obeys single commands accompanied by gestures.	Says three to five words.	Using one-word sentences, or holophrases.	Language increases to about 300 words.	The vocabulary of preschoolers increases to more than 2,100 words.	Spoken sentences of three to four words. They talk in language become their primary method of communication.
Emotional/Social	The newborn spends most of their time sleeping.	They have their first real smile.	The infant will enjoy patty cake.	The infant may develop stranger anxiety.	The infant may experience separation anxiety from their parents.	Sees oneself as separate from the caregiver.	Toddlers begin to learn about gender differences.	Aggressive behavior is started.	They do not have clear body boundaries.	They develop skills including cooperation, sharing, kindness, general affective displays, and relationships with friends.

Erickson	Trust vs. mistrust stage.	Infant begins to learn delayed gratification.	Failure to learn delayed gratification leads to mistrust.	Trust is developed by meeting comfort, feeding, stimulation, and caring needs.	Mistrust develops if needs are inadequately or inconsistently met.	Independence is paramount for toddlers, who are attempting to do everything for themselves.	Toddlers often use negativism or negative responses, as they begin to express their independence.	Ritualism provides a sense of comfort for toddlers as they begin to explore the environment beyond those most familiar to them.	Initiative vs. guilt. They become energetic learners, despite not having all of the physical abilities necessary to be successful at everything.	Guilt occurs preschoolers believe they misbehave or violate they unable accomplish a task.
Piaget	Newborns are in the sensory motor stage.	Infants progress from reflexive to simple repetitive to imitative activities.	Separation, object permanence, and mental representation are the three important tasks accomplished in this stage.	Infants learn to separate themselves from their objects in the environment.	They have the ability to recognize and use symbols.	Infants learn an object still exists when it is out of view.	The concept of object permanence becomes fully developed.	They have an demonstrate memories of events that relate to them and domestic mimicry is evident.	The preschooler moves from totally egocentric thoughts to social awareness and the ability to consider the viewpoints of others.	The preschooler transitions to the phase of intuitive thought around age 2. They judge on appearance.

