N432 Newborn Care Plan

Lakeview College of Nursing

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Demographics (10 points)

Date & Time of Clinical Assessment 4/4/22 09:00	**Patient Initials** IE	**Date & Time of Birth** 4/1/22 0340	**Age (in hours at the time of assessment)** 64 hours
Gender Female	**Weight at Birth** **(gm)** _3290___ **(lb.)** _7__ **(oz.)** __4.1_	**Weight at Time of Assessment** **(gm)** __3209__ **(lb.)** __7___ **(oz.)** __1.2__	**Age (in hours) at the Time of Last Weight** 7hrs
Race/Ethnicity African American	**Length at Birth** **Cm** __49.53_____ **Inches** ___19.5_____	**Head Circumference at Birth** **Cm** __35.5____ **Inches** ___13.9_____	**Chest Circumference at Birth** **Cm** ___33___ **Inches** ____12.9____

There are times when the weight at the time of your assessment will be the same as birth

Mother/Family Medical History (15 Points)

Prenatal History of the Mother:

GTPAL: G-3, P-1, T-1, A-1, L-1

When prenatal care started: 9/23/21

Abnormal prenatal labs/diagnostics: Decreased BUN, Decreased RBC, Decreased Hgb, Decreased Hct.

Prenatal complications: The mother experiences a history of c-section and preeclampsia.

Smoking/alcohol/drug use in pregnancy: The mother denies any use of alcohol or tobacco use. She does state however that she was using marijuana before the pregnancy.

Labor History of Mother:

Gestation at onset of labor: 38 weeks and 4 days.

Length of labor: 0hrs and 0mins. Pt was a repeat C-section.

ROM: Pt was a repeat C-section.

Medications in labor: Epidural, Azithromycin, Acetaminophen, Clindamycin, Ketorolac, Oxytocin (Pitocin) and Gentamycin.

Complications of labor and delivery: The mother was initially wanting to try to baby vaginally but the mother had preeclampsia and the baby was also breech.

Family History: The mother's previous pregnancy also ended with the mother having preeclampsia and the baby is now four years old was also breech then.

Pertinent to infant: N/A

Social History (tobacco/alcohol/drugs):

Pertinent to infant: The mother denies any use of alcohol or tobacco use. She does state however that she was using marijuana before the pregnancy.

Father/Co-Parent of Baby Involvement: The father is involved with the baby however he was not at the hospital during clinical rotation.

Living Situation: The mother lives with her mother, father, father of her child and her four-year-old son.

Education Level of Parents (If applicable to parents' learning barriers or care of infant):

The mother has a Highschool education and is currently unemployed.

No information available on the father.

Birth History (10 points)

Length of Second Stage of Labor:0hr and 0mins

Type of Delivery: The mother had a repeat C-section with a low transverse incision.

Complications of Birth: None

APGAR Scores:

1 minute: 9

5 minutes: 9

Resuscitation methods beyond the normal needed: None

Feeding Techniques (10 points)

Feeding Technique Type: Both Breastfeeding and Bottle feeding.

If breastfeeding:

LATCH score: 10

Supplemental feeding system or nipple shield: None

If bottle-feeding:

Positioning of the bottle: The bottle is in the upright and the baby is the side-lying position during the feedings.

Suck strength: The baby's suction strength is strong.

Amount: The baby is consuming 40mL per feeding of Similac.

Percentage of weight loss at time of assessment: __-2.3**__%**

****Show your calculations; if today's weight is not available, please show how you would calculate weight loss (i.e. show the formula) ****

(3209 (current weight) - 3290 (birth weight) = -81

-81 (loss) / 2050 (birth weight) = -0.0246

-0.0246 x 100 = -2.262 or a loss of 2.3%

What is normal weight loss for an infant of this age?

Normal weight loss for an infant is less than 7% the neonates body weight (Ricci et al., 2021).

Is this neonate's weight loss within normal limits? Yes

Intake and Output (8 points)

Intake

If breastfeeding:

Feeding frequency: Every 2-3 hours every other feeding.

Length of feeding session: Approximately 15 minutes or until the baby is full.

One or both breasts: Left breast only at this time.

If bottle feeding:

Formula type or Expressed breast milk (EBM): 20 cal/oz Similac

Frequency: Every 2-3 hours every other feeding**.**

Volume of formula/EBM per session: N/A

If EBM, is fortifier added/to bring it to which calorie content: N/A

If NG or OG feeding:

Frequency: N/A

Volume: N/A

If IV:

Rate of flow: N/A

Volume in 24 hours: N/A

Output

Age (in hours) of first void: 7 hours old

Voiding patterns: Every 3 hours.

Number of times in 24 hours: The infant had 5 voids within 24hrs.

Age (in hours) of first stool:16 hours

Stool patterns:

Type: Meconium

Color: Black

Consistency: Soft

Number of times in 24 hours: The infant had 6 stools within 24hrs.

Laboratory Data and Diagnostic Tests (15 points)

Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Name of Test	Why was this test ordered for THIS client? *Complete this even if these labs have not been completed*	Expected Results	Client's Results	Interpretation of Results
Blood Glucose Levels	This lab is ordered during the first 24 to 48 hours of life, as a normal newborns transition from intrauterine to extrauterine life, their plasma glucose levels are typically, lower than later in life (Ricci et al., 2021). Most newborns experience transient hypoglycemia and are asymptomatic (Ricci et al., 2021).	Greater than 45	This test was not performed or charted.	This test was not performed or charted.

	If hypoglycemia is prolonged or is left untreated, serious, long-term neurological effects can occur (Ricci et al., 2021).			
Blood Type and Rh Factor	Blood types are determined by the types of antigens on the red blood cells (Ricci et al., 2021). Antigens are proteins on the surface of RBC that can cause a response from the immune system. Mothers who are Rh-negative blood type who has given birth to an infant that has Rh-positive should receive an injection of Rh immunoglobulin within 72 hours after birth to prevent a sensitization reaction in the Rh-negative woman (Ricci et al., 2021). By getting the blood type it can determine Rh status and any incompatibility of the newborn (Ricci	A, B, AB, O +/-	This test was not performed or charted.	This test was not performed or charted.

	et al., 2021).			
Coombs Test	The Coombs tests Identifies hemolytic disease of newborns; positive results indicate that the newborns RBC have been coated with antibodies thus are sensitized. (Ricci et al., 2021).	+/-	This test was not performed or charted.	This test was not performed or charted.
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	Some jaundice in newborns are quite common, although it could be due to severe hyperbilirubinemia that could potentially lead to neurodevelopment complications (Ricci et al., 2021). This is tested because pathologic jaundice is manifested within the first 24 hours of life and the bilirubin levels increase more than 5 mg/dL/day in a full-term infant (Ricci et al., 2021).	<5 mg/dL in the first 24 hours.	6.9 One day ago, 03:48	Due to increased bilirubin blood test results the infant is at risk for hyperbilirubinemia (Ricci et al., 2021).
Newborn Screen (At 24 hours)	Used to detect dozens of metabolic disorders from a single drop of blood. A child who tests positive will have to have	Negative	**(If available—these may be not available until after discharge for some clients)** Test completed results not	Test completed results not received.

	additional testing to confirm the diagnoses (Ricci et al., 2021).		received.	
Newborn Hearing Screen	A hearing screening should be done before discharge from the birthing unit, if not the newborn needs to be screened before 1 month of age (Ricci et al., 2021). A hearing deficit can cause further impairments to the newborn so early detection is key (Ricci et al., 2021).	Pass/Fail	L ear: Passed R ear: Referred	The L ear passed the R ear has been referred. Babies with a REFERED result need to see an audiologist as soon as possible. The audiologist will do more complete tests to find out if the baby has hearing loss, how significant it is, and what can be done to help (Ricci et al., 2021).
Newborn Cardiac Screen (At 24 hours)	Pulse oximetry screening of newborns should occur within the first 24 hours of life (Ricci et al., 2021). This is an inexpensive and noninvasive test that can assist with finding congenital heart defects (Ricci et al., 2021).	Greater than 90	100% hand 100% foot	This is within normal range (Ricci et al., 2021).

Lab Data and Diagnostics Reference (1) (APA):

Ricci, S.S., Kyle, T., & Carman, S. *(2021). Maternity and pediatric nursing (4th ed.).* Philadelphia, PA: Wolters Kluwer.

Newborn Medications (7 points

Brand/Generic	**Aquamephyton (Vitamin K)**	**Illotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine**	
Dose	1mg	5mg/1g	0.5mL	
Frequency	Once	Once	Once	
Route	IM	Both Eyes	IM	
Classification	Vitamin	Macrolide Antibiotic (Eye ointment)	Vaccine	
Mechanism of Action	Vitamin K replacement indicated for the treatment of coagulation disorders (Jones and Bartlett, 2020).	Stop bacteria from producing important nutrients they need to survive (Jones and Bartlett, 2020).	Active immunization with hepatitis B vaccine stimulates the immune system to produce anti-HBs without exposing the patient to the risks of active infection (Ricci et al., 2021).	
Reason Client Taking	Low levels of Vitamin K can lead to dangerous bleeding in newborns (Jones and Bartlett, 2020). Newborns are given vitamin K at birth as a preventative measure for bleeding and to supplement for the lack of vitamin K in infancy (Ricci et al., 2021).	To prevent the newborn from getting a bacterial eye infection (Jones and Bartlett, 2020).	To provide protection to the infant so they do not contract Hepatitis B (Jones and Bartlett, 2020).	

Contraindications (2)	Some Vitamin K injections contain benzyl alcohol which should never be given to infants because of risk of fatal shock syndrome (Jones and Bartlett, 2020). Anaphylaxis may result from hypersensitivity to this medication or its components (Jones and Bartlett, 2020).	Hypersensitivity y to the medication. Allergies to macrolide antibiotics. (Jones and Bartlett, 2020).	Hypersensitivity y to the vaccine. Hypersensitivity to yeast (Jones and Bartlett, 2020).	
Side Effects/Adverse Reactions (2)	Cardiac arrest Respiratory arrest (Jones and Bartlett, 2020).	The medication can cause mild eye redness and irritation (Jones and Bartlett, 2020).	Reddening of the skin especially around the injection site and increased irritability (Jones and Bartlett, 2020).	
Nursing Considerations (2)	Observe for generalized ecchymosis or bleeding from umbilical cord and circumcision site (Jones and Bartlett, 2020).	Observe for irritation. Do not rinse, ointment may be wiped from the outer eye after 1 minute (Ricci et al., 2021).	First dose should be given within the first 12 hours. Administer intramuscularly (Ricci et al., 2021).	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	The nurse should assess the umbilical stump to monitor for bleeding and should also check the	Be alert for chemical conjunctivitis for 1-2 days. Close the eye to make sure the medication permeates	Monitor vital signs before and after administration (Jones and Bartlett, 2020). Find proper placement for the injection	

	baby's vitals prior to administration. If given before circumcision monitor for therapeutic effects (Jones and Bartlett, 2020).	(Ricci et al., 2021).	which is the Vastus Lateralis (Ricci et al., 2021).	
Client Teaching needs (2)	Educate the parent on why baby is receiving the medication and the therapeutic effects of the medication (Jones and Bartlett, 2020). Teach the parent about signs and symptoms of bleeding (Jones and Bartlett, 2020).	Educate to always wear gloves when applying medication to the eyes (Ricci et al., 2021). Do not touch the tip of the eye (Ricci et al., 2021).	Educate the parents on why it is necessary for the infant to be vaccinated against Hepatitis B (Jones and Bartlett, 2020). Educate that swelling and redness is a common side effect of the vaccine (Jones and Bartlett, 2020).	

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2020 Nurse's drug handbook*. Burlington, MA

Ricci, S.S., Kyle, T., & Carman, S. *(2021). Maternity and pediatric nursing (4th ed.).* Philadelphia, PA: Wolters Kluwer.

Newborn Assessment (20 points)

Area	Your Assessment	Expected Variations and Findings *This can be found in your book on page 622 in Ricci, Kyle, & Carman 4th ed 2020.	If assessment finding different from expectation, what is the clinical significance?
Skin	Skin is warm, smooth, and flexible. The infant is well hydrated. Skin turgor is within normal limits.	Skin is jaundiced. Acrocyanosis is present. Milia, Mongolian spots, and stork bites are present (Ricci et al., 2021).	Assessment findings match expected findings.
Head	The Head is symmetrical; the hair is evenly distributed. The Head does not have overriding sutures, lumps, or deformities.	Head variations include microcephaly, macrocephaly, and enlarged fontanels (Ricci et al., 2021).	Assessment findings match expected findings.
Fontanels	Anterior and posterior fontanelles are palpable.	Large or small fontanelles or closed fontanelles (Ricci et al., 2021).	Assessment findings match expected findings.
Face	The infant has full cheeks, and facial features are symmetrical.	Facial nerve paralysis, nevus flammeus, nevus vasculosus (Ricci et al., 2021).	Assessment findings match expected findings.
Eyes	Eyes are clear, symmetrically placed, and online with ears.	Chemical conjunctivitis, subconjunctival hemorrhages (Ricci et al., 2021).	Assessment findings match expected findings.
Nose	The nose is small, midline, and narrow. The infant can smell.	Malformation or blockage (Ricci et al., 2021).	Assessment findings match expected findings.
Mouth	Mouth is aligned in	Epstein pearls,	Assessment findings

	midline, symmetric, intact soft and hard palate.	erupted precocious, teeth, or thrush (Ricci et al., 2021).	match expected findings.
Ears	Ears are soft and palpable with quick recoil when folded and released.	Low set ears, Hearing loss (Ricci et al., 2021).	Assessment findings match expected findings.
Neck	Neck is short, creased, and moves freely. The infant holds head in midline.	Short, creased, moves freely, and baby holds head in midline (Ricci et al., 2021).	Assessment findings match expected findings.
Chest	Chest is round and symmetric. The chest is smaller than the head.	Nipple engorgement. Whitish discharge. (Ricci et al., 2021).	Assessment findings match expected findings.
Breath Sounds	Normal rate and pattern of respirations, respirations symmetrical and non-labored, lung sounds clear throughout anterior/posterior bilaterally, no wheezes, crackles, or rhonchi noted.	Normal rate and rhythm of respirations without wheezes, crackles, or rhonchi noted (Ricci et al., 2021).	Assessment findings match expected findings.

Heart Sounds	Clear S1 and S2, no extra heart sounds. Normal heart rate at 110.	Extra heart sounds. Abnormal heart rate of less than 110 or more than 160 beats per minute (Ricci et al., 2021).	Assessment findings match expected findings.
Abdomen	Protuberant contour, soft, three vessels in umbilical cord.	Distended. Only two vessels in the umbilical cord (Ricci et al., 2021).	Assessment findings match expected findings.
Bowel Sounds	Bowl sounds are present and normoactive.	Bowel sounds in all four quadrants are heard. No masses or lumps palpated. Assessment findings are normal (Ricci et al., 2021).	Assessment findings match expected findings.
Umbilical Cord	Umbilicus is green, yellow, and black. No bleeding, odor, or drainage.	Inspect for signs of bleeding, infection, inflammation, redness swelling, or purulent drainage. Assessment findings of umbilical cord were normal (Ricci et al., 2021).	Assessment findings match expected findings.
Genitals	Female genitals are swollen.	Female genitals are swollen in response to maternal estrogen (Ricci et al., 2021).	Assessment findings match expected findings.
Anus	No fissures, rash, hemorrhoids, prolapse, or skin tags.	Check for position and patency. This infants' anus should be symmetrical (Ricci et al., 2021).	Assessment findings match expected findings.
Extremities	Extremities are symmetrical and more freely.	Congenital hip dislocation (Ricci et al., 2021).	Assessment findings match expected findings.

Spine	The spine is aligned in the center with no deformities.	Tuft or dimple on spine (Ricci et al., 2021).	Assessment findings match expected findings.
Safety • **Matching ID bands with parents** • **Hugs tag** • **Sleep position**	Infant matching band with parent and hug tag were seen, checked, and accurate. The infant was sleeping supine in the bassinette.	They should be properly identified when leaving and returning room, bracelets remain on. Bracelets accurate and on baby and mom (Ricci et al., 2021).	Assessment findings match expected findings.

Ricci, S.S., Kyle, T., & Carman, S. *(2021). Maternity and pediatric nursing (4th ed.).*

Philadelphia, PA: Wolters Kluwer.

Complete the Ballard Scale grid at the end to determine if this infant is SGA, AGA, or LGA—be sure to show your work

What was your determination? AGA – the baby is appropriate for gestational age within the 10th to 90th percentile.

Are there any complications expected for a baby in this classification? No.

If the baby's gestational age findings after birth match the calendar age, the baby is said to be appropriate for gestational age (Ricci et al., 2021). AGA babies have lower rates of problems and death than babies that are small or large for their gestational age (Ricci et al., 2021).

Ricci, S.S., Kyle, T., & Carman, S. *(2021). Maternity and pediatric nursing (4th ed.).*

Philadelphia, PA: Wolters Kluwer.

Vital Signs, three sets (6 points)

Time	**Temperature**	**Pulse**	**Respirations**

Birth	98.6 F (Axillary)	160	58
4 Hours After Birth	98.4 F (Axillary)	140	40
At the Time of Your Assessment	97.5 F (Axillary)	138	44

Vital Sign Trends: Respiration and pulse trends are normal with no abnormalities. However, the baby had a temperature of 97.5 F this is a low temperature for a neonate.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	NIPS	N/A Neonate appears comfortable.	0-1 Neonate appears comfortable.	Relaxed and sleeping.	Baby was swaddled. Neonate appears comfortable.

Summary of Assessment (4 points)

Discuss the clinical significance of the findings from your physical assessment:
****See the example below****

Do we need to rewrite this so that it is complete sentences?

This neonate was delivered on 4/1/22 at 0340 by an unexpected cesarean section (C-section) due to the mom having preeclampsia and the neonate being breech. Apgar scores are both 9. EDD 3.31.22 by OSF revealed that the neonate is 38 weeks and AGA. Prenatal hx is complicated by preeclampsia. Birth weight 7 lbs. 4.1 oz. (3290 grams), 19.5” long (53.34 cms). Upon

assessment, all systems are within normal limits. Last set of vitals: 36.4(97.5 F)/138/44; the temperature is low. Neonate is breastfeeding and nursing well with most feedings, latch score ten, and nursing q2-3 hrs. The infant has voided five times and has had six stools. At 24 hours per scan, the bilirubin level was 6.9, which is considered high for a neonate. Neonate is expected to be discharged with the mother later today and see a pediatrician in the office for the first well-baby check within 48 hours.

Nursing Interventions and Medical Treatments for the Newborn (6 point

Nursing Interventions and Medical Treatments (Identify nursing interventions with "N" after you list them, identify medical treatments with "T" after you record them.)	**Frequency**	**Why was this intervention/ treatment provided to this patient? Please give a short rationale.**
Swaddle (N)	The baby can be swaddled as much as desired.	Swaddling the baby helps to comfort her, sooth crying, and keep her warm.
Feed (N)	The infant consumes 40oz of formula every 3 hours.	Proper feeding is essential to the infant for proper growth and development.
Change (N)	The diaper should be checked frequently to assess if the diaper needs changed.	The baby needs to be changed regularly to avoid rash and skin breakdown.
Erythromycin eye ointment (T)	Once	Erythromycin eye ointment is given to neonates routinely to help prevent them from getting eye infections.

Discharge Planning (2 points)

Discharge location: The infant will discharge home with her mother. The mother lives with her mother, father, the father of her child, and her four-year-old son.

Equipment needs (if applicable): The mother may need a breast pump to take home.

Follow up plan (include a plan for newborn ONLY): The infant will follow up with a pediatrician in 48 hours.

Education needs: Mother may need some refreshing on swaddle the baby and how often to feed the baby.

Nursing Diagnosis (30 points)
Must be NANDA approved nursing diagnosis and listed in order of priority
Two of the Nursing Diagnoses must be education-related i.e.; the interventions must be education for the client."

2 points for correct priori

Nursing Diagnosis (2 pt each) Identify problems that are specific to this patient. Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational (1 pt each)** Explain why the nursing diagnosis was chosen	**Intervention/Rational (2 per dx) (1 pt each)** Interventions should be specific and individualized for his patient. Be sure to include a time interval such as Assess vital signs q 12 hours." List a rationale for each intervention and using APA format, cite the source for your rationale.	**Evaluation (2 pts each)** • How did the patient/ family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for ineffective thermoregulation related to gestational age as evidenced by neonates' 97.7 degrees Fahrenheit.	This diagnosis was selected due to the neonate's inability to effectively regulate her body temperature due to the baby not being swaddled (Phelps et al., 2020).	1. Monitor neonate's body temperature according to facility protocol (Phelps et al., 2020). Rationale - This will help determine the need for any intervention related to an increase or decrease in temperature (Phelps et al., 2020). 2.Keep the neonate swaddled (Phelps et al., 2020).	Goal: Neonate will keep a body temperature above 97.5 and below 100.4. Neonate's body temperature remained in the 98-degree range during clinical after the baby was swaddled. Neonate will remain swaddled when in the bassinet.

		Rationale - This will help the neonate to conserve heat (Phelps et al., 2020).	Neonate was swaddled in the bassinet, and temperatures remained in the 98s.
2. Risk for inadequate nutrition related to the inability of parent participation and performance.	This diagnosis was chosen in relation to the mother being hesitant to feed the neonate as well as her inability to complete the feeding before the neonate became tired (Ricci et al., 2021).	1.Record the amount ingested during each feeding (Phelps et al., 2020). Rationale- This will help the parents monitor how much the neonate is consuming and ensure she is getting the recommended doses (Ricci et al., 2021). 2.Assess the parent's knowledge of the feeding technique, and educate them on how to prepare formula, feeding positions, burping, and feeding times (Phelps et al., 2017). Rationale-This intervention was chosen due to the stress related to the baby not eating for 7 hours. The parents may be overwhelmed and need an educational course on how to properly feed the baby even though they have experienced having a newborn baby in the past (Ricci et al., 2021).	Goal: Parents will start to record all feedings in a journal. The mother was able repeat back how to properly feed her neonate. Goal: Parents will demonstrate the side lying bottle feeding position. The mother stated she understands it may take a little more patience to alternate breastfeeding and bottle feeding.
1. Knowledge deficit related to new experiences to preparing formula and feeding infant as evidenced by just having newborn baby.	The mother just had a newborn girl and will need to know how to properly feed the newborn even though she has had a newborn in the past.	1. Teach the parent/caregiver the correct feeding techniques. Rationale - Mother must know how to feed newborns correctly (Ricci et al., 2021). 2. Teach the parent/caregiver the correct	Goal: The mother was willing to learn the information about her outcome will be for mother to hold the newborn for feeding with bottle propped at the right angle. Also, to make sure she properly prepared the formula.

		preparation of formula. Rationale - Mother must know how to properly prepare formula to facilitate growth for the neonate (Ricci et al., 2021).	
2. Knowledge deficit related to first time female mom as evidence by first female neonate.	The mother has just given birth to her first female neonate and she will need to know how to properly change the baby.	1. Teach the mother to change diaper more frequently due to her baby being a female. Rationale – The mother needs to change the diaper more frequently due to the female anatomy. Due to female anatomy if not cleaned properly it could possibly put the neonate at risk for infection (Ricci et al., 2021). 2. Teach mother to wipe front to back with her female daughter. Rationale- If the neonate is not wiped properly then the baby could be at risk for infection (Ricci et al., 2021).	Goal: The mother understands to change the diaper more frequently to prevent infections. Goal: The mother understands to properly wipe the female baby from front to back to prevent infections.

Other References (APA):

Phelps, L. L., Ralph, S. S., & Taylor, C. M. (2020). *Sparks & Taylor's nursing diagnosis reference manual* (10th ed.). Wolters Kluwer Health.

Ricci, S. S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Ballard Gestational Age Scale

Neuromuscular Maturity

Score	–1	0	1	2	3	4	5
Posture							
Square window (wrist)	 > 90°	 90°	 60°	 45°	 30°	 0°	
Arm recoil		 180°	 140–180°	 110–140°	 90–110°	 < 90°	
Popliteal angle	 180°	 160°	 140°	 120°	 100°	 90°	 < 90°
Scarf sign							
Heel to ear							

Physical Maturity

Skin	Sticky, friable, transparent	Gelatinous, red, translucent	Smooth, pink; visible veins	Superficial peeling and/or rash; few veins	Cracking, pale areas; rare veins	Parchment, deep cracking; no vessels	Leathery, cracked, wrinkled
Lanugo	None	Sparse	Abundant	Thinning	Bald areas	Mostly bald	
Plantar surface	Heel-toe 40–50 mm: –1 < 40 mm: –2	> 50 mm, no crease	Faint red marks	Anterior transverse crease only	Creases anterior 2/3	Creases over entire sole	
Breast	Imperceptible	Barely perceptible	Flat areola, no bud	Stippled areola, 1–2 mm bud	Raised areola, 3–4 mm bud	Full areola, 5–10 mm bud	
Eye/Ear	Lids fused loosely: –1 tightly: –2	Lids open; pinna flat; stays folded	Slightly curved pinna; soft; slow recoil	Well curved pinna; soft but ready recoil	Formed and firm, instant recoil	Thick cartilage, ear stiff	
Genitals (male)	Scrotum flat, smooth	Scrotum empty, faint rugae	Testes in upper canal, rare rugae	Testes descending, few rugae	Testes down, good rugae	Testes pendulous, deep rugae	
Genitals (female)	Clitoris prominent, labia flat	Clitoris prominent, small labia minora	Clitoris prominent, enlarging minora	Majora and minora equally prominent	Majora large, minora small	Majora cover clitoris and minora	

Maturity Rating

Score	Weeks
–10	20
–5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

CLASSIFICATION OF NEWBORNS (BOTH SEXES) BY INTRAUTERINE GROWTH AND GESTATIONAL AGE [1,2]

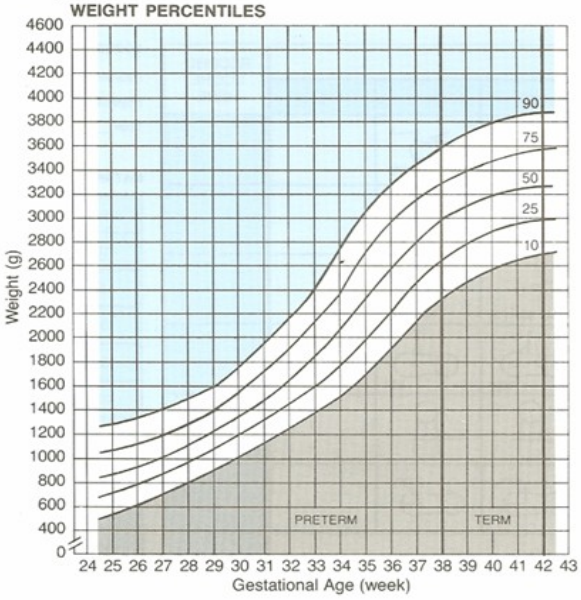
NAME _____ DATE OF EXAM _____ LENGTH _____

HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

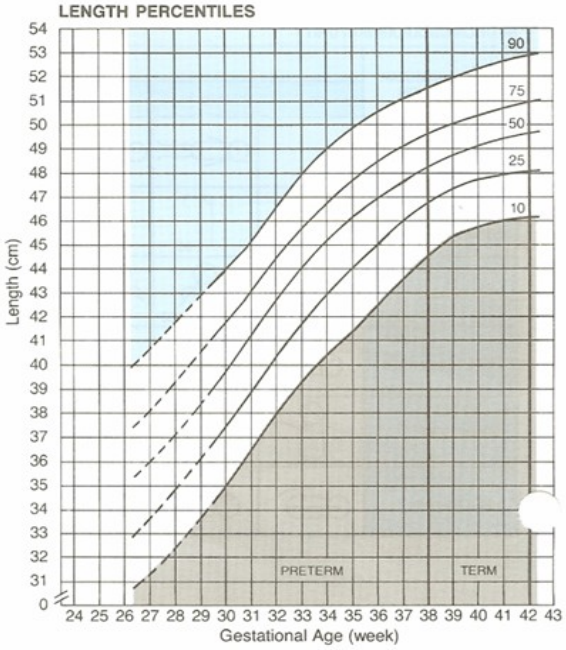
RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____

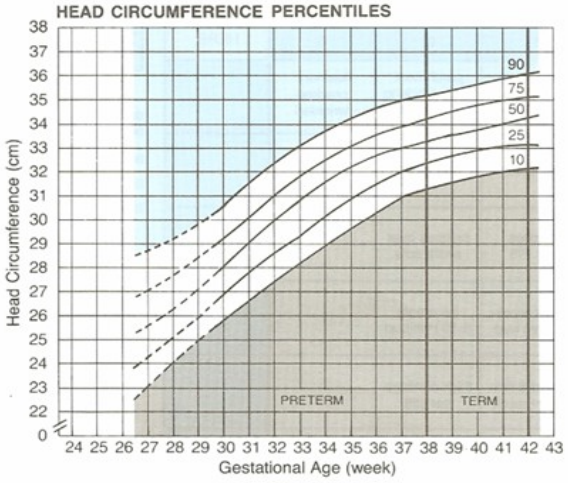
WEIGHT PERCENTILES



LENGTH PERCENTILES



HEAD CIRCUMFERENCE PERCENTILES



CLASSIFICATION OF INFANT*	Weight	Length	Head Circ.
Large for Gestational Age (LGA) (>90th percentile)			
Appropriate for Gestational Age (AGA) (10th to 90th percentile)			
Small for Gestational Age (SGA) (<10th percentile)			

*Place an "X" in the appropriate box (LGA, AGA or SGA) for weight, for length and for head circumference.

References
1. Battaglia FC, Lubchenco LO: A practical classification of newborn infants by weight and gestational age. J Pediatr 1967; 71:159-163