N432 Newborn Care Plan

Lakeview College of Nursing

Conor Deering

Demographics (10 points)

Date & Time of Clinical Assessment **3/5/21** **0030**	**Patient Initials** **S. D.**	**Date & Time of Birth** **3/4/21** **At 1058**	**Age** **(in hours at the time of assessment)** **4 hrs**
Gender **Female**	**Weight at Birth** **(gm) 4,090** **(lb.) 9 (oz.) 0**	**Weight at Time of Assessment** **(gm) 4030** **(lb.) 8 (oz.) 14.1**	**Age (in hours) at the Time of Last Weight** **13 hrs**
Race/Ethnicity **Caucasian**	**Length at Birth** **Cm 54** **Inches 21.6**	**Head Circumference at Birth** **Cm 36** **Inches 14.1**	**Chest Circumference at Birth** **Cm 34** **Inches 13.3**

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: Surgical history consists of laparoscopy for ovarian cyst and a wisdom teeth removal.

GTPAL: G1 P0 T0 A0 L0

When prenatal care started: 8/22/20

Abnormal prenatal labs/diagnostics: A glucose tolerance test was on 1/29/2021

Prenatal complications: This mother has gestational diabetes with obesity.

Smoking/alcohol/drug use in pregnancy: The patient denies smoking, alcohol, and drug use during labor.

Labor History of Mother:

Gestation at onset of labor: 36 weeks

Length of labor: 22 hours

ROM: Premature ROM

Medications in labor: No medications were listed.

Complications of labor and delivery: Failure to progress during second stage of labor requiring a C-section.

Family History:

Pertinent to infant: The mother and both of her parents are available to support the infant.

Social History (tobacco/alcohol/drugs):

Pertinent to infant: The mother denies tobacco, alcohol, or drug use.

Father/Co-Parent of Baby Involvement: The father is not involved with the family and the mother does not want to share information concerning the baby with him.

Living Situation: The mother lives with baby's grandma and grandpa in St. Joseph, IL. The mother is a single female who is working part time and going to college.

Education Level of Parents (If applicable to parents' learning barriers or care of infant): The mother is currently attending college.

Birth History (10 points)

Length of Second Stage of Labor: 20 hours

Type of Delivery: C – section

Complications of Birth: A cephalohematoma on the right-posterior section of the head due to a long second stage and head compression.

APGAR Scores:

1 minute: 8

5 minutes: 9

Resuscitation methods beyond the normal needed: No resuscitation methods were needed.

Feeding Techniques (10 points)

Feeding Technique Type: The mother expresses desire to breastfeed.

If breastfeeding:

LATCH score: 8

Supplemental feeding system or nipple shield: Will discuss supplemental feeding with the mother to help with hydration.

If bottle feeding: N/A

Positioning of bottle: N/A

Suck strength: N/A

Amount: N/A

Percentage of weight loss at time of assessment: 1.5%

4090g – 4030g = 60g; 60g/4090 X 100 = 1.46% (round to) 1.5%

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

What is normal weight loss for an infant of this age? Normal weight loss can be up to 6% in the first few days of life (Ricci et al., 2017).

Is this neonate's weight loss within normal limits? Yes, weight loss was only 1.5% (Ricci et al., 2017).

Intake and Output (8 points)

<u>Intake</u>

If breastfeeding:

Feeding frequency: Feeding is about every 3 hours.

Length of feeding session: 10 min

One or both breasts: The baby used both breasts to feed.

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: N/A/

Frequency: N/A

Volume: N/A

If IV:

Rate of flow: N/A

Volume in 24 hours: N/A

<u>Output</u>

Age (in hours) of first void: The baby was about 1 hour old at first void.

Voiding patterns:

Number of times in 24 hours: Once

Age (in hours) of first stool: The baby stooled at about 1 hour of life.

Stool patterns:

Type: Large meconium stool

Color: Black

Consistency: Sticky

Number of times in 24 hours: The baby stooled 2 times in 24 hours.

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	**Untrated hypoglycemia can cause mental issues in children long-term (Ricci et al., 2017).**	**>40mg/dl (Ricci et al., 2017).**	**55**	**This patient is not hypoglycemic (Ricci et al., 2017).**
Blood Type and Rh Factor	**The baby's blood type is important to contrast against the mother's blood type due to the possibility of a rhesus negative mother having a rhesus positive baby (Ricci et al., 2017).**	**AB POS to O NEG**	**A +**	**A+**

Coombs Test	**A coombs test assesses the newborn for antibodies causing hemolysis, thereby raising the level of bilirubin in the blood (Ricci et al., 2017).**	**Negative**	**N/A**	**N/A**
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	**Hyperbilirubinemia can cause neurologic disorder in the newborn (Ricci et al., 2017).**	**6 or less for 12 hours of age and 36 weeks gestation (Billitool inc., 2021).**	**6.4**	**The patient is at high risk and needs phototherapy (Billitool inc., 2021).**
Newborn Screen (At 24 hours)	**Newborn screens are used to detect abnormalities to prevent neurological and other disorders (Ricci et al., 2017).**	**Normal newborn screens consist of no detected abnormalities (Ricci et al., 2017).**	**(If available—these may be not available until after discharge for some clients)**	**N/A**
Newborn Hearing Screen	**Newborn hearing screens assess for deafness or hearing abnormalities.**	**Newborn will respond appropriately to stimuli (Ricci et al., 2017).**	**N/A**	**N/A**

Newborn Cardiac Screen (At 24 hours)	**This test uses pulse oximetry to detect heart defects (Ricci et al., 2017).**	**No abnormalities should be detected in the newborn (Ricci et al., 2017).**	**N/A**	**N/A**

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

Billitool inc. (2021). *Hour-Specific nomogram for risk stratification*. Billitool.Org. Retrieved November 13, 2021, from https://bilitool.org/?page_id=6

Ricci, S. S., Kyle, T., & Carman, S. (2017). *Maternity and pediatric nursing* (3rd ed.). Wolters Kluwer.

Newborn Medications (7 points)

Brand/Generic	**Aquamephyton (Vitamin K)**	**Illotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine**
Dose	**1mg (Melani & Miklush, 2021).**	**1g tube (RxList, 2021).**	**1 dose (Centers for Disease Control and Prevention, 2019).**
Frequency	**At birth (Melani & Miklush, 2021).**	**Q 4 hours (if treating conjunctivitis) (RxList, 2021).**	**1st of a 3 dose series (Centers for Disease Control and Prevention, 2019).**
Route	**IM (Melani & Miklush, 2021).**	**Topically (RxList, 2021).**	**IM (Centers for Disease Control and Prevention, 2019).**

Classification	**Vitamin (Melani & Miklush, 2021).**	**Macrolide antibiotic (RxList, 2021).**	**Vaccine (Centers for Disease Control and Prevention, 2019).**
Mechanism of Action	**Vitamin K assists in the activation of proteins essential for blood clotting (Melani & Miklush, 2021).**	**Inhibits protein synthesis, preventing further growth rather than destroying the bacteria (RxList, 2021).**	**Protects newborns from contracting hepatitis B, a potentially fatal virus that can cause liver cancer (Centers for Disease Control and Prevention, 2019).**
Reason Client Taking	**All newborns receive vitamin K shortly after birth; prevents hemorrhage (Melani & Miklush, 2021).**	**Prophylaxis and treatment of conjunctivitis (RxList, 2021).**	**To protect from hepatitis B virus (Centers for Disease Control and Prevention, 2019).**
Contraindications (2)	**No contraindications (Melani & Miklush, 2021).**	**Hypersensitvity (RxList, 2021).**	**No contraindications (Centers for Disease Control and Prevention, 2019).**
Side Effects/Adverse Reactions (2)	**Skin rash, hypersensitivity (Melani & Miklush, 2021).**	**Worsening eye symptoms, trouble breathing (RxList, 2021).**	**Low fever, sore arm (Centers for Disease Control and Prevention, 2019).**
Nursing Considerations (2)	**Administer in the vastus lateralus, Provide comfort after administration (Melani & Miklush, 2021).**	**Administer into each lower conjunctival sac. Do not flush ointment after applying to newborn (RxList, 2021).**	**Administer in the vastus lateralus. Give comfort care for baby after vaccination (Centers for Disease Control and Prevention, 2019).**
Key Nursing	**This medication**	**N/A (RxList,**	**N/A (Centers for**

Assessment(s)/Lab(s) Prior to Administration	**is administered to all patients (Melani & Miklush, 2021).**	**2021).**	**Disease Control and Prevention, 2019).**
Client Teaching needs (2)	**Newborns are at risk for bleeding without enough vitamin K. Assist the newborn and provide comfort after administration (Melani & Miklush, 2021).**	**Ointment is used to prevent the newborn from developing conjunctivitis. Do not touch the site after application (RxList, 2021).**	**Hepititis B can cause liver cancer and other serious complications. There is no cure for hepatitis B once contracted (Centers for Disease Control and Prevention, 2019).**

Medications Reference (1) (APA):

Centers for Disease Control and Prevention. (2019, August 2). *Hepatitis b and the vaccine (shot)*. Retrieved November 13, 2021, from https://www.cdc.gov/vaccines/parents/diseases/hepb.html

Melani, A., & Miklush, L. (2021). *Phytonadione/ vitamin k1: Nursing pharmacology*. Osmosis. Retrieved November 13, 2021, from https://www.osmosis.org/learn/Phytonadione_Vitamin_K1:_Nursing_Pharmacology

RxList. (2021, June 14). *Ilotycin (erythromycin): Uses, dosage, side effects, interactions, warning*. Retrieved November 13, 2021, from https://www.rxlist.com/ilotycin-drug.htm#description

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	**Yellow discoloration of the torso is present without cyanosis. The skin is flexible, smooth, and warm to the touch (Ricci et al., 2017).**	**The skin is flexible and smooth with good skin turgor; the skin is warm to the touch (Ricci et al., 2017).**	**Jaundice indicates hemolysis is outpacing the elimination of the bilirubin. Feeding may assist with this as well as phototherapy (Ricci et al., 2017).**
Head	**Cephalohematoma is in the right posterior aspect of the head. The size of the head is large for gestational age (Ricci et al., 2017).**	**Size and shape are normal for age, gender, and ethnicity (Ricci et al., 2017).**	**The clinical significance of this abnormal finding is a consequence of prolonged labor and head compression. Large gestational age is caused by gestational diabetes; babies may be prone to cardiovascular diseases, obesity, HTN, and other issues (Ricci et al., 2017).**
Fontanels	**Fontanelles are soft, flat, and open (Ricci et al., 2017).**	**Fontanelles are soft, flat, and open (Ricci et al., 2017).**	**N/A**
Face	**Full cheeks and symmetrical facial features are noted (Ricci et al., 2017).**	**Full cheeks and symmetrical facial features are noted (Ricci et al., 2017).**	**N/A**
Eyes	**Clear eyes with symmetry are in-**	**Clear eyes with symmetry are in-**	**N/A**

	line with ears (Ricci et al., 2017).	**line with ears (Ricci et al., 2017).**	
Nose	**The nose is small, midline, and narrow (Ricci et al., 2017).**	**The nose is small, midline, and narrow (Ricci et al., 2017).**	**N/A**
Mouth	**The mouth is midline and symmetric with intact soft and hard palates (Ricci et al., 2017).**	**The mouth is midline and symmetric with intact soft and hard palates (Ricci et al., 2017).**	**N/A**
Ears	**Ears are symmetric, soft, and flexible; they bounce back when folded (Ricci et al., 2017).**	**Ears are symmetric, soft, and flexible; they bounce back when folded (Ricci et al., 2017).**	**N/A**
Neck	**The neck is short with creases, not restricted with the newborn holding to the midline (Ricci et al., 2017).**	**The neck is short with creases, not restricted with the newborn holding to the midline (Ricci et al., 2017).**	**N/A**
Chest	**The chest is round with symmetry and has a smaller circumference than the head (Ricci et al., 2017).**	**The chest is round with symmetry and has a smaller circumference than the head (Ricci et al., 2017).**	**N/A**
Breath Sounds	**Breath sounds are normal and versicular (Ricci et al., 2017).**	**Breath sounds are normal and versicular (Ricci et al., 2017).**	**N/A**

Heart Sounds	**A normal S1, S2 without rubs, murmurs, or gallops was heard (Ricci et al., 2017).**	**A normal S1, S2 without rubs, murmurs, or gallops was heard (Ricci et al., 2017).**	**N/A**
Abdomen	**The abdomen appears protuberant and soft (Ricci et al., 2017).**	**The abdomen appears protuberant and soft (Ricci et al., 2017).**	**N/A**
Bowel Sounds	**Bowel sounds normoactive in all quadrants (Ricci et al., 2017).**	**Bowel sounds normoactive in all quadrants (Ricci et al., 2017).**	**N/A**
Umbilical Cord	**Three vessels are evident in the umbilicus and are intact (Ricci et al., 2017).**	**Three vessels are evident in the umbilicus and are intact (Ricci et al., 2017).**	**N/A**
Genitals	**Swollen genitalia resulting from estrogen is present (Ricci et al., 2017).**	**Swollen genitalia resulting from estrogen is present (Ricci et al., 2017).**	**N/A**
Anus	**The anus is intact without drainage or protuberant bowel (Ricci et al., 2017).**	**The anus is intact without drainage or protuberant bowel (Ricci et al., 2017).**	**N/A**
Extremities	**Extremities have symmetry while moving freely; no cyanosis noted (Ricci et al., 2017).**	**Extremities have symmetry while moving freely; no cyanosis noted (Ricci et al., 2017).**	**N/A**
Spine	**The spine is midline without deviation (Ricci et al., 2017).**	**The spine is midline without deviation (Ricci et al., 2017).**	**N/A**
Safety • **Matching ID bands with parents** • **Hugs tag**	**The newborn's ID matches with the mother with a hugs tag present on the baby. The baby is**	**The newborn's ID matches with the mother with a hugs tag present on the baby. The baby is**	**N/A**

• **Sleep position**	**sleeping on her back (Ricci et al., 2017).**	**sleeping on her back (Ricci et al., 2017).**	

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? This newborn is above larger than gestational age due to passing the 90th percentile (Ricci et al., 2017).

Are there any complications expected for a baby in this classification? Complications can include heart defects, obesity, respiratory issues, and hypoglycemia (Ricci et al., 2017).

Vital Signs, 3 sets (6 points)

Time	Temperature	Pulse	Respirations
Birth	**97.6**	**155**	**56**
4 Hours After Birth	**97.6**	**146**	**46**
At the Time of Your Assessment	**98.3**	**138**	**54**

Vital Sign Trends: Vital sign are within normal limits, pulse is decreasing steadily.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
2300	**NIPS**	**No pain**	**No pain**	**No pain**	**Infant is placed skin-to-skin with the mother.**

Summary of Assessment (4 points)

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

Babygirl Sarah Daniels was delivered 3/4/21 at 1058 by c-section. Cephalohematoma is present due to long second-stage labor and fetal head compression. Apgars are 8/9/9 for

this 36-week gestation LGA baby. Prenatal history consists of laparoscopy, wisdom tooth removal, gestational diabetes, and obesity. The baby's birth weight was 4090g while being 54cm long. Physical assessment revealed jaundice, cephalohematoma of the right posterior aspect of the head, and large head size. The most recent vital signs were T 98.3, P 138, R54, and Spo2 98%. Blood sugar was taken three times, with the lowest being 40. Glucose was 55 at the time of assessment. The baby is feeding for about 10 min every 3 hours. Bilirubin is 6.4 upon laboratory results, so she is considered high risk and will need phototherapy.

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.
Allow for a skin-to-skin time as much as possible for bonding and temperature regulation purposes (N)	**This intervention should be applied as much as the treatment allows.**	**Temperature regulation is essential to help with perfusion.**
Support and educate the mother concerning breastfeeding and pumping (N)	**This intervention should be performed as needed.**	**First-time mothers may struggle to care for their infants; this mother may benefit from a lactation consultant providing right breast and bottle feeding education. This intervention ensures the infant can have good feedings.**
Offer support groups and resources for single mothers (N)	**This intervention should be offered before discharge.**	**Single motherhood is difficult, especially for first-time mothers. The mother may benefit from a support group and other resources. Working part-time may not be sufficient, so the mother may be eligible for state and other private resources. This intervention will give the mother peace of mind, allowing security for the infant.**

Discharge Planning (2 points)

Discharge location: Discharge planning is still in process and not complete currently.

Equipment needs (if applicable): Discharge planning is still in process and not complete currently.

Follow up plan (include plan for newborn ONLY): Discharge planning is still in process and not complete currently.

Education needs: This mother needs education on breast/bottle feeding and care for her first infant.

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 injury related to hyperbilirubinemia as evidenced by bilirubin level of 6.4 (Phelps, 2020).	**This baby is at high risk due to being 12 hours old at 36 weeks gestation (Phelps, 2020).**	**1. Initiate phototherapy per provider's orders to lower bilirubin levels.** **2. Reassess bilirubin levels to check the progress of the interventions (Phelps, 2020).**	**The newborn will have a bilirubin level within normal limits upon discharge (Phelps, 2020).**
2. Risk for hypothermia related to	**This baby was born at 36 weeks**	**1. Monitor temperature every four hours**	**The newborn will maintain a temperature within**

ineffective perfusion as evidenced by prematurity (Phelps, 2020).	**gestation and is at risk for hypothermia (Phelps, 2020).**	**to evaluate the effectiveness of interventions.** **2. Place the patient skin-to-skin with the mother or under a warmer as much as possible to keep from hypothermia (Phelps, 2020).**	**normal limits until discharge (Phelps, 2020).**
3. Knowledge deficit related to breastfeeding as evidenced by mother's anxiety (Phelps, 2020).	**The mother is primiparous and does not have previous breastfeeding experiences (Phelps, 2020).**	**1. Support the mother and evaluate the type of feeding she is willing to pursue, allowing for appropriate nutrition planning.** **2. Provide the mother with a lactation consultant to give familiarity and confidence with feeding (Phelps, 2020).**	**The newborn and mother will be more effective during feedings (Phelps, 2020).**
4. Ineffective family processes related to paternal abandonment as evidenced by the mother saying the father is not involved (Phelps, 2020).	**The father not being involved in the family process can psychologically tax the mother and the child (Phelps, 2020).**	**1. Provide moral support for the mother to build her confidence in her parenting ability.** **2. Provide education on resources and support groups to assist the mother in reinforcing confidence and success (Phelps, 2020).**	**The mother will have adequate resources and self-confidence to find success in motherhood (Phelps, 2020).**

Other References (APA):

Phelps, L. L. (2020). *Sparks & taylor's nursing diagnosis pocket guide* (4th ed.). Wolters Kluwer.

Ricci, S. S., Kyle, T., & Carman, S. (2017). *Maternity and pediatric nursing* (3rd 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	S[redacted]k; v[redacted]s	Superficial peeling and/or rash; few veins	Cracking, pale areas; rare veins	Parchment, deep cracking; no vessels	Leathery, cracked, wrinkled
Lanugo	None	Sparse	Abundant	[redacted]	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	[redacted] entire sole	
Breast	Imperceptible	Barely perceptible	Flat areola, no bud	Stippled areola, 1–2 mm bud	[redacted] 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 [redacted] 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	[redacted]	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
[redacted]	
35	38
40	40
45	42
50	44

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

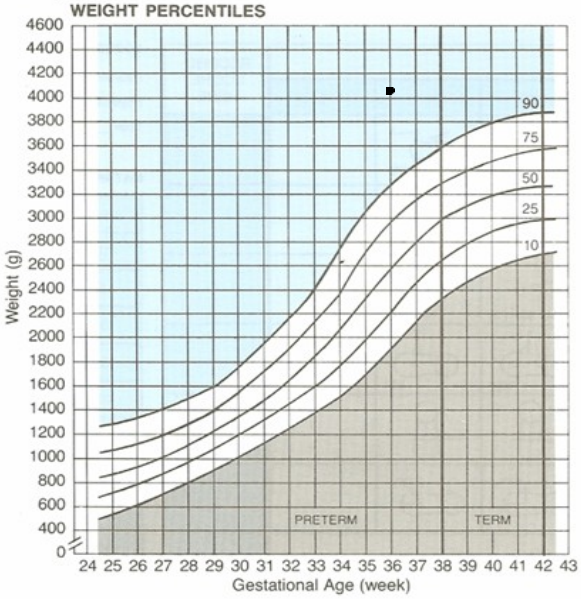
NAME _____ DATE OF EXAM _____ LENGTH _____

HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

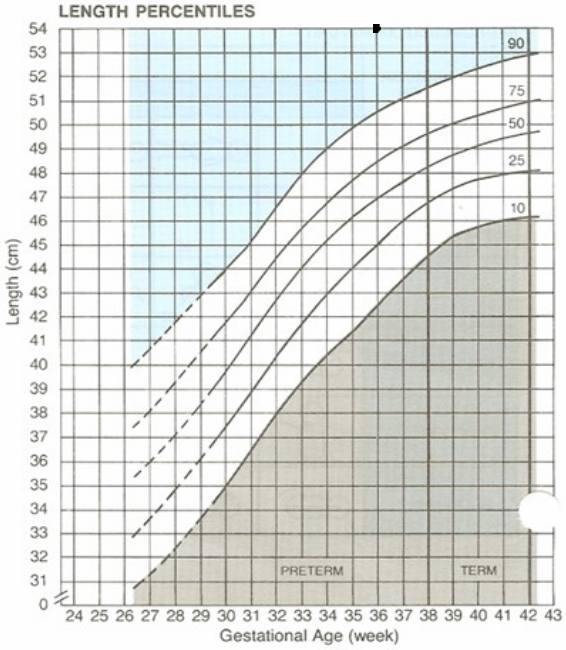
RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____

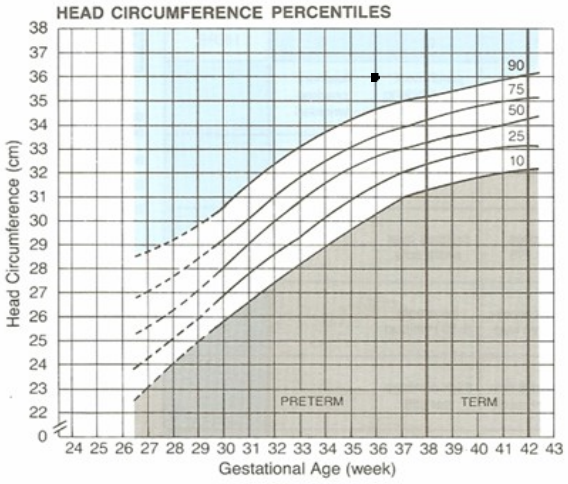
WEIGHT PERCENTILES



LENGTH PERCENTILES



HEAD CIRCUMFERENCE PERCENTILES



CLASSIFICATION OF INFANT*	Weight	Length	Head Circ.
[redacted]			
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