N432 Newborn Care Plan

Lakeview College of Nursing

Jamario Jeffries

Demographics (10 points)

Date & Time of Clinical Assessment 3/24/2021 1330	**Patient Initials** B.S.	**Date & Time of Birth** 3/24/2021	**Age (in hours at the time of assessment)** 12 hours
Gender Male	**Weight at Birth** 3055 gm 6 lb. 11.9oz.	**Weight at Time of Assessment** 3055 gm. 6 lb. 11.9 oz.	**Age (in hours) at the Time of Last Weight** 12 hours
Race/Ethnicity White/Caucasian	**Length at Birth** 49.53 cm. 19.5 inches	**Head Circumference at Birth** 32 cm. 12.6 Inches	**Chest Circumference at Birth** 30 cm. 11.8 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:

GTPAL: 11101

When prenatal care started: The client stated her prenatal care started around 9-10 after her last period.

Abnormal prenatal labs/diagnostics: Chloride 108 mmol/L, Glucose 64 mmol/L, creatinine 0.38 mg/dL, total protein 5.9 g/dL, albumin 3.2 g/dL, Calcium 8.1 mg/dL, White Blood Level 12.10*10, RBC 3.72*10, HGB 11.7 g/dL, HCT 34.5%, MPV8.5 fL

Prenatal complications: Gestational hypertension, Chlamydia infection, spontaneous vaginal delivery.

Smoking/alcohol/drug use in pregnancy: Marijuana use, current smoker, no alcohol use.

Labor History of Mother:

Gestation at the onset of labor: 37 weeks one day

Length of labor: The entire labor took an hour and 13 minutes.

ROM: The Mother had an artificial rupture of the membrane on March 23, 2021. The membranes were clear and had no odor.

Medications in labor: Oxytocin, epidural; fentanyl-ropivacaine; ondansetron, lactated ringers; acetaminophen and ibuprofen.

Complications of labor and delivery: The mother developed gestational hypertension.

Family History: The father has type 1 Diabetes, Heart Disease, Kidney Disease. Mother; Hypertension

Pertinent to infants: Type 1 Diabetes, Heart disease, Kidney disease.

Social History (tobacco/alcohol/drugs): The mother smoked marijuana and cigarettes; she reported no alcohol use.

Pertinent to infants: Smoking; cigarettes, and marijuana.

Father/Co-Parent of Baby Involvement: Completely involved and in the home.

Living Situation: Two-bedroom apartment, with a nursery in the second bedroom.

Education Level of Parents (If applicable to parents' learning barriers or care of infants): Mother some college courses, she states "I will go back to school when her son is acclimated and ready."The father said that "college is not for me" and that he works full time.

Birth History (10 points)

Length of Second Stage of Labor: The second stage of labor lasted approximately one hour and seven minutes.

Type of Delivery: The mother had an AROM induction followed by vaginal delivery.

Complications of Birth: No reported complication throughout the birth.

APGAR Scores:

1 minute: 8

5 minutes: 9

Resuscitation methods beyond the normal needed: The patient is a full code, no resuscitation methods warranted after delivery.

Feeding Techniques (10 points)

Feeding Technique Type: Breastfeeding

If breastfeeding:

LATCH score: 9

Supplemental feeding system or nipple shield: None warranted.

If bottle-feeding: N/A

Positioning of the bottle: N/A

Suck strength: N/A

Amount: N/A

Percentage of weight loss at the time of assessment: N/A %. No weight loss was noted, and weight was not assessed at the time of assessment.

****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 within the first 24 hours of birth is predicted to be greater than or equal to 4.5% for breastfeeding infants (Paul et al., 2016).

Is this neonate’s weight loss within normal limits?

The client's weight had not yet been assessed since the first birth weight of 3.055 kg.

Intake and Output (8 points)

Intake

If breastfeeding:

Feeding frequency: Every 2-3 hours.

Length of feeding session: The mother stated that she fed for roughly 30-35 minutes each time.

One or both breasts: The mother stated that he latches to both breasts.

If bottle-feeding: Not Warranted

Formula type or Expressed breast milk (EBM): N/A

Frequency: N/A

The volume of formula/EBM per session: N/A

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

If N.G. or O.G. feeding: Not warranted

Frequency: N/A

Volume: N/A

If IV: Not warranted

Rate of flow: N/A

Volume in 24 hours: N/A

Output

Age (in hours) of the first void: 7.5 hours

Voiding patterns: Voids spontaneously without difficulty, flatulence present.

Number of times in 24 hours: Assessment completed twelve hours after birth; the client voided twice within that twelve hours.

Age (in hours) of first stool: The infant was seven and a half hours old when he first voided.

Stool patterns:

Type: The infant had meconium type stool.

Color: The infant had a dark green, black tarry stool.

Consistency: The infant had a liquid, mushy-type stool.

The number of 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	Blood glucose for the infant is completed 24 hours after birth. This test is ordered for clients who appear to have LGA and congenital abnormalities (Ricci et al., 2020, pp. 846)	45-99 mg/dL (Ricci et al., 2020, pp. 846).	Not Assessed.	35 - 45 mg/dL indicates hypoglycemia (Ricci et al., 2020, pp. 846). 35 - 45 mg/dL indicates normal glucose level (Ricci et al., 2020, pp. 846). Glucose levels above 45 mg/dL indicate appropriate weight gain (Ricci et al., 2020, pp. 846).

Blood Type and Rh Factor	The blood type and Rh factor test was not completed at the time of assessment.The indication for this test is to determine Rh status and any incompatibility of the newborn (Ricci et al., 2020, pp. 903).	A+, A- B+, B- AB+, AB- O+, O-	Not assessed.	The infant could have Rh-positive or Rh-negative blood.
Coombs Test	The Coombs test is to identify hemolytic disease of the newborn (Ricci et al., 2020, pp. 903). At the time of my assessment the test had not been completed.	Negative	Not assessed.	A positive Coombs test indicates the newborn's red blood cells have been coated with antibodies and are sensitized (Ricci et al., 2020, pp. 903).
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	This test is completed to check the amount of bilirubin present 24 hours after birth (Ricci et al., 2020, pp. 900). Furthermore, it is used to check for the possibility of jaundice (Ricci et al., 2020, pp. 900).	0.3-8.	Not assessed.	Bilirubin was not assessed for the infant. The Bilitool website is used to check for the possibility of hyperbilirubinemia and what signs and symptoms to monitor for.
Newborn Screen (At 24 hours)	The indication for this test is the detection of metabolic and hematologic	Negative	(If available—these maybe not available until after discharge for some	The test was not completed because the infant had not reached 24 hours of life.

	disorders undetectable at birth (Pagani et al., 2020)		clients)	
Newborn Hearing Screen	The infant had this test completed 13 hours after birth. Indications for this test is to check for hearing loss (Ricci et al., 2020, pp. 1089)	Passing	Pass	The infant passed the newborn hearing screen, and no signs of hearing loss were reported at this time.
Newborn Cardiac Screen (At 24 hours)	This test is completed to check for congenital heart defects such as murmurs, deformities, irregular blood flow (Ricci et al., 2020, pp. 903.	Passing	Not assessed.	Positive results would indicate a congenital heart defect (Ricci et al., 2020, pp. 903)

Paul, I. M., Schaefer, E. W., Miller, J. R., Kuzniewicz, M. W., Li, S. X., Walsh, E. M., & Flaherman, V. J. (2016). Weight change nomograms for the first month after birth. *PEDIATRICS, 138*(6), e20162625-e20162625. https://doi.org/10.1542/peds.2016-2625

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

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

Newborn Medications (7 points)

Brand/Generic	**Aquamephyton (Vitamin K)**	**Illotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine**	**Lidocaine 1%**	**Sucrose**
Dose	1 mg	½ tube administered in each eye	0.5 mL	1 mL	1 mL
Frequency	Once	Once	Once	Once	PRN pain
Route	IM	Both eyes	IM	Infiltration	Po
Classification	Vitamin	Antibiotic	Vaccine	Local anesthetic	Analgesic
Mechanism of Action	Helps promote the hepatic synthesis of blood coagulation factors II (prothrombin), VII, IX, and X (Drugguide.com, 2021).	Suppresses protein synthesis at the level of the 50S bacterial ribosome (drugguide.com, 2021).	The immune gamma-globulin fraction containing high titers of antibodies to the hepatitis B surface antigen.	Inhibits transport of ions across neuronal membranes, thereby preventing initiation and conduction of normal nerve impulses (Drugguide.com)	Oral sucrose for procedural pain management (rch.org.au, 2021)
Reason Client Taking	Newborns are deficient in vitamin K, which poses the risk of bleeding in newborns (DrugGuide.com, 2021)	The infant has described this medication to prevent ocular infections such as cornea, conjunctiva, and ophthalmia	Passive immunity for hepatitis B infection	The client underwent a circumcision that required a local	Reduces pain in neonates and infants (rch.org.au,

		(drugguide.com, 2021)		anesthetic.	2021)
Contraindications (2)	It is contraindicated in clients with hepatic impairment. It is contraindicated in clients with hypersensitivity (Drugguide.com, 2021).	Heart rate less than 50 bpm, and Hypokalemia (drugguide.com, 2021)	Hypersensitivity to immune globulins. Use cautiously in clients with thrombocytopenia.	In clients under three years old and infants less than six months (druggui de.com	Sucrose intolerance and the muscle relaxes neonates and infants (rch.org.au, 2021).
Side Effects/Adverse Reactions (2)	Hemolytic Anemia and hyperbilirubinemia (Drugguide.com, 2021).	Ventricular arrhythmia and Ototoxicity (drugguide.com, 2021).	Dizziness and joint pain (rxlist.com, 2021).	Anaphylaxis and seizures (drugguide.com, 2021)	Swelling of the face, throat, eyes, and mouth, accompanied by difficulty breathing (webdmd.com, 2021)
Nursing Considerations (2)	Monitor for respiratory depression, hypersensitivity, and allergic reactions signs and symptoms (Drugguide.com, 2021)	The nurse should use a new tube for each eye and flush the eye after administration (Drugguide.com)	Administer in the anterolateral thigh for neonates and infants. Do not give intravenous /intradermal (rxlist.com, 2021)	The nurse should massage the scrotum and monitor for signs and symptoms of anaphyla	Do not use in infants with hyperglycemia or hypoglycemia, and monitor for signs

				xis (druggui des.com, 2021).	and sympto ms of sucrose toxicity (drugg uide.co m, 2021)
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor for side effects and adverse reactions, and monitor the infants INR (drugguide.com, 2021)	Allow five minutes between eye drops (drugguides.co m, 2021)	Assess for signs and symptoms of anaphylaxis (hypotensio n, flushing, chest tightness, wheezing, fever, dizziness) (drugguides .com, 2021)	The nurse should assess the degree of numbnes s of the affected part and monitor for toxicity overdose (druggui des.com, 2021)	Know that the sucrose will only work for 5 to 8 minute s, and implem ent neonat al pain assess ment (rch.or g.au, 2021).
Client Teaching needs (2)	Advise the parents to monitor for unusual bleeding or bruising and inform the parents that the follow-up lab work is to be drawn (Drugguide.com , 2021).	Instruct the infant's parents to monitor for signs and symptoms of infantile hypertrophic pyloric stenosis (drugguides.co m, 2021).	Advise the infant's parents to monitor for signs of anaphylaxis . Explain to the infant's parents about the use and purpose of the Hepatitis B immune globulin therapy.	Explain the purpose of the injection to the infant's parents, and its benefits and that it might cause drowsin ess in the infant (druggui	Inform the infant's parents that the sucrose solutio n helps distract from the pain signals, instruct the parents they are

				des.com, 2021)	able to do this throughout the procedure

Medications Reference (1) (APA):

Lexicom. (2021). http://www.lexicomcomputers.com/.

The Royal Children's Hospital Melbourne. (2019). https://www.rch.org.au/.

RxList. (2017, February 14). *Drugs A-Z List - A on RxList*. RxList.

https://www.rxlist.com/drugs/alpha_a.htm.

***Up-to-date drug information*. (2021). https://www.drugguide.com/ddo?svar=c%7Crc.**

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 expectations, what is the clinical significance?
Skin	The infant's skin appeared normal and showed no signs of deformations	Normal skin findings entail smooth, flexible, good skin turgor, well hydrated and warm (Ricci et al., 2017, pp. 645)	No abnormal findings to report
Head	The infant appeared to have slight molding, which did not warrant any concerns of caput succedaneum or cephalohematoma.	Within normal limits of the infant male sex (Ricci et al., 2017, pp. 638, 645).	No abnormal finding to report.
Fontanels	Posterior and anterior fontanels present, soft, flat, and open	Flat and soft fontanelles.	No abnormal findings to report
Face	The infant's face appeared symmetrical, and his ears are aligned with his eyes.	The infant's face is normal; full cheeks and symmetrical facial features (Ricci et al., 2017 pp. 645).	No abnormal findings to report.
Eyes	The infant slightly opened his eyes due to painful stimuli; however, I could not inspect the conjunctiva, sclera, iris, and pupils.	Within normal limits, clear and symmetrically placed on the face; online with ears (Ricci et al., 2017, pp. 645)	No abnormal findings to report from the limited assessment performed.
Nose	The infant's nose appeared to have typical characteristics.	Within normal limits entailing small, placement in the midline and narrow, ability to smell (Ricci	No abnormal findings to report.

		et al., 2017, pp. 645).	
Mouth	The infant's mouth was intact with symmetrical movement; the loops were pink moist and showed no cracking signs.	Within normal limits of the mouth, aligned in the midline, symmetric, intact soft and hard palate (Ricci et al., 2017, pp. 645)	No abnormal findings to report.
Ears	The infant's ears were soft, pliable, and showed fast recoil, and the ears are aligned with no signs of abnormal shape.	Within normal limits of soft and pliable, with quick recoil (Ricci et al., 2017, pp. 645).	No abnormal findings to report.
Neck	The infant did not have much muscular control of his neck, noted while bathing him. The nurse noted that since he is 13 hours old, he does not have much control and must support his neck.	Within normal limits of short, creased, moves freely, and the infant holds it midline (Ricci et al., 2017, pp. 645).	No abnormal findings; the nurse noted that he should gain more stability of his neck muscle within the coming weeks.
Chest	The infant's chest appeared normal, barreled shaped, with equal anteroposterior and lateral diameters and symmetric.	Within normal limits of round symmetric, and smaller than the head (Ricci et al., 2017, pp. 645).	No abnormal findings to report; the infant's chest circumference is 2 cm smaller than his head circumference.
Breath Sounds	The infant has clear and equal bilateral breath sounds.	The newborn's breath sounds are normal; clear and equal, and bilateral	No abnormal findings to report.

Heart Sounds	The infant has S1/S2 with no indication or auscultation of S3/S4.	The newborn's heart sounds are normal by having S1/S2, and no without a heart murmur or gallop (Ricci et al., 2017, pp. 1188).	No abnormal findings to report.
Abdomen	The infant's abdomen appears round and protuberant, with no signs of distension.	The infant's abdomen appears round and protuberant and shows no signs of distension. (Ricci et al., 2017, pp. 1188)	No abnormal findings to report.
Bowel Sounds	The infant's bowel sounds are active in all four quadrants.	Bowel sounds should be present in all four quadrants for five full minutes. (Ricci et al., 2017, pp. 1188)	No abnormal findings to report.
Umbilical Cord	The infant's umbilical cord was freshly clamped off and still somewhat moist.	The infant's umbilical cord should be dry, black, and complicated by the end of the second week of life (Ricci et al., 2017, pp. 1189)	No abnormal findings to report.
Genitals	The infant's genitals appeared uncircumcised, and the foreskin covered the glans.	Within normal limits of smooth glans, meatus centered at the tip of the penis (Ricci et al., 2017, pp. 645)	The infant underwent circumcision, in which the provider used the plastibell method.
Anus	The infant's anus is intact; he passed gas and voided twice within the 13 hours of life.	Within normal limits of the infant passes gas and voids quickly without strain (Ricci et al., 2017, pp. 1190)	No abnormal findings to report.
Extremities	The infant moves all extremities with no signs of pain. The infant has five digits on each hand foot.	Within normal limits of extremities symmetric with free movement	No abnormal findings to report.

Spine	The infant's spine is inline and shows no signs of scoliosis, lordosis, or kyphosis.	The infant's spine is symmetrical and has a free range of motion.	No abnormal findings to report.
Safety ● **Matching ID bands with parents** ● **Hugs tag** ● **Sleep position**	The mother and father had matching bands with the infant. The infant had the hugs tag on his left ankle. The infant was sleeping in the supine position.	The newborn and the parents are all wearing wristbands. The infant's hugs tag is in place. The patient is sleeping Supine to prevent SIDS.	No abnormal findings to report.

Ricci, S. S., Ricci, S., Kyle, T., & Carman, S. (2017). *Maternity and pediatric nursing*. LWW.

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?

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

Vital Signs, three sets (6 points)

Time	**Temperature**	**Pulse**	**Respirations**
Birth	**37.3 C (99.1 F)**	**164**	**60**
4 Hours After Birth	**36.8 C (98.2 F)**	**140**	**56**
At the Time of Your Assessment	**37.7 C (99.9 F)**	**158**	**36**

Vital Sign Trends: The infant's temperature fluctuated a little; however, his pulse had a range of 140-164, and his respiratory rate had a range of 36-60. No critical vital signs were reported in the chart or at the time of the assessment.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0815	**NIPS**	**Generalized**	**1, NIPS scale**	**Whimper**	**Swaddling.**

Summary of Assessment (4 points)

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

This neonate was delivered on 3.24.21 at 0139 by artificial rupture of membranes (AROM). Nuchal cord x0. Apgar scores 8/9. EDD 4.13.21 by ultrasound revealed neonate is 37 1/7 weeks. Prenatal hx. is complicated by Gestational Hypertension, chlamydia infection, and tobacco and marijuana use. Birth weight 6 lbs 11 ozs (3055 grams), 19.5" long (49.53 cms). Upon assessment all systems are within normal limits; however, the infant underwent a plastibell circumcision. Last set of vitals: 37.7/158/36. B.S. was not assessed after birth and will be assessed 24 hours after delivery. neonate is breastfeeding and nursing well with most feedings 20"/20" q2-3 hrs. Bilirubin levels have not been assessed and will be at 24 hours. There were not any orders for discharge yet; however, the infant experienced no abnormalities or complications with the birth.

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.
The infant is bathed. (N)	Immediately the following birth and after voiding.	Immediately after birth, this helps to minimize the risk of infection caused by hepatitis B, herpes virus, and HIV (Ricci et al., 2017 pp. 646). The infant had just undergone circumcision and voided, which warranted a bath before we gave him back to the mother.
Circumcision (T).	Once, after birth and once the infant is stabilized.	This is done to help prevent the possibility of phimosis and paraphimosis (Ricci et al., 2017 pp. 1663)

Oral Sucrose solution (N)	PRN Pain	The nurse can implement the use of this to help alleviate the infant in pain. For example, throughout the infant's circumcision, the nurse repeatedly supplied the infant with oral sucrose.
Skin to skin contact (N)	PRN, whenever.	Newborns have a decreased ability to regulate their body temperature, which is why the mother and nurse need to implement skin-to-skin contact to help with the infant's thermoregulation (Ricci et al., 2017 pp. 608)

Ricci, S. S., Ricci, S., Kyle, T., & Carman, S. (2017). *Maternity and pediatric nursing*. LWW.

Discharge Planning (2 points)

Discharge location: Home with parents

Equipment needs (if applicable): None predicted or warranted

Follow-up plan (include a newborn ONLY): The infant will need to visit a pediatrician.

Education needs Circumcision education, Umbilical Cord education, SIDS education, breastfeeding, and Smoking cessation education.

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)	**Rational (1 pt each)**	**Intervention/Rational (2 per dx) (1 pt each)**	**Evaluation (1 pt each)**
Identify problems that are specific to this patient. Include full nursing diagnosis with “related to” and “as evidenced by”	Explain why the nursing diagnosis was chosen	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	● How did the patient/ family respond to the nurse’s actions? ● Client response, the status of goals and outcomes,

components		each intervention, and using APA format, cite the source for your rationale.	modifications to plan.
1. Sudden infant death syndrome, as evidenced by the mother asking, "why should he lay supine"?	**This nursing diagnosis was chosen because the infant's parents are new parents and are deficient in this knowledge.**	**1. Swaddling the infant tightly.** **Rationale** This is to ensure the infant cannot roll on his stomach. **2. Implement a barrier bed.** **Rationale** Having barriers could prevent the infant from rolling on his stomach.	**The mother and father are both learning to swaddle their infant, and they are comfortable with this intervention.** **However, they were concerned that they do not have barriers in his bed to prevent rollover.** **Goal: To Prevent SIDS**
2. Deficient knowledge of breastfeeding, ineffective as evidenced by the mother not switching breast between feedings.	**This nursing diagnosis was chosen because the mother used her right breast for the feedings instead of alternating between both breasts.**	**1. Have the mother keep a breastfeeding log.** **Rationale** This will help to ensure she is keeping track of the breastfeeding sides. **2. Implement pumping.** **Rationale** This could be done to prevent confusion in which breast and could help with breast milk storage.	**The mother is okay with keeping a breastfeeding log to help keep track.** **The mother was hesitant to use pumps because she solely wanted to breastfeed without using a bottle.** **Goal: To provide education about breastfeeding.**
3. Risk for infection, circumcision as evidenced by the plastibell circumcision procedure.	**This nursing diagnosis was chosen because the infant recently had a circumcision 13 hours after birth.**	**1. Have the mother bathe the infant.** **Rationale** This will help to ensure the groin area is frequently cleaned and helps prevent bacteria growth. **2. Change the diaper often** **Rationale** This helps prevent bacteria buildup and growth.	**The mother was okay with bathing the infant quite often. The mother was okay with frequent diaper changes.** **Goal: To prevent infection of the penis.**
4. Deficient knowledge in thermoregulation, as evidenced by the mothers questioning about the	**This nursing diagnosis was chosen because the mother asked the nursing why we do skin-to-skin**	**1. Provide education on infantile thermoregulation and its benefits** **Rationale** This will help the mother with gaining further knowledge about infantile heat loss. **2. Implement skin-to-skin**	**The mother was open to education after the reasoning behind skin-to-skin.** **The father was more than happy to implement skin-to-skin contact.**

reason for skin-to-skin	**contact.**	**contact with the father Rationale** This will allow for paternal-infant bonding and ensuring good thermoregulation for the infant.	**Goal: To provide education about thermoregulation and skin-to-skin contact.**

Other References (APA):

Gulanick, M., & Myers, J. L. (2017). Nursing care plans: Diagnoses, Interventions, & outcomes (9th ed). 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

Ballard Gestational Age Scale was not assessed and completed

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

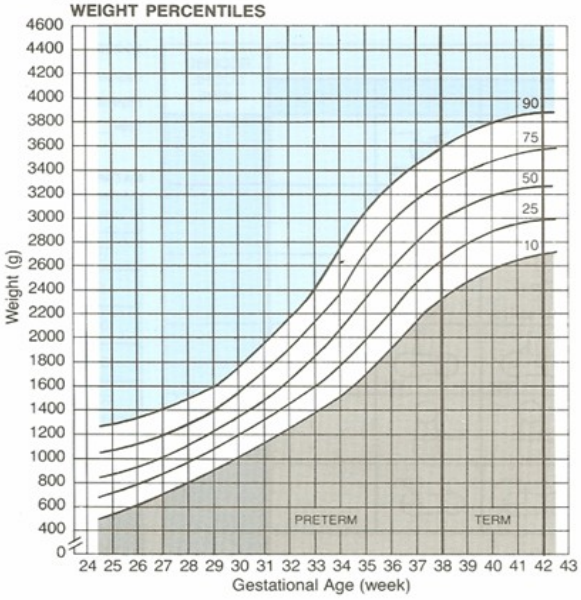
NAME _____ DATE OF EXAM _____ LENGTH _____

HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

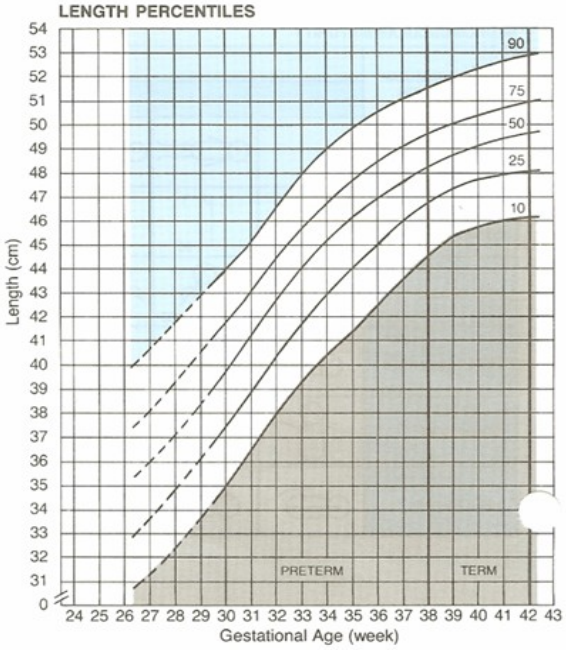
RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____

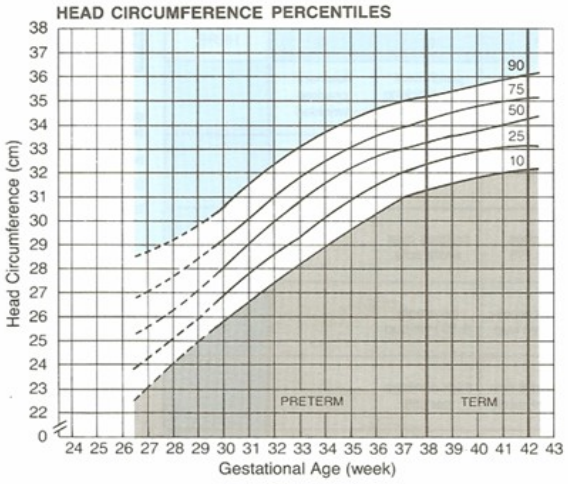
WEIGHT PERCENTILES



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