N432 Newborn Care Plan

Lakeview College of Nursing

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Demographics (10 points)

Date & Time of Clinical Assessment **2-1-21** **2:00pm**	**Patient Initials** **BB**	**Date & Time of Birth** **1-31-21** **7:33am**	**Age** **(in hours at the time of assessment)** **30 hours**
Gender **Male**	**Weight at Birth** **(gm)** **__3310_____** **(lb.) __7___ (oz.)** **___4.8__**	**Weight at Time of Assessment** **(gm)** **_____3370_____** **(lb.) _7____ (oz.)** **___6.9__**	**Age (in hours) at the Time of Last Weight** **7 hours**
Race/Ethnicity **White**	**Length at Birth** **Cm** **____52.07_____** **Inches** **__20.5_____**	**Head Circumference at Birth** **Cm** **____13.78_____** **Inches** **____5.42_____**	**Chest Circumference at Birth** **Cm** **___34_____** **Inches** **_____13.38_____**

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: Gravida: 4. Term: 1. Preterm: 1. Abortions: 2. Living: 2.

When prenatal care started: 10 weeks and 2 days.

Abnormal prenatal labs/diagnostics: The patient's prenatal labs showed slight anemia and a slightly high glucose level.

Prenatal complications: The patient was diagnosed with a pregnancy complication called placenta previa and velamentous insertion of the cord (the umbilical cord is inserted into the placenta). Placenta Previa is when the placenta is inserted either fully or partially covering the cervical opening ((Ricci et al., 2021).

Smoking/alcohol/drug use in pregnancy: The patient did not smoke, do drugs, or drink alcohol at all during the pregnancy.

Citation: Ricci, S. S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing*. Wolters Kluwer.

Labor History of Mother: The patient has had 1 full term vaginal delivery, two spontaneous abortions, and one pre-term C-section.

Gestation at onset of labor: 36 weeks.

Length of labor: scheduled C- section.

ROM: Membranes were taken out during the C-section.

Medications in labor: Oxytocin injection, ondansetron, morphine, lactated ringers, fentanyl, sensorcaine spinal.

Complications of labor and delivery: Hemorrhage (blood loss: 1052ml).

Family History: maternal father; hypertension. Maternal mother: NA. Paternal mother: hypertension. Paternal father: NA. Mother of baby: Slightly elevated glucose. Father of baby: NA.

Pertinent to infant: None of the parents/grandparent's medical history is pertinent to the baby.

Social History (tobacco/alcohol/drugs): The patient does not drink, smoke, or do drugs.

Pertinent to infant: None of this information is pertinent to the baby.

Father/Co-Parent of Baby Involvement: The father is involved.

Living Situation: The mother and baby will go live at home with the father and older brother (5 years old).

Education Level of Parents (If applicable to parents' learning barriers or care of infant): The mother has a high school diploma, has had a baby before (5 years old), and is a stay at home mom. There is no learning barrier. The mother may need to be brushed up on basic care of the infant (bath & feeding).

Birth History (10 points)

Length of Second Stage of Labor: Not applicable to this patient because she came in for a C-section.

Type of Delivery: C- section.

Complications of Birth: The mother hemorrhaged during the C-section (1052 blood loss).

APGAR Scores:

1 minute: 8

5 minutes: 9

Resuscitation methods beyond the normal needed: None.

Feeding Techniques (10 points)

Feeding Technique Type: Bottle fed.

If breastfeeding: The patient is not breastfeeding her baby.

LATCH score:

Supplemental feeding system or nipple shield:

If bottle feeding: The bottle is help semi-upright and the baby's head is supported (Ricci et al., 2021).

Positioning of bottle: Semi-upright.

Suck strength: The baby's suck strength is strong.

Amount: 30 ml or around 1 oz every 3 hours.

Percentage of weight loss at time of assessment: ___1.81_____%

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

3370grams-3310grams=60 grams. / 3310= 0.0181.

What is normal weight loss for an infant of this age? The infant usually loses 10% of the birth weight within the first few days (Ricci et al., 2021).

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

Intake and Output (8 points)

<u>Intake</u>

If breastfeeding: The mother is not breastfeeding because she is unable to produce milk.

Feeding frequency: NA.

Length of feeding session: NA.

One or both breasts: NA.

If bottle feeding: Enfamil neuro pro.

Formula type or Expressed breast milk (EBM): Enfamil neuro pro.

Frequency: every 3 hours.

Volume of formula/EBM per session: 30 ml or about 1 Oz per session.

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

If NG or OG feeding: The infant is not OG feeding and does not have an NG tube.

Frequency: NA.

Volume: NA.

If IV: The infant does not have an IV.

Rate of flow: NA.

Volume in 24 hours: NA.

Output

Age (in hours) of first void: 5 hours old.

Voiding patterns: In 32 hours, the infant has voided 3 times. This infant has met the requirement (the requirement is 1 void in 24 hours).

Number of times in 24 hours: 3 times in 24 hours.

Age (in hours) of first stool: 11 hours old.

Stool patterns: In 32 hours, the infant has had 4 stools which meets the requirement (1 stool in 24 hours).

Type: Meconium.

Color: Meconium.

Consistency: Meconium.

Number of times in 24 hours: 4 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	**A blood glucose level would be drawn on a patient who has suspected hypoglycemia. If the mother had gestational diabetes, the infant could be at risk for hypoglycemia (Ricci et al., 2021).**	**Above 45.**	**The client did not need blood glucose levels drawn.**	**The client did not need blood glucose levels drawn.**
Blood Type and Rh Factor	**It is important to determine blood type and Rh factor because blood incompatibility can be fatal to the infant and can harm the mother (Ricci et al., 2021).**	**Negative. Mother and infants' blood should match (in either positive or negative).**	**B negative. Infants blood type is also negative.**	**The baby and mothers blood type match up (because they are both negative) so the mother does not have to receive RhoGAM.**
Coombs Test	**The coombs test detects**	**Negative.**	**Negative.**	**The infants Coombs test was negative, so**

	antibodies that attack your RBC's. If the Coombs test is positive, the patient does not have enough RBC's (Ricci et al., 2021).			**he does not have antibodies that attack his own RBC's. He will not have anemia, and this is a desired result (Ricci et al., 2021).**
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	**Bilirubin levels in a newborn baby is tested to make sure that the liver cells are breaking down and excreting bilirubin correctly. If bilirubin is nor secreted, it could be toxic to the body**	**If the baby is pre-term (in this case 36 weeks), they could be at a medium risk according to bilitool.org. at 32 hours of age, the bilirubin level should be under 11.1 mg/dl.**	**The baby's bilirubin level is 4.3 mg/dl.**	**The baby is at a low risk.**

	(Ricci et al., 2021).			
Newborn Screen (At 24 hours)	**A newborn screen is done to test multiple disorders that might not be detected visually or at birth. These could be metabolic, hormone related, or genetic (Ricci et al., 2021).**	**Negative results.**	**(If available—these may be not available until after discharge for some clients)** ***The newborn had their screening and the labs were drawn, but the results are not in***	**The labs are pending.**
Newborn Hearing Screen	**This screening is done to test how well the infant hears or if they have trouble hearing (Ricci et al.,**	**passed.**	**Passed.**	**The newborn can hear in both ears.**

	2021).			
Newborn Cardiac Screen (At 24 hours)	**Newborn cardiac screening is done to assess O2 saturation above and below the heart to test for any abnormalities (Ricci et al., 2021).**	**Oxygen saturation needs to be 95% or above. There also can only be a 3% difference (no more) between the arm and the leg (above and below the heart) (Ricci et al., 2021).**	**95% and 96%.**	**The newborn passed the cardiac screen at 24 hours.**

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

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

Newborn Medications (7 points)

Brand/ Generic	**Aquamephyton (Vitamin K) Phytonadione**	**Illotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine Energix B**	**Acetaminophen /Tylenol**	**Dextrose Glutose**

Dose	**1mg**	**5mg**	**0.5 ml**	**40 mg**	**1.7 g**
Frequency	**1X**	**1X**	**PRN X1 dose**	**PRN for pain.**	**PRN for hypoglycemia.**
Route	**Intramuscular**	**Ointment that goes in both eyes.**	**Intramuscular**	**Orally**	**Oral gel**
Classification	**Clotting agent.**	**Antibacterial agent.**	**Vaccines, Inactivated, Viral.**	**Antipyretic, nonopioid analgesic.**	**Carbohydrate, glucose-elevating agent.**
Mechanism of Action	**Vitamin k helps the blood clot.**	**Binds to many types of bacteria (Gram positive, negative, and aerobic) and inhibits RNA dependent protein, causing them to die.**	**Anti-Hb antibodies are injected into the body. Active immunization.**	**Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.**	**Prevents nitrogen and protein loss, promotes glycogen deposition, prevents or decreases ketosis, acts as an osmotic diuretic.**
Reason Client Taking	**To prevent hemorrhagic disease in neonates.**	**To treat/ prevent bacteria from getting into the eyes.**	**To prevent the patient from contracting Hepatitis B.**	**The client is taking PRN for pain.**	**Client is taking PRN to treat hypoglycemia.**
Contraindications (2)	**Hypoprothrombinemia, hyperbilirubinemia.**	**Hypersensitivity to erythromycin, lovastatin, simvastatin, or terfenadin**	**Hypersensitivity to yeast, hypersensitivity to Hepatitis B vaccine componen**	**Hypersensitivity to acetaminophen or its components, severe hepatic impairment.**	**Diabetic coma, anuria.**

		e therapy.	**t.**		
Side Effects/ Adverse Reactions (2)	**Injection site pain or discomfort, rapid or weak pulse.**	**Hepatoxicity, Fever.**	**Pain at the injection site, redness at the injection site.**	**Hypotension, hypokalemia.**	**Hypotension, Bronchospasm.**
Nursing Considerations (2)	**Be aware that some vitamin K solutions contain benzyl alcohol. Don't administer these to neonates. Take precautions to protect vitamin K solution from exposure to light because it is light sensitive.**	**Monitor infants for vomiting or irritability with feeding. Watch for signs and symptoms of infection.**	**First dose of hepatitis B needs to be administered within 12 hours of birth, There needs to be another dose so monitor for adverse reactions.**	**Ensure that the daily dosage does not exceed maximum daily limits, know that concentrated drops are being phased out and are no longer manufactured.**	**Monitor patient closely for a hypersensitivity reaction, know that excessive or rapid delivery of solution in a very low-birth-weight infant may increase serum osmolality and cause intracerebral hemorrhage.**
Key Nursing Assessment(s) /Lab(s) Prior to Administration	**Assess the baby's weight, and vital signs.**	**Assess for hepatoxicity, Assess vital signs.**	**Monitor the patient's vitals before giving vaccine (HR, BP, RR). Assess the mother of the baby for HBV.**	**Know to monitor liver function labs, assess for pain before giving medication.**	**Assess blood glucose levels, assess vital signs. HR, RR, BP.**

Client Teaching needs (2)	**Teach the parents of the baby the purpose for the vitamin K injection. Also teach the parents for signs of anaphylaxis.**	**Teach the parents of the baby to look for redness or irritation, teach parent to make sure all the ointment is rubbed in.**	**Teach the baby's parents that another dose is needed so follow up appointment is necessary, Teach the client about what this vaccine is for.**	**Make sure the parents are educated on dosage so they know not to exceed the dosage. Teach the parents to recognize signs of bleeding or malaise.**	**Teach parents how to monitor their babys blood glucose level, teach patient how to report pain, discomfort, or swelling.**

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). 2020 Nurse's drug handbook (19th ed.). Burlington, MA.

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	**Smooth, flexible, warm, hydrated skin.**	**Smooth, flexible, warm, hydrated skin (Ricci et al., 2021).**	**If the skin had an abnormal finding, it could be a sign of infection or an abnormality. This is significant and the provider would need to be notified (Ricci et al., 2021). No abnormalities in this baby.**
Head	**Normal, soft, fontanels palpated.**	**Normal; varies with age, gender, and ethnicity (Ricci et al., 2021).**	**If the head was too small or large that could indicate an abnormality (Ricci et al., 2021). No abnormalities in this baby.**
Fontanels	**Sutures felt, smooth.**	**Sutures smooth and fused, head is overall smooth besides over sutures and molding (Ricci et al., 2021).**	**If the fontanels were too large or too small, this could indicate increased pressure or other abnormalities (Ricci et al., 2021). No abnormalities in this baby.**
Face	**Facial features are symmetrical, cheeks are full and warm.**	**Full cheeks, facial features symmetric (Ricci et al., 2021).**	**Common problems: facial nerve paralysis, nevus flammeus (birthmark) (Ricci et al., 2021). No abnormalities in this baby.**

Eyes	**Clear and symmetrical, in line with the ears.**	**Clear and symmetrically placed on face; online with ears (Ricci et al., 2021).**	**Conjuvitivits would be something to be concerned about and would need to be reported to the provider (Ricci et al., 2021). No abnormalities in this baby.**
Nose	**Midline and narrow, can smell, small.**	**Small, placement in the middle and narrow, ability to smell (Ricci et al., 2021).**	**If the nose had an abnormality, it could indicate a blockage or malformation (Ricci et al., 2021). No abnormalities in this baby.**
Mouth	**Midline, symmetrical, intact soft and hard palate.**	**Aligned in midline, symmetric, intact soft and hard palate (Ricci et al., 2021).**	**If the mouth had an abnormality like thrush, the provider would need to be notified so the infant could be treated (Ricci et al., 2021). No abnormalities in this baby.**
Ears	**Soft, recoils when folded and released.**	**Soft and pliable with quick recoil when folded and released (Ricci et al., 2021).**	**Low- set ears and hearing loss would be significant and would need treatment (Ricci et al., 2021). No abnormalities in this baby.**
Neck	**Creased, warm, holds head in midline, moves freely, short.**	**Short, creased, moves freely, baby holds head in midline (Ricci et al., 2021).**	**Restricted movement would be a major complication and would need medical treatment (Ricci et al., 2021). No abnormalities in this baby.**

Chest	**Round, symmetric, smaller than head.**	**Round, symmetric, smaller than head (Ricci et al., 2021).**	**Whitish discharge on chest could indicate infection (Ricci et al., 2021).**
Breath Sounds	**No tachypnea, bradypnea, grunting, gasping, or periods of apnea.**	**No abnormalities like tachypnea, bradypnea, apnea, grunting, or gasping (Ricci et al., 2021).**	**Abnormalities could indicate heart or lung issues (Ricci et al., 2021).**

Heart Sounds	**Heart sounds were slightly tachy. Sinus arrhythmia.**	**Sinus arrhythmia is a normal finding, average HR is 120-160 (Ricci et al., 2021).**	**Abnormalities could indicate a heart problem and would require intervention (Ricci et al., 2021).**
Abdomen	**Pink, soft, umbilical cord present.**	**Protuberant contour, soft, three vessels in umbilical cord (Ricci et al., 2021).**	**Distention could indicate a GI issue and intervention is required (Ricci et al., 2021).**
Bowel Sounds	**Bowel sounds heart in all 4 quadrants, no tenderness.**	**Bowel sounds heart in all 4 quadrants, no tenderness (Ricci et al., 2021).**	**No bowel sounds could indicate a blockage in the GI tract (Ricci et al., 2021).**
Umbilical Cord	**No bleeding, redness, swelling, or drainage. Correct amount of blood vessels present.**	**No bleeding, redness, swelling, or drainage. Correct amount of blood vessels present (Ricci et al., 2021).**	**Bleeding, swelling, or drainage could indicate infection (Ricci et al., 2021).**
Genitals	**Smooth, penis centered.**	**Smooth glans, meatus centered at tip of penis (Ricci et al., 2021).**	**Edematous scrotum (swelling) (Ricci et al., 2021).**
Anus	**Patent, meconium passed.**	**Patent, meconium passed (Ricci et al., 2021).**	**Anal fissures or fistulas is an abnormal finding (Ricci et al., 2021).**
Extremities	**Symmetric, free movement.**	**Symmetric, free movement (Ricci et al., 2021).**	**Hip dislocation is an abnormality (Ricci et al., 2021).**
Spine	**Symmetric, free movement. Intact.**	**Symmetric, free movement (Ricci et al., 2021).**	**Dimple on the spine is an abnormality (Ricci et al., 2021).**
Safety • **Matching ID bands with parents** • **Hugs tag**	**Baby's ID bands matched with parents, hugs tag was present, and baby sleeps on back**	**Baby's ID bands matched with parents, hugs tag was present, and baby sleeps on back**	**All of these items need to match. If the baby sleeps prone, there is an increased risk of SIDS (Ricci**

• **Sleep position**	**(supine).**	**(supine).**	**et al., 2021).**

Complete the Ballard Scale grid at the end to determine if this infant is SGA, AGA, or LGA—be sure to show your work

The Ballard scale is used to determine the baby's neuromuscular and physical maturity. Newborns are typically classified according to gestational age (Ricci et al., 2021). Baby brown is a 36 week old infant (32 hours old at time of assessment). He weighs 3370 grams, has a head circumference of 35 cm, and is 52 cm long.

What was your determination?

Baby Browns weight and head circumference is appropriate for gestational age (AGA)— 10^{th}- 90^{th} percentile. For length he is in the large for gestational age (LGA) or above 90^{th} percentile.

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

There are no complications expected for this baby.

Vital Signs, 3 sets (6 points)

Time	Temperature	Pulse	Respirations
Birth	**98.8 F**	**168**	**70**
4 Hours After Birth	**98.4 F**	**140**	**64**
At the Time of Your Assessment	**98.5 F**	**118**	**57**

Vital Sign Trends: The baby's vital signs have been pretty consistent throughout. Pulse was slightly elevated after birth because of the transition, but have slightly lowered.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
16:00	**0-10**	**NA**	**0**	**NA**	**The pt was not in pain.**

Summary of Assessment (4 points)

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

****See the example below****

This neonate was delivered on 1-31-2021 at 7:33am through a C-section. A C-section was scheduled due to complications discovered during a prenatal visit. The mother had placenta Previa and velamentous insertion of the cord (the umbilical cord is inserted into the placenta). Apgar scores 8/9. EDD 2-27-21 and due to the prenatal complications, the baby was born at 36 weeks. Although the baby is Pre-term (36 weeks) he fell under AGA (weight and head circumference) and LGA (length) categories. Birth weight 7lbs 4.8 oz. (3310 grams), 20.5" long (52.01 cm). Upon assessment all systems are within normal limits. Last set of vitals: 98.5F/118/57. Neonate is bottle feeding every 2-3 hours. Bilirubin level at 24 hours per scan was 4.3 (low risk). Neonate is expected to discharge with mother in 2 days (2-3-21) and to see pediatrician for first well baby check within 48 hours.

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.**
Ensuring proper identification. N.	**Anytime the baby is being taken out of the mother's room.**	**Due to infant abductions and mix ups, it is important to always check the baby's ID bracelet and make sure it matches the mothers (Ricci et al., 2021).**
Maintaining thermoregulation. N.	**Frequently. Every 2 hours.**	**Minimizing heat loss is important so the baby does not go into hypothermia (Ricci et al., 2021).**
Swaddling the newborn.	**As frequently as possible. (Whenever not feeding, bathing, etc.).**	**Swaddling provides comfort to the newborn.**
Administer pain medication. T.	**PRN for pain.**	**If the newborn has pain, Tylenol will be administered.**

Discharge Planning (2 points)

Discharge location: The newborn is going home with mom and dad.

Equipment needs (if applicable): No special equipment is needed.

Follow up plan (include plan for newborn ONLY): The newborn is to see the pediatrician at 1 month.

Education needs: The mother has already had a baby, but she could use some bottle feeding and bathing education because it has been 5 years since her 1st child was born.

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 (1 pt each)** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. **Risk of disturbance in body temperature related to thermoregulation as evidence by the newborns lack of ability.**	**A newborn baby cannot control their body temperature so they are at risk of thermoregulation and losing heat.**	**1.check the newborns temperature every 2 hours. Rationale: if you check the baby's temperature every 2 hours you can make sure they are warm enough. 2.Keep the baby**	**Patient/family: the patient and family were cooperative and the mother assisted in preventing heat loss. Thermoregulation was maintained, goals**

		covered (swaddled), wearing a hat, and socks. **Rationale: if they baby is fully clothed and covered, it reduces the risk of losing heat.**	**were achieved, and modifications do not need to be made.**
2. **Risk of infection related to immune deficiency as evidence by a not fully developed immune system.**	**A baby has a small /lack of immune system so they are at a higher risk of developing an infection.**	**1. Keep the baby up to date on immunizations.** **Rationale: If the baby has their immunizations, they have a decreased risk of catching certain illnesses.** **2.keep the baby out of the cold, keep them warm, and minimize the amount of people around the baby.** **Rationale: keeping the baby warm and around less people will decrease the risk of developing an infection.**	**The family responded well to these interventions and were fully cooperative. When the family goes home they will be around as little people as possible to try and reduce the risk of potential infection. The plan does not need to be modified.** **Goal: Reduce the risk of infection.** **Outcome: met so far.**
1. **Disturbance in the exercise of parenting related to bringing a new baby home as evidence by the mother having a toddler at home. *educational***	**The mother has a toddler at home and will be bringing a newborn baby home.**	**1. Teach the mother how to balance 2 children instead of one.** **Rationale: bringing a newborn into a home with a toddler is difficult, and the mother might have a hard time balancing both.** **2. Teach the mother signs of the toddler acting out as a result of the newborn.** **Rationale: the toddler might act out**	**The mother was willing to learn. Goals were met: mother is taking this information home with her.** **Outcome: for the mother to be able to balance 2 children and for the toddler to not feel "left out".**

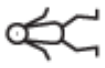
		because he isn't the only child anymore. Teaching the mom to realize these signs might make her more aware so she will know how to handle it better.	
2. Lack of knowledge related to breastfeeding/bathing as evidence by this being her first baby in 5 years.	**The mother had a baby 5 years ago so she needs educated on some caring techniques.**	**1. Give the baby a bath with the mother and narrate the actions being performed. Rationale: educating the mother on bathing the newborn will help her do it correctly/safely. 2. Teach the mother how too properly bottle feed her baby. Rationale: Maximum feeding potential will be met if the mother knows how to properly feed her baby.**	**The mother was willing to learn. The baby was also cooperative during the teaching. Goal: improve the mother's education on bathing and bottle feeding. Outcome: teaching was effective and mother now knows how to do these tasks effectively.**

Other References (APA):

Swearingen, P. L., & Wright, J. D. (2020). ***All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*****. St. Louis, MO: 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

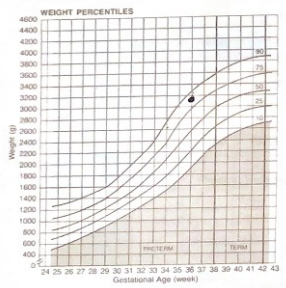
Score	Weeks
–10	20
–5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

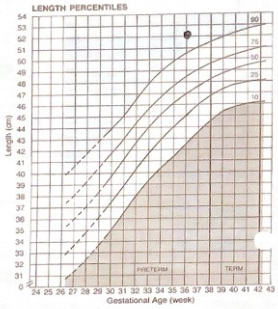
Neuromuscular maturity: 4. Physical maturity: 30 (matches the 36-week-old scale)

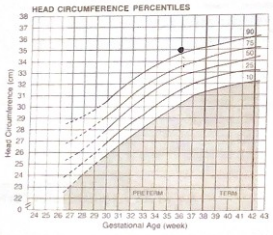
[redacted]

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)		X	
Appropriate for Gestational Age (AGA) (10th to 90th percentile)	X		X
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.

[redacted]