N432 Newborn Care Plan

Lakeview College of Nursing

Justin Pranada

Demographics (10 points)

Date & Time of Clinical Assessment 10/21/2020 0800	**Patient Initials** A. O.	**Date & Time of Birth** 10/20/2020 22:39	**Age (in hours at the time of assessment)** 9 hours
Gender Male	**Weight at Birth** 3,835 grams 8 lbs 7.3 oz	**Weight at Time of Assessment** 3,835 grams 8 lbs 7.3 oz	**Age (in hours) at the Time of Last Weight** 9 hours
Race/Ethnicity Caucasian	**Length at Birth** 52.07 cm 20.5 inches	**Head Circumference at Birth** 38 cm 14.96 inches	**Chest Circumference at Birth** 34.5 cm 13.58 inches

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:

When prenatal care started: The prenatal care started on 3/24/2020.

Abnormal prenatal labs/diagnostics: The mother had the following abnormal prenatal labs:

- Neutrophils: 78.5
- Lymphocytes: 12.9

Prenatal complications: The pregnancy was complicated by persistent right umbilical vein and abnormal position of the gallbladder.

Smoking/alcohol/drug use in pregnancy: The mother denied the use of alcohol, illicit drugs, or reported smoking during her pregnancy.

Labor History of Mother:

Gestation at onset of labor: The fetus was at 37 weeks and 6 days of gestation at the onset of labor. The Ballard score showed that the newborn is at 40 weeks gestation.

Length of labor: The length of labor was 12 hours and 43 minutes.

ROM: Spontaneous Rupture of Membranes during cervical exam on 10/20/2020 at 18:27; roughly 4 hours prior to delivery (22:39).

Medications in labor: Epidural

Complications of labor and delivery: None

Family History:

Pertinent to infant: None

Social History (tobacco/alcohol/drugs): The mother denied the use of alcohol, illicit drugs, or reported smoking during her pregnancy.

Pertinent to infant: None

Father/Co-Parent of Baby Involvement: Father is involved with the care of the newborn.

Living Situation: Home with mother and father.

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

Birth History (10 points)

Length of Second Stage of Labor: 23 minutes

Type of Delivery: Spontaneous vaginal delivery.

Complications of Birth: None

APGAR Scores:

1 minute: 8

5 minutes: 8

Resuscitation methods beyond the normal needed: None

Feeding Techniques (10 points)

Feeding Technique Type: Breastfeeding and bottle feeding.

If breastfeeding: Breastfeed, one attempt - 5mL (0240)

LATCH score: 8

If bottle feeding: Bottle feeding

Positioning of bottle: Side lying

Suck strength: Weak

Amount: 10 mL (0240), 15 mL (0500) - 10/21/2020

Percentage of weight loss at time of assessment: N/A

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

- Birth weight (in grams) - current weight (in grams) = x grams
- x grams / birth weight = 0.X grams (multiply by 100) = **percentage loss**

What is normal weight loss for an infant of this age? Newborns lose approximately 7 - 10% of their birth weight in the first 7 - 10 days of life. They are expected to regain the lost weight shortly after (Ricci et al., 2017).

Is this neonate's weight loss within normal limits? The infant's current weight was not available during assessment. The infant was 9 hours old.

Intake and Output (8 points)

Intake

If breastfeeding:

Feeding frequency: Every 3 hours.

Length of feeding session: 15 minutes - as long as the infant can tolerate.

One or both breasts: Right side only.

If bottle feeding: Formula 19 cals/oz - Similac

Frequency: Every 3 hours.

Volume of formula per session: 10 mL (0240), 15 mL (0500)

If NG or OG feeding: No NG or OG.

Frequency: N/A

Volume: N/A

If IV: No IV.

Rate of flow: N/A

Volume in 24 hours: N/A

Output

Age (in hours) of first void: 10/21/2020 - 0240 - 4 hours old.

Voiding patterns: Voids spontaneously.

Number of times in 24 hours: Twice (2x) before clinical; Twice (2x) during clinical - four (4x) times in 24 hours.

Age (in hours) of first stool: 10/21/2020 - 4 hours old.

Stool patterns: Spontaneous

Type: Normal newborn stool.

Color: Dark, brown

Consistency: Soft and Seedy

Number of times in 24 hours: Once (1x) before clinical; Twice (2x) during clinical - three (3x) 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	Newborns cannot properly control their glucose in the first couple days of life (Ricci et al., 2017).	40 - 99	53	The newborn's glucose is within normal limits but should be monitored.
Blood Type and Rh Factor	Determines blood type in case of transfusion to avoid reactions	Depends on factors like the parents's blood types	A positive (+)	Has A antigen and positive Rh factor.
Coombs Test	The test is done to look for antibodies that cause an autoimmune reaction that causes immunity to attack the body's own RBC.	Negative	N/A	N/A
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	This test is done to assess for Jaundice. Newborns are at risk for newborn jaundice. Bilitool.org says that the infant needs to be at least 12 hours old.	<5.2 mg/dL	Not done yet - the newborn was not 24 hours old at the time of assessment.	N/A

Newborn Screen (At 24 hours)	This test allows for detection of any disorder that can affect a newborn's development.	Negative	Not available. The newborn was not 24 hours old at the time of assessment.	The results for this infant were not available. The infant was only 9 hours old at the time of assessment.
Newborn Hearing Screen	This test detects any hearing disorders	Pass	Not done yet.	**N/A**
Newborn Cardiac Screen (At 24 hours)	This test allows for the detection of any congenital heart defects in the newborn.	Pass - 95% or above for pulse oximetry with the opposite extremity being 3% or less within the other value.	Not done yet.	The cardiac screen has not been done because the infant was only 9 hours old at the time of assessment.

Lab Data and Diagnostics Reference (APA):

Bilitool.org

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)	**Ilotycin** (Erythromycin Ointment)	**Hepatitis B Vaccine**	N/A	N/A
Dose	1 mg	Thin film	0.5 mL	N/A	N/A
Frequency	Once at birth	Once at birth	Once at birth	N/A	N/A
Route	IM injection	Eyelid of both eyes	IM injection	N/A	N/A
Classification	Vitamin	Antibiotic	Vaccine	N/A	N/A
Mechanism of Action	By working in the liver, it promotes the synthesis of	Provides bacterial and bacteriostatic actions to prevent infections.	Hepatitis B surface antigen that stimulates active	N/A	N/A

	coagulation factors.		immunity.		
Reason Client Taking	To prevent bleeding due to vitamin K deficiency.	Protection from bacterial infections and prevents ophthalmia neonatorum.	Immunity against hepatitis B.	N/A	N/A
Contraindications (2)	Anaphylactic reaction; liver dysfunction	hypersensitivity; hepatic disorders	Active infection; lupus-like syndrome	N/A	N/A
Side Effects/Adverse Reactions (2)	Injection site reaction; hyperbilirubinemia	Chemical conjunctivitis; fever	Fever; irritability	N/A	N/A
Nursing Considerations (2)	Use 25-gauge, ⅝ needle for injection; hold the leg firmly and inject slowly	Close the eye to make sure the medication permeates; wear gloves	Caution in immunocompromised; Do not store in extreme hot or cold	N/A	N/A
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor liver functions before administration	Observe infant for possible infection.	Monitor renal and hepatic functions/labs before and after administration	N/A	N/A
Client Teaching needs (2)	Inform parents what the medication is for; Notify provider if bleeding occurs	Inform the parents what the medication is for; Inform parent to notify provider if they notice signs and symptoms of infection	Inform the parents what the medication is for; do not breastfeed while taking the medication	N/A	N/A

Medications Reference (APA):

Jones & Bartlett Learning. (2019). *Nurses drug handbook.*

Ricci, S.S., Kyle, T., Carman, S. (2017). *Maternity and Pediatric Nursing* (3rd ed.).

Wolters Kluwer.

Newborn Assessment (20 points)

Area	Your Assessment	Expected Variations and Findings *This can be found in your book on page 645*	If assessment finding different from expectation, what is the clinical significance?
Skin	No jaundice noted, dry, pink, and intact.	Smooth, flexible, good skin turgor, well hydrated, warm.	N/A
Head	Anterior and posterior fontanelles are open and flat. Head is symmetrical and normocephalic. Hair distribution is equal.	Varies with age, gender, ethnicity.	N/A
Fontanels	Anterior and posterior fontanelles are open, soft, and flat.	Fontanelles open, flat, and soft.	N/A
Face	Facial features were symmetrical. Full cheeks.	Full cheeks, facial features are symmetric.	N/A
Eyes	Eyelids open and close. Eyes are intact and present red reflexes bilaterally. Online with ears.	Clear and symmetrically placed on the face, online with ears.	N/A
Nose	The nose is small, midline, and shows patent nostrils and nares. No septal deviation noted.	Small, placement in the midline and narrow, ability to smell.	N/A
Mouth	The oral mucosa is intact, moist, and pink in color. Tongue is pink in color and intact. Intact soft and hard palate.	Aligned in midline, symmetric, intact soft and hard palate.	N/A

Ears	The ears have patent canals, no abnormalities noted. Soft and pliable with quick recoil during Ballard assessment.	Soft and pliable with quick recoil when folded and released.	N/A
Neck	Trachea is midline and no masses palpated in the neck. The next is short and the baby holds his head in midline.	Short, creased, moves freely, baby holds head in midline.	N/A
Chest	The chest rises and falls with each respiration. Round, symmetric, and smaller than the head.	Round, symmetric, smaller than head.	N/A
Breath Sounds	All lung fields are clear to auscultation. No labored breathing, use of accessory muscles, and distress noted.	Lung fields clear bilaterally.	N/A

Heart Sounds	S1 and S2 heard. No additional heart sounds (S3, S4, murmurs) noted.	S1 and S2 present. Murmurs may be present - more common in newborns, does not mean cardiovascular disease.	N/A
Abdomen	The abdomen is soft, non-distended, and no organomegaly noted. Three vessels in the umbilical cord.	Protuberant contour, soft, three vessels in umbilical cord.	N/A
Bowel Sounds	Active bowel sounds were auscultated in all four quadrants.	Active bowel sounds in all quadrants.	N/A
Umbilical Cord	Present and demonstrates 3 vessels. No drainage or bleeding.	3 vessels present (2 arteries, 1 vein), no drainage or bleeding.	N/A
Genitals	The baby boy is uncircumcised. Genitals are intact.	Smooth glans, meatus centered at tip of penis.	N/A
Anus	The anus is pink and intact.	Intact and patent.	N/A
Extremities	Peripheral pulses were palpated in femoral pulses. Symmetric and free moving.	Extremities symmetric with free movement.	N/A
Spine	The spine is midline and intact.	Midline and intact.	N/A
Safety ● **Matching bands with parents** ● **Hugs tag** ● **Sleep position**	The infant has matching bands with the mother and hugs tag. The infant is put in side lying position for aspiration precautions.	Hospital policies may require all newborns to have a HUGS tag and identification that match the parent(s). The infant should be in supine or side lying position with no other items in the	N/A

		sleeping area.	

Reference:

Ricci, S., Kyle, T. & Carmen, S. (2017). *Maternity and pediatric nursing (3rd ed.).* Lippincott, Williams & Wilkins.

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?

AO is LGA for weight and head circumference but AGA for length.

Are there any complications expected for a baby in this classification?

Infants that are LGA are more at risk for respiratory distress syndrome. They are also at risk for aspiration during feeding. Furthermore, they may also develop polycythemia (Ricci et al., 2017).

Vital Signs, 3 sets (6 points)

Time	Temperature	Pulse	Respirations
Birth	98.1 F (36.7 C)	140 bpm	64*
4 Hours After Birth	98.9 F (37.2 C)	134 bpm	42
At the Time of Your Assessment	97.9 (36.6 C)	124 bpm	46

Vital Sign Trends: The infant's temperatures (97.4-99.6) and pulses (100-160) were within normal limits. The respirations were high at birth, normal range is 30 - 60 breaths per minute, but slowly stabilized and were within normal limits.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0800	NIPS	N/A	2 (a score of 3 and above is when an infant would be considered in pain).	None	None

Summary of Assessment (4 points)

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

This newborn was delivered on 10/20/2020 at 22:39 by normal spontaneous vaginal delivery (NSVD). The APGAR scores at one and five minutes were 8 and 8. The EDD for the newborn was 11/3/2020. The Ballard Gestational Age assessment revealed that this infant is 40 weeks and LGA. Prenatal history is complicated by the right umbilical vein and abnormal position of the gallbladder. The birth weight of the infant was 8 lbs 7.3 oz (3,835 grams), 20.5 inches long (52.07 cm). Upon assessment, all systems are within normal limits. Last set of vitals were 97.9 F, 124 bpm, 46 respirations. Blood glucose after delivery is within normal limits at 53. The infant is breastfeeding and bottle feeding. He is nursing well every 3 hours. Bilirubin levels have not been done yet. The infant is expected to be discharged with the mother if 24 hour screenings show no abnormalities. The infant is planned for a well baby check 48 hours after discharge.

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.
Pacifier - N	Given when the baby is crying or when assessments were being performed.	Sucking on the pacifier helped calm the infant down.
Oral Sucrose - N	Given when the baby was crying when assessments were being performed.	Oral sucrose was given in addition to the pacifier to help calm the infant.
Breast/Bottle Feeding - N	Every 3 hours.	The infant needs as much calories as he

		can intake for normal development in the first week of life.
Monitor Breathing patterns - T	Every 15 minutes.	The infant was sent to the NICU for abnormal breathing patterns. There were no signs of distress and vital signs were within normal limits, we just want to make sure that the sighing the infant was doing was not serious.

Discharge Planning (2 points)

Discharge location:

The infant will be discharged home with his family. There were no discharge orders at the time of clinical.

Equipment needs (if applicable):

There is no equipment needed.

Follow up plan (include plan for newborn ONLY):

The parents will need a follow up if the infant's breathing patterns change. One of the main concerns about the infant is his breathing patterns that caused him to be admitted to the NICU. His respirations show no distress or labored breathing, but a persistent unusual sigh during expiration is the concern.

Education needs:

The mother will need to be educated on recognizing signs and symptoms of respiratory distress related to her infant's unusual breathing patterns.

Nursing Diagnosis (30 points)

Must be NANDA approved nursing diagnosis and listed in order of priority
Two of them must be education related i.e. the interventions must be education for the client."

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 (1 pt each)** ● How did the patient/ family respond to the nurse's actions? ● Client response, status of goals and outcomes, modifications to plan.
Ineffective breathing pattern related to prolonged expiration phase as evidenced by an intermittent sigh.	The infant was sent into the NICU for observation because of a sigh during expiration. There were no clear signs of distress and vital signs were stable.	1 Assess the symptoms and causative factors. **Rationale:** We want to look at the patterns of the irregular breathing as well as other factors like any causative agents that may aggravate symptoms. 2 Consider medical conditions that may present with irregular breathing patterns. **Rationale:** We want to make sure that the breathing pattern is not related to an underlying cause that may be harmful for the infant. Close observation is essential for assessment of the breathing patterns.	Goal: The infant will show no signs of distress during acute exacerbation of irregular breathing patterns. The mother was very cooperative with allowing the nurses to assess her infant. Observation of the infant in the NICU showed that the infant's breathing pattern is intermittent.
Ineffective breastfeeding related to difficulty of the infant with the breastfeeding process as evidenced by the infant resisting	The infant was having trouble latching to the mother's nipple and	1 Assess for causative or contributing factors. **Rationale:** The mother may have lack of knowledge when it comes to breastfeeding or there could	Goal: The mom will be able to breastfeed the infant successfully. The mother was very open to advice and teachings. She is now

latching on to the breast.		be discomfort for the infant. We want to educate the mother of what can cause ineffective breastfeeding (the infant might be full, tired, irritable). 2 Promote successful breastfeeding. **Rationale:** We want to advise the mother to increase the frequency of feeding times gradually with each feeding time lasting between 5 - 45 minutes. Instruct the mother to offer both breasts. A. O. is currently only nursing on the right breast.	trying to increase the frequency of breastfeeding and interaction with the infant as well as offering both breasts. We have also tried different infant positions in relation to the breast to promote a strong suck strength.
Risk for ineffective thermoregulation related to infant's inability to regulate body temperature as evidenced by unstable vital sign fluctuations.	Newborns cannot regulate their own body temperature yet, preventing heat loss is essential.	1 Assess the infant's vital signs Q 1 hour - more specifically temperature. **Rationale:** We want to avoid drastic changes in temperature, by monitoring the temperature closely and frequently, this can be avoided. 2 Use clothing/linen to help the infant have a more consistent temperature. **Rationale:** Wrapping the infant into a swaddle helps the infant maintain a stable temperature.	Goal: The infant maintains a temperature between normal limits. The mother learned why it is essential for skin to skin contact and properly swaddling her infant.
Risk for infection related to an immature immune system as evidenced by increased neutrophil and WBC	The infant has a developing immune system and is more at risk for developing an	1 Implement proper precautions when providing care. **Rationale:** Doing so will decrease the spread of	Goal: The infant will not develop any infections. The mother is breastfeeding the infant and is figuring out the

counts.	infection.	unwanted pathogens. 2 Encourage the mother to breastfeed. **Rationale:** Breast milk contains passive immunity passed by the mother.	best methods for a strong latch. Proper precautions are being taken when providing care for both the infant and the mother.

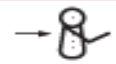
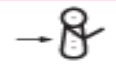
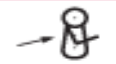
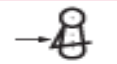
Other References (APA)

Carpenito, L. J. (2017). *Handbook of nursing diagnosis*. Philadelphia: Wolters Kluwer.

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*. Elsevier.

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

Neuromuscular	Physical
- Posture: 4 - Square window: 4 - Arm recoil: 4 - Popliteal angle: 3 - Scarf sign: 4 - Heel to ear: 3 TOTAL: 22	- Skin: 3 - Lanugo: 3 - Plantar surface: 3 - Breast: 3 - Eye/Ear: 3 - Genitals (male): 3 TOTAL: 18

Ballard SCORE: 40 (equates to 40 weeks gestation)
The newborn scored a 40 on the Ballard Gestational Age Scale, which puts him at 40 weeks maturity.

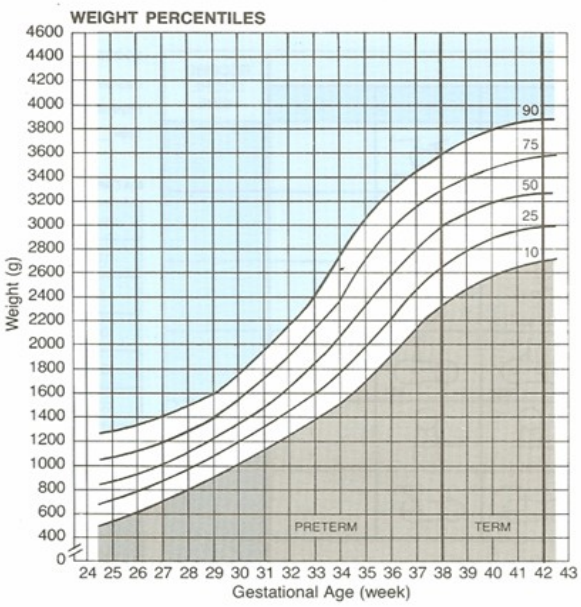
CLASSIFICATION OF NEWBORNS (BOTH SEXES) BY INTRAUTERINE GROWTH AND GESTATIONAL AGE [1,2]

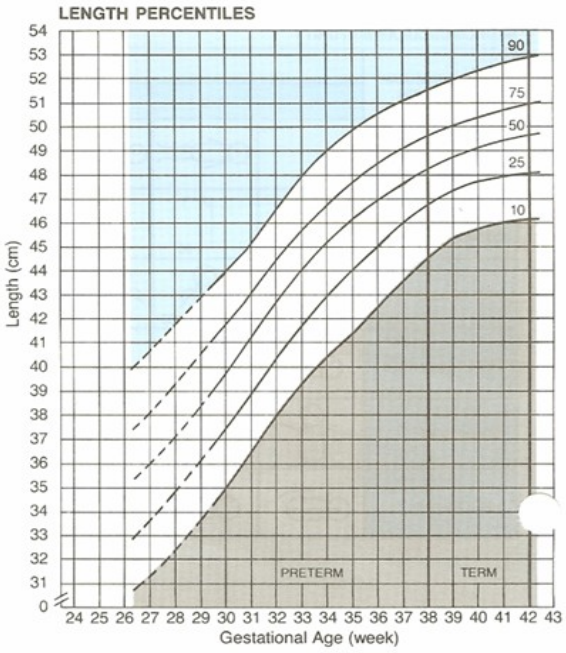
NAME _____ DATE OF EXAM _____ LENGTH _____

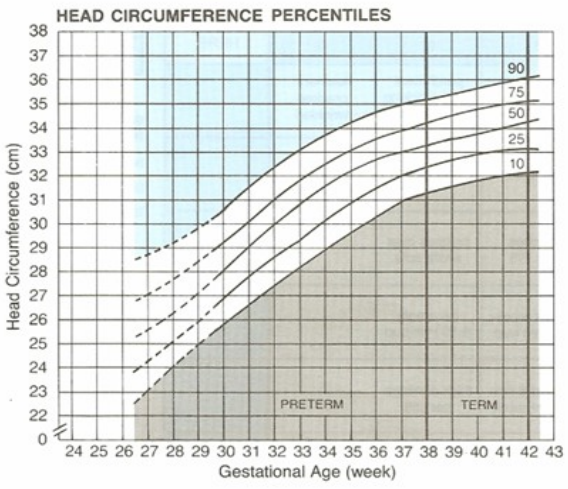
HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____







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

Weight %	**Length %**	**Head Circumference %**
- 90% - LGA	- 80% - AGA	- 99% - LGA