N432 Newborn Care Plan

Lakeview College of Nursing

Bailey Pierce

Demographics (10 points)

Date & Time of Clinical Assessment\ 09/27/21 1800	**Patient Initials K.B.**	**Date & Time of Birth 09/21/ 1122**	**Age (in hours at the time of assessment) Approximately 149.5**
Gender Female	**Weight at Birth (gm) __2050_____ (lb.) _4__ (oz.) __8.3_**	**Weight at Time of Assessment (gm) ___1925_____ (lb.)__4_ (oz.) _3.9__**	**Age (in hours) at the Time of Last Weight Approximately 143.5 hrs old**
Race/Ethnicity African American	**Length at Birth Cm ____45____ Inches __17.72_____**	**Head Circumference at Birth Cm ___31_____ Inches __12.2_____**	**Chest Circumference at Birth Cm _____27 cm_____ Inches 10.6____**

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, T-0, P-2, A-1, L-2

When prenatal care started: 03/18/21

Abnormal prenatal labs/diagnostics: Elevated AST (41), Decreased BUN (4),

Decreased Potassium (3.4)

Prenatal complications: The mother experienced hyperemesis gravidarum, dehydration, intrauterine growth restriction (IUGR) with AC <1%, preeclampsia, and gastroesophageal reflux disease.

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 approximately 3x a week for the last 8 weeks leading up to delivery.

Labor History of Mother:

Gestation at onset of labor: 34 weeks and 6 days

Length of labor: 6 hrs and 18 minutes

ROM: Patient underwent a C-section.

Medications in labor: ceFaZolin (Ancef), ePHEDrine injection, sodium citrate citric acid, dextrose 5% lactated ringers, fentanyl ropivacaine premix, morphine sulfate injection, ondansetron, oxytocin (Pitocin), propofol (Diprivan) injection, Cervidil

Complications of labor and delivery: Mother initially was going to try to deliver vaginally. At 1023, a bright red blood show was observed followed by clots. The decision to perform a repeat C-section was then made. Immediately following the delivery, the mother experienced a uterine rupture. Estimated blood loss was 950 mL.

Family History:

Pertinent to infant: Mother's previous pregnancy also ended in a preterm birth. Her older son was born at 31 weeks and 4 days weighing 3lbs 12oz. He stayed in the neonatal intensive care unit (NICU) for 4 weeks. The mother developed HELLP syndrome (hemolysis, elevated liver enzymes, low platelets) during her pregnancy with her son.

Social History (tobacco/alcohol/drugs):

Pertinent to infant: Mom quit smoking 01/01/2018. Reports no alcohol use. Mother reports using marijuana recreationally at least 3xs per week. No social history recorded for dad.

Father/Co-Parent of Baby Involvement: Father rotates with mom to visit the baby approximately one time a day for 5 minutes. Older brother also has same father.

Living Situation: Mother and father live together in Michigan with their son. Currently, they are living separately with family members in the area to help with family issues.

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

Mother-12th grade

Father- No information available

Birth History (10 points)

Length of Second Stage of Labor: 0 hr 1 minute

Type of Delivery: Cesarian section (C-section)

Complications of Birth: Following the delivery of the baby the mother experienced a uterine rupture to the upper right of the uterus.

APGAR Scores:

1 minute: 9

5 minutes:9

Resuscitation methods beyond the normal needed: Baby received 2L Oxygen via high flow nasal cannula (HFNC) for approximately 19 hrs. She has been on room air since 0600 on 09/22/2021.

Feeding Techniques (10 points)

Feeding Technique Type: Bottle

If breastfeeding:

LATCH score: N/A

Supplemental feeding system or nipple shield: N/A

If bottle feeding:

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

Suck strength: Baby's suck strength is good. She is using a preemie size nipple.

Amount: Baby is consuming 40mL per feeding of Similac special care 24cal premature formula.

Percentage of weight loss at time of assessment: ___-6.1**___%**

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

(1925 (current weight)- 2050 (birth weight))= -125

-125 (loss) / 2050 (birth weight) = -0.0609

-0.0609 x 100 = -6.097 or a loss of 6.1%

What is normal weight loss for an infant of this age? Less than 7% is considered within normal limits (Ricci et al., 2021).

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

Intake and Output (8 points)

Intake

If breastfeeding:

Feeding frequency: N/A

Length of feeding session: N/A

One or both breasts: N/A

If bottle feeding:

Formula type or Expressed breast milk (EBM): Similac special care 24cal premature formula

Frequency: Baby is eating every 3 hours.

Volume of formula/EBM per session: Baby is eating 40mL of formula every feeding.

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

If NG or OG feeding:

Frequency: Baby had an NG tube inserted during the last feeding we observed.

Volume: Baby consumed 33 mL via bottle. NG tube was inserted to complete the last 7mL of the feeding.

If IV: N/A

Rate of flow: N/A

Volume in 24 hours: N/A

Output

Age (in hours) of first void: 1 hr

Voiding patterns:

Number of times in 24 hours: Neonate voided approximately 8x in 24 hours.

Age (in hours) of first stool: 12.5 hours

Stool patterns:

Type: Neonate has small to moderate stools.

Color: Neonate's stool is brown to green.

Consistency: Stools are creamy and soft.

Number of times in 24 hours: Neonate had 2 stools in a 24-hour period.

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	Glucose is the primary source of energy for the neonate during the first few hours of life (Ricci et al., 2021). Hypoglycemia is common in newborn children (Ricci et al., 2021).	>40 (Ricci et al., 2021).	45	Normal
Blood Type and Rh Factor	This is performed only if mom is Rh- to determine if baby is Rh+ and mom will need to receive a RhoGAM injection due to the difference in	N/A	Not performed	N/A

	Rh factor.			
Coombs Test	Coombs test assesses blood for antibodies that may attack red blood cells (Rath, 2019).	Positive or negative	Not performed	N/A
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	Due to immaturity, metabolic pathways in the liver are not able to conjugate bilirubin as efficiently as needed (Ricci et al., 2021).	6-8	5.9 @ 26.5 hrs	This level is slightly lower than the normal range.
Newborn Screen (At 24 hours)	This assessment is performed at the 24 hour mark as prior to the neonate has not transitioned from intrauterine	Assessment of the skin color, posture, head size, respirations, and other checks to be	(If available—these may be not available until after discharge for some clients) Pending	Pending

	to extrauterine (Ricci et al., 2021). This exam is an overall assessment of the systems to assess for any abnormalities (Ricci et al., 2021).	within normal limits or abnormalities identified.		
Newborn Hearing Screen	To assess for deficits in hearing.	Electrodes are placed on the neonate head, neck, and shoulders and record neural activity from brainstem in response to sound (Ricci et al., 2021)	Passed	N/A
Newborn Cardiac Screen (At 24 hours)	Determines the amount of	greater than 93% (Ricci et	100/100 (R/L)	N/A

	oxygen in babies blood testing the right and left sides of the body.	al., 2021)		

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

Rath, L. (2019, November 24). *Coombs test: Purpose, procedure, and results explained*. WebMD. Retrieved from https://www.webmd.com/a-to-z-guides/antibody-coombs-test.

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

Newborn Medications (7 points)

Brand/Generic	**Aquamephyton (Vitamin K)**	**Ilotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine**		
Dose	1mg	1 cm	N/A pt declined		
Frequency	1x within 1 hour of birth (Ricci et al., 2021)	1x within 1 hour of birth	N/A		
Route	Intramuscular injection	Eye ointment	N/A		
Classification	Vitamin K (Ricci et al., 2021)	Macrolide antibiotic, ophthalmic anti-infectives(Drugs.com, 2021)	N/A		
Mechanism of Action	Used to treat decreased clotting ability due to vitamin K deficiency (Ricci et al., 2021)	Inhibits the growth of bacteria. (Drugs.com, 2021)	N/A		

Reason Client Taking	Vitamin K is not produced by the newborn until bacteria have been introduced into the gut following the first feeding (Ricci et al., 2021)	Prevention of neonatal conjunctivitis. (Drugs.com, 2021)	N/A		
Contraindications (2)	Hypersensitivity to any of components of the injection, should not be taken with other benzyl alcohol medications (RxList, 2018)	Allergies to macrolide antibiotics. (Drugs.com, 2021)	N/A		
Side Effects/Adverse Reactions (2)	gasping syndrome, anaphylaxis (RxList, 2018)	Burning, blurred vision. (Drugs.com, 2021)	N/A		
Nursing Considerations (2)	Measurable effectiveness can take 1-2 hours. Use benzyl alcohol free formulas in infants and neonates to avoid gasping syndrome. (RxList, 2018)	Wait 5 minutes before applying any additional eye drops. Drops can be delayed a few hours to allow mom and baby to bond over breastfeeding. (Drugs.com, 2021)	N/A		
Key Nursing Assessment(s)/Lab(s) Prior to Administration	No labs needed prior, but pT should be monitored following injection. (RxList, 2018)	It would be beneficial to know if mom has an infection related to chlamydia or gonorrhea. (Drugs.com, 2021)	N/A		
Client Teaching needs (2)	Yellowing of the skin can be an indicator of hyperbilirubinemia. Rashes and skin disturbances can occur up to one years following injection. (RxList, 2018)	If pt declines, neonate could be at risk for blindness related to infection. Education on why the drops are being administered and letting the patient know they have the right to decline. (Drugs.com, 2021)	N/A		

Medications Reference (1) (APA):

Drugs.com. (2021, September 21). *Ilotycin - FDA prescribing information, side effects and uses*. Drugs.com. Retrieved from https://www.drugs.com/pro/ilotycin.html.

RxList. (2018, June 5). *Aquamephyton (Phytonadione injection): Uses, dosage, side effects, interactions, warning*. RxList. Retrieved from https://www.rxlist.com/aquamephyton-drug.htm.

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	**Smooth, good skin turgor, well hydrated, warm**	**Smooth, good skin turgor, well hydrated, warm**	**N/A**
Head	**proportionate for age**	**varies with age, gender, and ethnicity**	**N/A**
Fontanels	**anterior and posterior fontanels are soft, flat and open.**	**Soft, flat, open**	**N/A**
Face	**full cheeks, symmetric facial features**	**Full cheeks, symmetric facial features**	**N/A**
Eyes	**clear and symmetrical, in line with ears**	**Clear and symmetrical, in line with ears**	**N/A**
Nose	**small, midline, narrow**	**Small midline, narrow**	**N/A**
Mouth	**midline, symmetric, intact soft and hard palate**	**midline, symmetric, intact soft and hard palate**	**N/A**
Ears	**soft and pliable with quick recoil when folded and released**	**soft and pliable with quick recoil when folded and released**	**N/A**
Neck	**short, creased, moves freely, baby holds head midline**	**short, creased, moves freely, baby holds head midline**	**N/A**
Chest	**round, symmetric, smaller than head**	**round, symmetric, smaller than head**	**N/A**

Breath Sounds	**clear lung sounds heard throughout R and L lung**	**clear sounds heard throughout R and L lung**	**N/A**

Heart Sounds	**Sinus arrhythmia w/ o murmurs. HR 178 bpm.**	**rate of 120-160 bpm without murmurs. Sinus arrhythmia is normal.**	**HR was slightly increased due to stress of exam on neonate.**
Abdomen	**protuberant contour, soft, umbilical cord has hardened**	**protuberant contour, soft, 3 vessels in umbilical cord**	**Unable to observe 3 vessels in umbilical cord as it has hardened.**
Bowel Sounds	**Bowel sounds present in all 4 quadrants.**	**bowel sounds in all 4 quadrants without tenderness or masses present upon palpation.**	**N/A**
Umbilical Cord	**Unable to observe umbilical cord for presence of arteries and veins. Cord has begun to harden. Umbilical area free of redness, inflammation, swelling, drainage, or bleeding.**	**2 arteries and 1 vein present. Umbilical area free of redness, inflammation, swelling, drainage, or bleeding.**	**N/A**
Genitals	**swollen female genitals**	**swollen female genitals in response to maternal estrogen**	**N/A**
Anus	**symmetrical and patent**	**symmetrical and patent**	**N/A**
Extremities	**symmetric with free movement**	**symmetric with free movement**	**N/A**
Spine	**without dimpling. midline**	**without dimpling, midline**	**N/A**
Safety • **Matching ID bands with parents** • **Hugs tag** • **Sleep position**	**Neonate wearing ID bracelet wrist. Hugs tag present on neonate, mother and father not present. Neonate is on back which is the safest recommended position.**	**Hugs tag on both neonate and mother as well as matching ID bracelets. Babies should sleep on back with no blankets in crib.**	**Mom and dad were not present to assess for wrist bands (ID) or hugs tags.**

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. Neonate is appropriate for gestational age.

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

Vital Signs, 3 sets (6 points)

Time	Temperature	Pulse	Respirations
Birth	98	180	64
4 Hours After Birth	98.2	168	48
At the Time of Your Assessment	98.9	178	63

Vital Sign Trends:

Heart rate is between 150-170.
Respirations are between 40-64.
Temperatures range between 98.3-99.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1400	NIPS	N/A	0-1	Relaxed and sleeping.	Swaddling awake, nested in bed, awake times minimized, and cluster of care.
1700	NIPS	N/A	0-1	Awake and relaxed	Cluster of care, swaddled awake, nested in bed.

Summary of Assessment (4 points)

Discuss the clinical significance of the findings from your physical assessment:

Neonate delivered on 09-21-2022 at 1122 via repeat C-section. Apgar scores were 9 at 1 minutes and 9 at 5minutes. The original estimated delivery date was 10.29.2022. Neonate was delivered at 34weeks and 5 days. Neonate weighed 4 lbs. 8.3 oz (2050 grams) and was 17.72 inches (45 cm) in length. All systems are working WNL. Neonates last set of vitals include HR of 178, temperature of 98.9, and respirations at 63. Blood glucose is considered within normal limits and was at 45. Neonate is being bottle fed and consuming 40mL of Similac special care 24cal preemie formula every 3 hours. At 3 hrs old, neonates bilirubin levels were at 89 and 11 hours of phototherapy followed. Neonate's bilirubin levels at 26.5 hours were 5.9. Neonate does not have an estimated discharge date. Once neonate is successfully gaining and taking full feeds, discharge to the parents will be re-evaluated.

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.
Swaddled-N	Continuous	Containment encourages thermoregulation and conservation of energy.
Clustering of care-N	q 3 hours	Hands on care with feedings promotes rest between feeds and growth.
Similac special care 24cal preemie formula-T	q3 hours	Neonate needed additional calories to prevent weight loss.
NG Tube placement-T	continuous	Neonate was unable to finish full 40 mL feed without wearing out. This will ensure the neonate gets all the nutrients she needs.

Discharge Planning (2 points)

Discharge location: tentatively to home with mother and father

Equipment needs (if applicable): N/A

Follow up plan (include plan for newborn ONLY): Follow up with pediatrician within 24 hours unless on a Friday then Monday follow up recommended.

Education needs: Patient teaching on feeds and encourage increased involvement with the neonate such as more frequent hands-on time.

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. Risk for ineffective thermoregulation related gestational age.	**This diagnosis was selected due to the neonates inability to effectively regulate her body temperature due to premature birth (Phelps et al., 2017) .**	**1.Monitor neonate's body temperature according to facility protocol (Phelps et al., 2017). Rationale- This will help to determine the need for any intervention related to an increase or decrease in temperature (Phelps et al., 2017). 2.Keep the neonate swaddled (Phelps et al., 2017). Rationale- This will help the neonate to conserve heat (Phelps et al., 2017).**	**Goal: Neonate will keep a body temperature above 97.5 and below 100.4. Neonates body temperature remained in the 98-degree range during clinical. Neonate will remain swaddled when in the bassinet. Neonate was swaddled in the bassinet and temperatures remained in the 98s.**
2. Risk for disturbed maternal-fetal dyad related to mother's lack of	**This diagnosis was chosen based on the lack of presence of**	**1. Promote the mother to express any concerns, feelings, or disappointments. Rationale- Using**	**Goal: Mother will discuss any feelings she is having about being separated from the neonate.**

participation neonate.	**the mother which the neonate is in the hospital.**	**therapeutic communication to encourage the mother to open up about her feelings can reveal any barriers that may be preventing the mother from participating more with her child (Phelps et al., 2017).** **2.Encourage support/involvement of the significant other to enhance role adaptation (Phelps et al., 2017).** **Rationale- In situations such as this where the child unable to come home right away, it is crucial to have a good support person to help with the potential stress of the situation (Phelps et al., 2017).**	**I was unable to observe this goal as the mother was not present during this clinical rotation.** **Goal: The father will accompany the mother to visit the neonate.** **This outcome was not observed as neither parent was present to have a discussion with during the rotation.**
3. Risk for inadequate nutrition related to inability of parent participation and performance.	**This diagnosis was chosen in relation to the father being hesitant to feed the neonate as well his inability to complete the feeding before the neonate became tired.**	**1. Record the amount of ingested during each feeding (Phelps et al., 2017).** **Rationale- This will help the parents to monitor how much the neonate is consuming and ensure she is getting the recommended doses.** **2. Assess the parents knowledge of the feeding technique, and educate 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 having a premature**	**Goal: Parents will record all feedings in a journal.** **This was not observed as the parents were not present during the clinical rotation.** **Goal: Parents will demonstrate the side lying bottle feeding position.** **This was not observed as the parents were not present during the clinical rotation.**

		baby. The parents may be overwhelmed and need an educational course on how to properly feed the baby even though they have experience having a newborn baby in the past.	
4. Risk for impaired skin integrity related to shearing forces and moisture.	**This diagnosis was selected based on an abrasion due related to an ankle bracelet and redness in the thigh fold from the neonate's diaper and moisture.**	**1. Apply barrier cream to the affected area (Phelps et al., 2017). Rationale-This rational was chosen to prevent further break down and promote healing of the affected areas.** **2. Frequent changing of soiled diapers (Phelps et al., 2017). Rational-Keeping the neonate dry and free from urine and feces will prevent further skin irritation and break down.**	**Goal: Barrier cream will be applied by the parents or nurse during each diaper change.** **Vaseline was applied to the thigh fold 2 times during the clinical rotation.** **Goal: Diaper will be changed 10x a day.** **Diaper was changed 2 times during the clinical rotation.**

Other References (APA):

Phelps, L. L., Ralph, S. S., & Taylor, C. M. (2017). *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°		90°	< 90°
Scarf sign							
Heel to ear							

15

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	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

25= 34 weeks

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

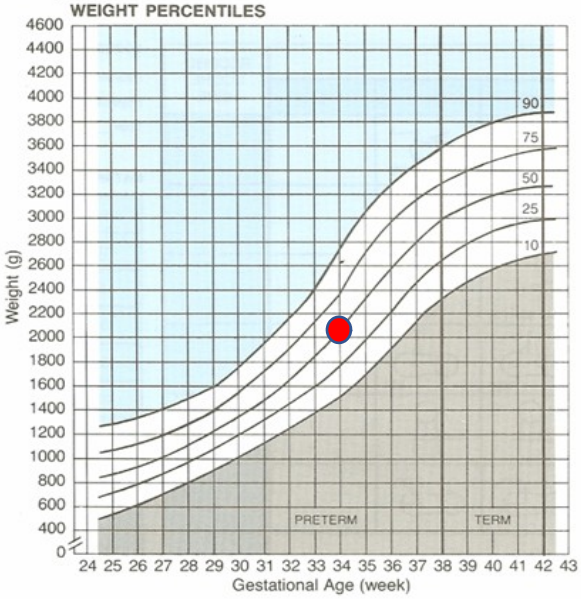
NAME _____ DATE OF EXAM _____ LENGTH _____

HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

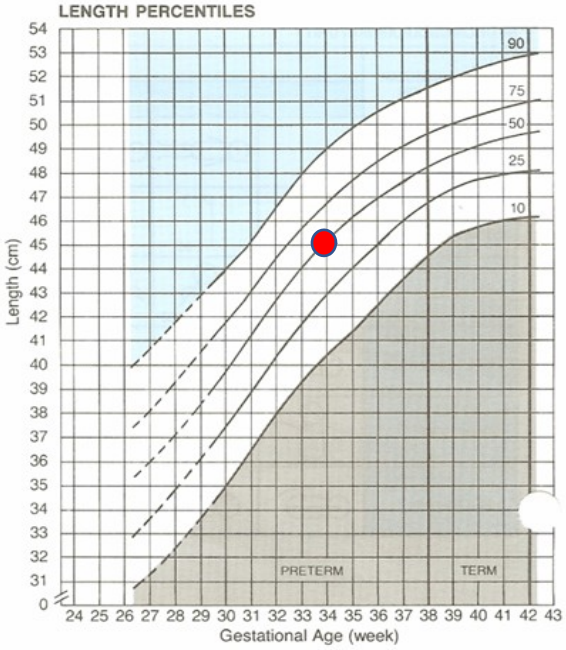
RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____

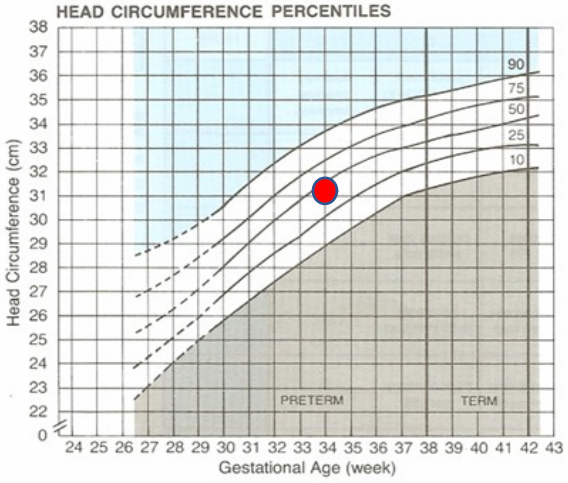
WEIGHT PERCENTILES



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