N432 Newborn Care Plan

Lakeview College of Nursing

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Demographics (10 points)

Date & Time of Clinical Assessment 9/20/2021 @ 1400	**Patient Initials** E.S.	**Date & Time of Birth** 9/18/2021 @ 0146	**Age (in hours at the time of assessment)** 62 hours
Gender Female	**Weight at Birth** **(gm)** 2875 **(lb.)** 6 **(oz.)** 5	**Weight at Time of Assessment** **(gm)** 2560 **(lb.)** 5 **(oz.)** 10	**Age (in hours) at the Time of Last Weight** 48 hours
Race/Ethnicity White/Caucasian	**Length at Birth** **Cm** 47 **Inches** 18.5	**Head Circumference at Birth** **Cm** 33 **Inches** 12.9	**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: G1 T1 P1 A0 L1

When prenatal care started: The mother of the baby started prenatal care at 8 weeks.

Abnormal prenatal labs/diagnostics: Upon admission the mother of the baby presented with low hemoglobin (11.7) and low hematocrit (32.7).

Prenatal complications: There was a concern for bicornuate uterus.

Smoking/alcohol/drug use in pregnancy: MOB denies any use of smoking and drugs. She stated she used alcohol occasionally prior to the pregnancy.

Labor History of Mother:

Gestation at onset of labor: 36 + 1

Length of labor: 20 minutes

ROM: ROM occurred at the start of the cesarean delivery.

Medications in labor: Betamethasone within 2 hours of the delivery.

Complications of labor and delivery: The fetus presented in the breech position and nuchal x2.

Family History: MOB has Wolff Parkinson White Syndrome.

Pertinent to infant: The family history is not pertinent to the infant.

Social History (tobacco/alcohol/drugs): Both MOB and FOB deny smoking and drug usage but stated occasional alcohol consumption. MOB stopped using alcohol prior to the pregnancy.

Pertinent to infant: The social history is not pertinent to the infant.

Father/Co-Parent of Baby Involvement: The FOB is involved in the care of the infant.

Living Situation: The MOB and FOB live together.

Education Level of Parents (If applicable to parents' learning barriers or care of infant): MOB and FOB have some college education with no learning barriers to care for the infant.

Birth History (10 points)

Length of Second Stage of Labor: The mother never reached full cervical dilation.

Type of Delivery: Cesarean

Complications of Birth: The neonate had increased work of breathing, respirations, and appeared in mild distress. The neonate was placed on a CPAP to help improve oxygenation saturation.

APGAR Scores:

1 minute: 7

5 minutes: 8

Resuscitation methods beyond the normal needed: The neonate required a CPAP.

Feeding Techniques (10 points)

Feeding Technique Type: OG

If breastfeeding:

LATCH score: n/a

Supplemental feeding system or nipple shield: n/a

If bottle feeding:

Positioning of bottle: n/a

Suck strength: n/a

Amount: n/a

Percentage of weight loss at time of assessment: -11**%**

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

2875-2560=315/2875x100=10.9……11%

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

Within the first 3-4 days of life, newborns can lose up to 10% of their birth weight (Ricci et al., 2017).

Is this neonate's weight loss within normal limits? No

Intake and Output (8 points)

<u>Intake</u>

If breastfeeding: n/a

Feeding frequency: n/a

Length of feeding session: n/a

One or both breasts: n/a

If bottle feeding: n/a

Formula type or Expressed breast milk (EBM): n/a

Frequency: n/a

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: OG

Frequency: Q3hr

Volume: 14 ml/hr

If IV:

Rate of flow: 8.4 ml/hr

Volume in 24 hours: 201.6/24hr

Output

Age (in hours) of first void: 9 hours

Voiding patterns: The voiding pattern consists of 20-50mL every 3 hours.

Number of times in 24 hours: 8 voids

Age (in hours) of first stool: 6 hours

Stool patterns:

Type: soft

Color: brown/orange

Consistency: soft/runny

Number of times in 24 hours: 2

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	Expected Results	Client's Results	Interpretation of Results

	THIS client? *Complete this even if these labs have not been completed*			
Blood Glucose Levels	Determines the newborn's glucose level	45-99	94	The newborns results are within normal ranges.
Blood Type and Rh Factor	Determines the Rh factor and blood group	Blood type A, B, AB, or O with a + or – Rh factor	A-	The newborn is type A blood type with a negative Rh factor.
Coombs Test	Determines whether the newborn has autoimmune hemolytic anemia	No presence of clumped RBC	Not performed	The Coombs test has not been conducted.
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	Determines if the newborn has jaundice	1-15	5.4	The results are within normal ranges.
Newborn Screen (At 24 hours)	Detects any birth defects that are undetectable before birth	Negative	**(If available—these may be not available until after discharge for some clients)** Not resulted	This screening is not available until after discharge.
Newborn Hearing Screen	Identifies any hearing loss or deafness	Positive response to sound stimulation	Not performed	This screening has not been performed.
Newborn Cardiac Screen (At 24 hours)	Identifies congenital heart disease	Both pre and post ductal saturations greater than 95%	Pre and post ductal results were both 93%	The newborn failed the exam which means a need for further testing.

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

Ricci, S. S., Kyle, T., & Carman, S. (2020). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Newborn Medications (7 points)

Brand/ Generic	**Vitamin K/ Aquamephyton**	**Illotycin / Erythromycin Ointment**	**Recombiva / Hepatitis B Vaccine**	**Instant Glucose/ Dextrose 10%**	**Sucrose**	**Caffeine Citrate**
Dose	0.5 mL	1 drop in each eye	0.5 mL	8.4 mL	0.05-0.1 mL	29mg
Frequency	Once	Once	Once at birth, repeat at 1-2 months, and again at 6 months	Continuous infusion	PRN	Once daily
Route	Intramuscular	Topical Ointment	Intramuscular	Intravenous	Oral	Intravenous
Classification	Vitamin	Antibiotic	Viral vaccine	Carbohydrate	Analgesic	Respiratory Stimulant
Mechanism of Action	Used by the body to create a clotting factor	Bactericidal preventative against chlamydia or gonorrhea during birth	Provides active immunity against Hepatitis B	Provides the body with carbs and fluids and increases blood glucose circulation	Causes the body to release endorphins to help with pain	Stimulates respiratory centers and increases pulmonary blood flow
Reason Client Taking	Used to increase the coagulability of the	Administered to newborns to prevent ophthal	Vaccine to help build the immunity in the newborn	Used to help control glucose and fluid	Newborn is in respiratory distress, has IV, and has	Helps the newborns respiratory rate

	newborn ’s blood	mia neonatorum in which causes blindness.			constant foot sticks for blood tests	
Contraindications (2)	Hypercoagulability, hypersensitivity to vitamin K	Concurrent simvastatin therapy, hypersensitivity to erythromycin or macrolide anitbiotics	If there has been a past reaction to the hepatitis B vaccine, then no further shots should be given. Yest hypersensitivity	Overhydration, hyperglycemia	Sucrose intolerance, muscle relaxed neonates and infants	High blood pressure, abnormal heart rhythm
Side Effects /Adverse Reactions (2)	Tachycardia, hypersensitivity	Jaundice, hepatoxicity	Irritation at injection site, fever	Hypotension, hyperglycemia	Tachycardia, bradycardia	Rapid infusions can cause cardiac arrhythmias, toxicity
Nursing Considerations (2)	Administer 1-2 hours after birth. Inject intramuscular at a 90-degree angle in the outer third of the vastus lateralis.	Wears gloves when administering. Ensure not to touch the eye.	Within the first 12 hours, the first dose should be given. 4 doses are acceptable for most patients.	Monitor for dehydration due to this fluid can affect osmolarity. Assess site for swelling.	If non-pharmalogical measures can be taken before a procedure, administer sucrose.	Use with caution in neonates with impaired renal or hepatic function. Push injection slow to avoid cardiac arrhythmias

Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor INR	Monitor for any changes or allergic reaction	Make sure the infant is in stable condition	Check blood glucose level.	Two minutes before a procedure, administer 0.25mL onto the newborns tongue.	Monitor serum concentrations of caffeine. Monitor dose administration to avoid toxicity.
Client Teaching needs (2)	Report any signs of respiratory distress or rash. Educate caregiver(s) that this medication is given to a newborn to help the body with clotting,	Report signs of irritation. Educate caregiver(s) that the purpose of this medication is to prevent blindness.	Educate the caregiver(s) that hepatitis B is spread through bodily fluids. Educate the caregiver(s) that vaccinations help prevent the newborn from developing the disease.	Monitor for signs of fluid volume deficit/overload. Report signs of irritation at infusion site.	The effects only last 5-8 minutes. Continue to monitor every 2 minutes in small volumes.	Monitor for hives, diarrhea, and sweating. Monitor for seizures.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.).

Ricci, S. S., Kyle, T., & Carman, S. (2020). *Maternity and pediatric nursing* (4th ed.). 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 pale pink in color with no signs of cyanosis. It is warm, dry, and intact. There are no visible signs of bruising. Skin turgor is normal recoil. No signs of lanugo. The infant has no Mongolian spots or nevus vasculosis.	Newborn skin should be acyanotic, warm, and have rapid recoil. Bruising can occur from delivery. There are some common skin variations that can occur which includes Mongolian spots and vasculosis.	Normal findings.
Head	Head presents asymmetrically, round, and normal in size. Anterior and posterior fontanels present. No fontanel measurement recorded.	A newborn's head should be round, asymmetric with both anterior and posterior fontanels present. Some head variations can occur which include molding.	Normal findings.
Fontanels	No measurement recorded/performed. Both anterior and posterior fontanel present.	Posterior fontanel should be triangular and 0.5-1 cm in size. Anterior fontanel should be diamond and 4-6 cm in size.	Unable to determine due to no record of the fontanel measurement.
Face	Symmetrical with full cheeks and prominent facial features. CPAP with facial padding is being utilized.	Full cheeks with proportional features.	Newborn was brought into the NICU due to respiratory distress where a CPAP was placed.
Eyes	Eyes spaced equally apart. Was not able to	A newborn's eyes could have potential	Normal assessment, but eye movement

	assess for the presence of strabismus due to infant sleeping.	strabismus from lack of muscle control, searching nystagmus, and chemical conjunctivitis from erythromycin ointment. The eyes should be spaced equally apart.	was not assessed due to infant sleeping.

Nose	Nose is midline and flat. No drainage present. CPAP in newborn's nares.	Septum intact, midline, flat, with no drainage present.	Newborn was brought into the NICU and was placed on a CPAP to help with oxygenation.
Mouth	Midline, lips intact, and symmetrical. Hard and soft palate intact. Oral mucosa is pink and moist.	Intact soft and hard palate. Mouth is midline and symmetrical. Tongue should not protrude.	Normal findings.
Ears	Soft, pliable, with firm cartilage. Ears align with eyes. No drainage present.	Pliable and soft. Ears should align with the eyes. Firm cartilage. No drainage. Tympanic membrane may not be seen in newborns.	Normal findings.
Neck	Neck moves freely and newborn holds head midline. No evidence of broken/fractured clavicle.	Newborn holds head midline. Neck should be short, moves freely. Possible fracture or break in clavicle from birth.	Normal findings.
Chest	Newborn presents with a barrel chest that measures 33cm.	Round, symmetric, and smaller than the head. Barrel chest may be present.	Normal findings.
Breath Sounds	Clear lung sounds present in all 4 lobes bilaterally. No crackles, wheezing, or rhonchi present.	Clear lung sounds in all 4 lobes bilaterally. Crackles may be heard due to amniotic fluid inhaled during birth.	Normal findings.

Heart Sounds	Clear S1 and S2 sounds with no murmurs upon auscultation.	S1, S2 sounds. Heart sounds should have a regular rate/rhythm.	Normal findings.
Abdomen	Abdomen moves with each respiration. Abdomen is soft and round.	Abdominal movements with respiration. Should be soft, nondistended, and round. No abdominal tenderness.	Normal findings.
Bowel Sounds	Bowel sounds are present in all four quadrants.	Present, normoactive bowel sounds in all four quadrants.	Normal findings.
Umbilical Cord	Umbilical cord present with no swelling, bleeding, or redness.	Present with two blood vessels. No swelling, bleeding, or redness.	Normal findings,
Genitals	Labia majora is covering labia minora.	Labia majora covers labia minora and engorged.	Normal findings.
Anus	Presents with no anal fissures. Newborn can pass stool freely.	Should not have anal fissures. Anal patency shown by passing of stool.	Normal findings.
Extremities	20 digits intact, with full range of motion. Symmetrical with free movement.	All 20 digits intact with full range of motion. Symmetrical and moves freely.	Normal findings.
Spine	No signs of curvature. Presented symmetrical.	Symmetrical, with no curvature.	Normal findings.
Safety • **Matching ID bands with parents** • **Hugs tag** • **Sleep position**	Parent and newborn have matching ID bands. Newborn wearing a hugs tag. For most of the shift, the newborn was supine and then turned to the prone	Parent and newborn must have matching ID bands. Newborn wears hugs sleep tag. Newborn is placed supine when sleeping.	Normal findings.

	position to help with oxygenation saturation.		

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 neonate scored a 36 on the Ballard Scale which is an estimated 38 weeks gestation. She is scoring between the 10th and 90th percentile which makes her AGA.

Are there any complications expected for a baby in this classification? There are no complications for a baby in this classification.

Vital Signs, 3 sets (6 points)

Time	**Temperature**	**Pulse**	**Respirations**
Birth	37.1 C	148	61
4 Hours After Birth	36.6 C	120	68
At the Time of Your Assessment	36.8 C	126	38

Vital Sign Trends: The neonates vitals are stable. She started to decrease her work of breathing with the use of a CPAP. The neonate is receiving help from a giraffe warmer to help regulate her body temperature.

Pain Assessment, 1 set (2 points)

Time	**Scale**	**Location**	**Severity**	**Characteristics**	**Interventions**
1416	NIPS	-	Appears comfortable	-	-

Summary of Assessment (4 points)

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

This newborn was delivered 9.18.21. at 0146 by cesarean section. Nuchal cord x2. Apgar scores are 7 at 1 minute and 8 and 5 minutes. The estimated delivery date was 10.15.21. According to the Ballard score she is AGA. Prenatal history there was a concern for bicornuate uterus. The birth weight was 6 lbs 5 oz (2875g) and length was 18.5 in (47 cm). Upon assessment all systems normal, except for the requirement of a CPAP. Last set of vital signs: 36.8C/126/38. Labs are all within normal limits. Infant is tolerating OG feeding at 14mL/hr every 3 hours. The treatment plan is to have the newborn tolerate room air before discharging.

Nursing Interventions and Medical Treatments for the Newborn (6 points)

Nursing Interventions and Medical Treatments (Identify nursing interventions with "N" after you list them, identify medical treatments with "T" after you list them.)	**Frequency**	**Why was this intervention/ treatment provided to this patient? Please give a short rationale.**
IV Caffeine citrate - T	Once daily	When administering caffeine citrate, it helps stimulate the brain that affects breathing. The newborn had some periods of bradycardia and apnea.
CPAP - T	Continuous	To help the neonate, improve oxygenation saturation, the CPAP helps provide more oxygen for the neonate to breathe in.
Promoting rest - N	Continuous	By promoting rest, this will help the neonate with improving oxygenation.
Erythromycin Ointment - T	Once	By administering this ointment, it will prevent conjunctivitis.

Discharge Planning (2 points)

Discharge location: The neonate is planning on discharging home with her mother and father once she can tolerate breathing on her own and PO feedings.

Equipment needs (if applicable): The neonate will need a proper fitting car seat.

Follow up plan (include plan for newborn ONLY): The neonate will need to follow up with a pediatrician 3-5 days after discharge from the special care nursery.

Education needs: MOB will need to isolate until recovered from COVID-19. The FOB and family assistance will be needed to care for the infant until MOB has fully recovered.

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 priority

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. Deficient knowledge related to no prior experience as evidenced by mother primipara.	During this pandemic, information and education classes may not have been available to this mother.	**1.**Provide information to the mother about how to properly change the infant's diaper. **Rationale:** Infants require proper perineal care to prevent skin breakdown from a wet diaper. **2.** Educate the mother on proper home safety for the infant. **Rationale:** An infant relies solely on the caregiver to care and do tasks for them. It is vital to ensure the mother knows how to be safe and have preventative safety measures (Ricci et al., 2020).	Mother displayed understanding of how to proper change a diaper. Mother verbalized an understanding of proper home safety.
3. Ineffective breathing	The newborn went through	**1.** Place infant with proper body alignment to help with	The infant was repositioned to her belly

pattern related to respiratory distress as evidenced by multiple apneic episodes.	episodes of apnea.	maximum breathing. **Rationale:** Proper body alignment keeps the airway straight and open. **2.** Stay with infant during episodes of respiratory distress. **Rationale:** Stay close by in case further actions need to be completed if infant does not recover from acute episode.	with arms tucked underneath with body alignment. During acute episodes, the infant was monitored at bedside until she came out of the episode.
4. Risk for impaired skin integrity related to oxygen device as evidenced by skin irritation.	The newborn has a CPAP device worn continuously.	**1.** Reposition the CPAP device. **Rationale:** By repositioning the device, it will help with any skin irritation. **2.** Assess skin for skin breakdown. **Rationale:** Identifying early skin breakdown can help prevent any infections and any further skin irritation (Ricci et al., 2020).	The CPAP is repositioned on the nares and top of the ears to prevent any skin breakdown. The skin is assessed frequently for any redness, breakdown, and irritation.
5. Risk for infection related to maternal COVID-19 as evidenced by newborn not having a strong immune system	The mother tested positive for COVID-19.	**1.** Educate the mother on how to properly wear a mask around newborn. **Rationale:** Mother has COVID-19 and wearing a mask is a precaution on stopping the spread. **2.** Provide information on how to stop the spread of infection. **Rationale:** By providing information, the mother will be able to prevent the spread of infection to the newborn after discharge.	Mother verbalized an understanding of how to properly wear a mask. Mother demonstrated the willingness to read the information provided to her on stopping the spread of infection.

Other References (APA):

Ricci, S. S., Kyle, T., & Carman, S. (2020). *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]

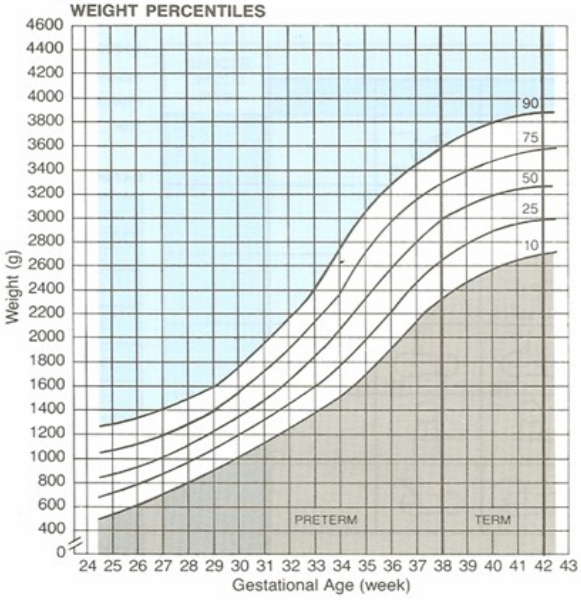
NAME _____ DATE OF EXAM _____ LENGTH _____

HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

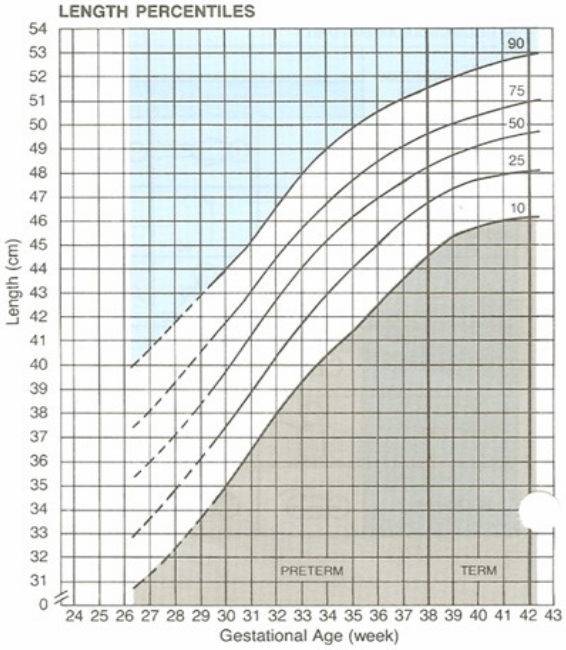
RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____

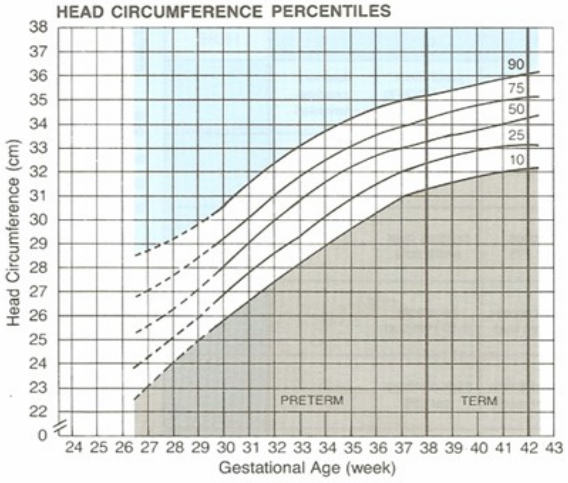
WEIGHT PERCENTILES



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