N432 Newborn Care Plan

Lakeview College of Nursing

Jamie Rucker

Demographics (10 points)

Date & Time of Clinical Assessment 02/21/22 0849	**Patient Initials** GS	**Date & Time of Birth** 02/21/22	**Age (in hours at the time of assessment)** Done at birth
Gender Male	**Weight at Birth** (gm) 3180 7(lb.) 0(oz.)	**Weight at Time of Assessment** (gm) 3180 7(lb.) 0(oz.)	**Age (in hours) at the Time of Last Weight** Done at birth
Race/Ethnicity African American	**Length at Birth** 52.1 Cm 20.5 Inches	**Head Circumference at Birth** 34 Cm 13.4 Inches	**Chest Circumference at Birth** 31 Cm 12.2 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: Gravida 1, Term 1, Preterm 0, Abortion 0, Living 0

When prenatal care started: July 4, 2021

Abnormal prenatal labs/diagnostics: None

Prenatal complications: Chlamydia positive (10/21/21), negative 1/18/22

Smoking/alcohol/drug use in pregnancy: Never a smoker, negative for drug use, history of occasional marijuana use

Labor History of Mother:

Gestation at onset of labor: 39 weeks and 2 days

Length of labor: 11hr 47min

ROM: Artificial rupture of membranes (AROM) @ 0524 on 02/21/22

Medications in labor: Nalbuphine, fentanyl-ropivacaine, gentamicin, Pitocin, Zithromax, Ancef, terbutaline

Complications of labor and delivery: The monitor showed late and prolonged decelerations, which indicated fetal intolerance. The occiput posterior position of the fetus was not ideal for a vaginal delivery. A cesarean section was necessary to deliver the baby safely.

Family History: None

Pertinent to infant: n/a

Social History (tobacco/alcohol/drugs): None

Pertinent to infant: n/a

Father/Co-Parent of Baby Involvement: Not present at the bedside. Maternal grandmother was present and very involved.

Living Situation: The baby's mother lives at home with her mother. They will both be discharged home with the baby's mother.

Education Level of Parents (If applicable to parents' learning barriers or care of infant): The baby's mother graduated from high school. The father was not present and is not involved.

Birth History (10 points)

Length of Second Stage of Labor: She never reached the second stage of labor; instead, she was taken back for a c-section.

Type of Delivery: Cesarean section

Complications of Birth: None

APGAR Scores:

1 minute: 8

5 minutes: 9

Resuscitation methods beyond the normal needed: The only methods used were standard methods, dry, stimulate and bulb suction.

Feeding Techniques (10 points)

Feeding Technique Type: Bottle feeding

If breastfeeding: n/a

LATCH score: n/a

Supplemental feeding system or nipple shield: n/a

If bottle feeding:

Positioning of bottle: Upright

Suck strength: Strong

Amount: 20 mL

Percentage of weight loss at 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)**** The baby was just born at 0849, so there was no weight other than the initial birth weight available. The calculation is the current weight minus the birth weight, divided by the birth weight times 100, resulting in a negative number. Formula (pounds lost/starting weight x 100).

What is normal weight loss for an infant of this age? Normal birth weight for a term baby can range from 2,500 g to 4,000 g. Newborns usually lose up to 10% of their birth weight within the first few days of life but regain it in approximately ten days (Ricci et al., 2021).

Is this neonate's weight loss within normal limits? n/a

Intake and Output (8 points)

Intake

If breastfeeding: n/a

Feeding frequency: n/a

Length of feeding session: n/a

One or both breasts: n/a

If bottle feeding:

Formula type or Expressed breast milk (EBM): Similac Advance

Frequency: Every 3 hours

Volume of formula/EBM per session: First feeding, the baby took 20 mL. His order is Adlib feedings.

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: n/a

Rate of flow: n/a

Volume in 24 hours: n/a

Output

Age (in hours) of first void: At delivery, he has not voided. He has 24 hours to void. He did not void during this nursing student's clinical rotation.

Voiding patterns: n/a

Number of times in 24 hours: n/a

Age (in hours) of first stool: n/a

Stool patterns: n/a

Type: n/a

Color: n/a

Consistency: n/a

Number of times in 24 hours: n/a

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	There was not an order for glucose testing for this patient. The order for glucose testing is for newborns at greater risk for hypoglycemia (Ricci et al., 2021). Some situations that would put the newborn at higher risk would be when the mother has diabetes, preterm babies, newborns born with intrauterine growth restriction, or hypothermia (Ricci et al., 2021).	>45	N/A	N/A
Blood Type and Rh Factor	The types of antigens on the red blood cells determine a person's blood type (Ricci et al., 2021). The determination of blood type and Rh factor will determine if there is any incompatibility between the mom and the newborn (Ricci et al., 2021).	A, B, AB, O	Results Pending	N/A
Coombs Test	The Coombs test is done to identify	+ or -	Results Pending	N/A

	hemolytic disease of newborns; positive results indicate that the newborn's red blood cells have been coated with antibodies and are sensitized. (Ricci et al., 2021).			
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	This test was not yet done on this patient. This is tested because pathologic jaundice is manifested within the first 24 hours of life and the bilirubin levels increase more than 5 mg/dL/day in a full-term infant (Ricci et al., 2021).	<5.2 mg/dL in the first 24 hours	N/A	N/A
Newborn Screen (At 24 hours)	This test will detect metabolic disorders. A positive test will require additional testing to confirm the diagnosis (Ricci et al., 2021).	Negative	**(If available—these may be not available until after discharge for some clients)** N/A	N/A
Newborn Hearing Screen	A hearing screen should be done before discharge to determine a hearing deficit. Further testing is	Pass/Fail	N/A	N/A

	required if the baby fails the hearing test (Ricci et al., 2021). This test is essential for early detection and intervention to avoid complications in language and cognitive development (Ricci et al., 2021).			
Newborn Cardiac Screen (At 24 hours)	The cardiac screen is used to detect congenital heart defects before signs are present. The pulse oximeter measures the amount of oxygen in the blood, a low oxygen level is an indication of congenital heart defects (Ricci et al., 2021).	Greater than 95% and less and 3 apart	N/A	N/A

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

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

Newborn Medications (7 points)

Brand/Generic	**Aquamephyton (Vitamin K)**	**Illotycin (Erythromycin Ointment)**	**Recombivax HB Hepatitis B**		

			Vaccine		
Dose	1 mg	1 g	0.5 mL		
Frequency	Once	Once	Once		
Route	IM	Both Eyes	IM		
Classification	Vaccine	Macrolide Antibiotic	Viral Vaccine		
Mechanism of Action	This is a Fat-soluble vitamin that promotes blood clotting by increasing the synthesis of prothrombin by the liver **(**Ricci et al., 2021).	Inhibits RNA-dependent protein synthesis in bacterial cells and causes them to die (Jones and Bartlett, 2020).	Stimulates the immune system to produce anti-HBs without exposing the patient to the risks of active infection (Ricci et al., 2021).		
Reason Client Taking	Prophylactic treatment is given to newborns to promote blood clotting and increase prothrombin to prevent hemorrhage Ricci et al., 2021).	Prophylactic treatment is given to newborns for the prevention of bacterial eye infections (Jones and Bartlett, 2020).	This vaccine is given for the prevention of hepatitis B (*Recombivax HB,* 2022)		
Contraindications (2)	Do not give Vitamin K solutions with benzyl alcohol to neonates due to the risk for the fatal toxic syndrome. Hypersensitivity and shock may occur (Jones and Bartlett, 2020).	Some drug contraindications include Astemizole or cisapride therapy. Hypersensitivity to erythromycin or other macrolide antibiotics (Jones and Bartlett, 2020).	Should not be given to anyone with a history of severe allergic reactions, or yeast allergies or anaphylaxis *(Recombivax HB,* 2022)		
Side Effects/Adverse Reactions (2)	Hypersensitivity, severe allergic	Erythema Pruritus	Irritability Fever		

	reaction, anaphylaxis. Respiratory arrest, metabolic acidosis (Jones and Bartlett, 2020).	(Jones and Bartlett, 2020).	*(Recombivax HB,* 2022)		
Nursing Considerations (2)	Administer this medication one to two hours after birth. Inject the medication slowly into the vastus lateralis muscle (Ricci et al., 2021).	Monitor for chemical conjunctivitis for one to two days. Wipe off excess ointment after one minute (Ricci et al., 2021).	The first dose should be given within the first 12 hours of life. The vaccine should be given intramuscularly in the vastus lateralis (Ricci et al., 2021).		
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess for bleeding, signs of bleeding. Vitals should be taken and assessed (Jones and Bartlett, 2020).	Assess for signs of hyperacute purulent conjunctivitis (Ricci et al., 2021).	Assess for signs of an allergic reaction, and redness at the injection site. Assess the age and weight of newborns prior to administering this vaccination (*Recombivax HB,* 2022).		
Client Teaching needs (2)	Explain the purpose and necessity of the vaccine. Discuss possible adverse effects with the parents (Ricci et al., 2021).	Explain the purpose of the treatment. Discuss possible adverse effects with parents (Ricci et al., 2021).	Follow the vaccine schedule from the provider to get the booster shots in the proper time frame. Notify the provider of adverse effects such as muscle weakness, or		

			difficulty breathing *(Recombivax HB,* 2022).		

Medications Reference (1) (APA):

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

Recombivax HB - FDA prescribing information, side effects and uses. Drugs.com. (2022, February 1). Retrieved from https://www.drugs.com/pro/recombivax-hb.html

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

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	Skin is smooth, warm, with good skin turgor. Mongolian spots noted.	Mongolian spots, Jaundice, acrocyanosis, milia, and stork bites are expected variations. Skin texture and lanugo are also variations that are seen among newborns (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations. Mongolian spots are more common in dark-skinned newborns, (African American, Asian, Hispanic, and Indian) (Ricci et al., 2021).
Head	Head size is 32 cm and normal for age and body size. Molding noted with an overriding sagittal suture line	Microcephaly, macrocephaly, enlarged fontanels are expected variations (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations. Molding is an expected variation and will normally resolve without intervention (Ricci et al., 2021).
Fontanels	Anterior and posterior fontanels are palpable.	Small, closed, or large fontanelles (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Face	Full cheeks with symmetrical facial features	Facial nerve paralysis, nevus flammeus, nevus vasculosus (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Eyes	Eyes are clear and symmetrical	Chemical conjunctivitis, subconjunctival hemorrhages (Ricci et	Assessment findings are within the usual findings and expected

		al., 2021).	variations.
Nose	Small with midline placing, patent nares, and intact septum	Malformation or blockage (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Mouth	The mouth is symmetrical and midline, pink and moist with strong sucking	Epstein pearls, erupted precocious teeth, thrush (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Ears	The ears are soft and pliable with a quick recoil. Ears are in proper alignment	Low-set ears, Hearing loss (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Neck	The neck is short, creased, and moves freely. No clavicular fractures noted	Restricted movement. Clavicular fractures (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Chest	The chest is 31 cm, round and symmetrical	Nipple engorgement, white discharge (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Breath Sounds	Clear and equal breath sounds bilaterally, the chest rises and falls symmetrically	Fine crackles can be heard on inspiration because of amniotic fluid being cleared from the lungs (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.

Heart Sounds	Clear S1 and S2, no murmur, gallop or bruit heard. Normal heart rate of 140 right after birth	Murmurs are common during the first few hours after birth as the foramen ovale closes (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Abdomen	The abdomen is protuberant, rises, and falls with respirations. Three vessels were noted in the umbilical cord (two arteries and one vein).	Distended, only two vessels in the umbilical cord (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Bowel Sounds	Bowel sounds present in all four quadrants, no masses or tenderness on palpation	Variations include hypoactive or hyperactive bowel sounds. Absent or hyperactive sounds or any masses will require imaging (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Umbilical Cord	The umbilical cord has two arteries and one vein. The umbilical cord is absent of bleeding, drainage, odor, redness, or signs of infection.	Variations could be only one artery associated with renal and gastrointestinal anomalies. Any bleeding from the umbilical cord, drainage, and odor are signs of infection that would require immediate attention and care (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Genitals	Smooth glans, meatus centered at the tip of the penis, the testes	Edematous scrotum, bulging, or discoloration (Ricci	Assessment findings are within the usual findings and expected

	are present in the scrotum. The scrotum is large with well-formed rugae.	et al., 2021).	variations.

Anus	The anus is symmetrical, patent, absent of fissures and fistulas.	Present, patent not covered with membrane. Should be symmetrical; any asymmetry would require further evaluation and testing (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Extremities	The extremities are flexed, freely movable, and symmetrical. The soles of his feet are well lined, no clicks were noted when abducting his hips. Light peeling and acrocyanosis were noted on his hands and feet which is a common assessment finding in a newborn.	Variations include bowed legs, flat feet, clubbing of the feet caused by intrauterine positioning. In newborns, extra digits and the amount of creasing or lines in the hands and feet are also variations. Hip clicks would require additional evaluation for possible hip dislocation (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Spine	His spine is midline with no bulging or deformities noted.	Dimple or tuft on the spine (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.
Safety • **Matching ID bands with parents** • **Hugs tag** • **Sleep position**	Matching ID bands were placed on the baby, the mother of the baby, and the maternal grandmother. The hugs tag was in place and the baby was swaddled and sleeping in the supine position in the crib.	A hugs tag is not in place when the baby is in a warmer or isolette bed. *The ID bands should remain on the baby, the mother of the baby, and the support person always* (Ricci et al., 2021).	Assessment findings are within the usual findings and expected variations.

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? According to the Ballard Scale, this baby is appropriate for gestational age. His neuromuscular maturity scores are as follows, posture: 4, square window: 4, arm recoil: 4, popliteal angle: 5, scarf sign: 4, heel to ear: 4. His physical maturity scores are as follows, lanugo: 0, plantar surface: 4, breast: 4, eye/ear: 3, genitals: 3. The total maturity rating is equal to 39 weeks. His weight is in the twenty-fifth percentile, his length is in the seventy-fifth percentile, and his head circumference is in the thirtieth percentile.

Are there any complications expected for a baby in this classification? There are no complications expected for a baby appropriate for gestational age.

Vital Signs, 3 sets (6 points)

Time	**Temperature**	**Pulse**	**Respirations**
Birth (0849)	98.5 F (axillary)	140	68 – Increased respirations are due to the baby crying.
4 Hours After Birth (1249)	n/a – The clinical rotation was over at the time of this assessment.	n/a	n/a
At the Time of Your Assessment (1030)	99.2 (axillary) – The baby was swaddled in two blankets. One blanket was removed after this assessment.	130	48

Vital Sign Trends: His respirations were slightly increased initially at birth due to him crying. His temperature was slightly elevated a couple of hours after birth due to being swaddled with two blankets. His vitals have been stable since birth.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0849	NIPS	The baby appears comfortable and without any pain	The baby appears comfortable and without any pain	The baby appears comfortable and without any pain	The baby appears comfortable and without any pain

Summary of Assessment (4 points)

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

Do we need to rewrite this so that t is complete sentences?

This Neonate was delivered on 02/21/22 at 0849 by emergency cesarean section. Apgar's score was eight at 1 minute and nine at 5 minutes after birth. The Neonate was born at 39 weeks and two days gestation and AGA. The baby was in occiput posterior position, having late and prolonged decelerations, which complicated the labor process, making a vaginal delivery unsafe. Birth weight was 7 lbs 0 ozs (3180 grams), 20.5" long (52.1 cms). Upon assessment, all systems are within normal limits. The last vitals were temperature: 99.2, pulse: 130, and respirations: 48. The Neonate is bottle-feeding well in an upright position. Neonate will be discharged with the mother and see a pediatrician in the office for the first well-baby check within 48-72 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.
Suction N	Immediately after birth and as	Suctioning with a bulb syringe is done to remove secretions and maintain an

	needed after that	open airway.
Swaddle N	Swaddling the baby can be done any time and up until he can roll over	Swaddling keeps the baby contained and helps him feel secure. Swaddling comforts the baby and provides warmth.
Feed N	Feedings should occur every three hours or on-demand.	The newborn stomach can only hold a little bit at a time, and peristalsis is rapid. Small, frequent feedings are necessary to meet nutritional needs essential for growth and development**.**
Diaper change N	Diapers should be checked frequently, especially after feedings.	The newborn should be changed right after urinating or having a bowel movement to minimize the risk for diaper rash and skin breakdown. Assess the penis after circumcision for signs of infection with each diaper change. Use barrier cream after cleansing to help protect the skin.

Discharge Planning (2 points)

Discharge location: The baby will discharge home with his mother. They will be living with the maternal grandmother.

Equipment needs (if applicable): n/a

Follow up plan (include plan for newborn ONLY): The baby will have a follow-up visit with a pediatrician within 48-72 hours.

Education needs: The baby's mother will need to be educated on proper feeding technique and frequency, swaddling, supine sleeping in his crib, umbilical cord care, circumcision, and bathing.

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. Knowledge deficit regarding infant safety related to inexperience, as evidenced by young maternal age and first pregnancy	The baby's mom is 19 years old, and this was her first pregnancy which was unplanned	**1.** The baby's mom will be taught about infant safety **Rationale:** Supine sleeping and avoiding co-sleeping is safest for the baby and will help reduce the risk of sudden infant death syndrome (SIDS) (Ricci et al., 2021). **2.** The baby's mom will be taught about the schedule for newborn wellness checks **Rationale:** The newborn wellness checks should be done on time to monitor the growth and development of the baby, and receive immunizations on time (Ricci et al., 2021).	The nurse demonstrated and discussed proper swaddling of the infant and the importance of the baby sleeping in his own bed in a supine position to reduce the risk of suffocation and SIDS. The mom understood the teaching. The nurse explained that the baby should be seen by the pediatrician within 72 hours of discharge for his first well-baby visit. She also discussed what to expect at the doctor's visit and the immunization schedule.
2. Risk for impaired infant/parent attachment related to lack of skin-to-skin as evidenced by		**1.** The baby's mom will be encouraged to have skin-to-skin contact with the baby **Rationale:** Skin-to-skin contact promotes optimal mother-infant bonding (Ricci et al., 2021). **2.**The baby's mom will be	The nurse will explain that skin-to-skin contact with the baby is optimal for bonding and keeping the baby warm. The nurse will explain when bottle-feeding the baby will be held close and in

little interaction with newborn and formula feeding		taught the importance of talking to the baby, and holding him during feedings **Rationale:** A comfortable, relaxed, and quiet setting is best for the mom and baby during feedings. The mom should hold the baby in a secure upright or semi-upright position to provide stimulation and prevent choking. Talking to the baby during feedings promotes bonding (Ricci et al., 2021).	an upright position for his safety. She will explain that talking to him and holding him during bottle feeding will help facilitate bonding but also will enable mom to keep an eye on how he is handling the feeding
3. Risk for infection related to impaired skin integrity at the umbilical site as evidenced by infant's reduced immune system	A newborn has an undeveloped immune system which makes him more susceptible to infections	**1.** Teach mom how to care for the umbilical cord and skin around it **Rationale:** Proper hand hygiene and care of the umbilical site will reduce the risk of infection (Ricci et al., 2021). **2**. Teach mom the signs and symptoms of infection she should look for and report **Rationale:** Knowing the signs and symptoms to look for will help reduce the severity of infection should it occur (Ricci et al., 2021).	Before discharge, the nurse will teach the baby's mom how to care for the umbilical cord. She should wash her hands with soap and water before touching the cord or the skin around it. The mom should inspect the cord for drainage, foul odor, and color. The baby should receive sponge baths until the cord falls off around 10-14 days after birth. The top of the diaper should be folded underneath and remain below the umbilical cord. The cord should be kept clean and dry. The mom should inspect the skin around the cord for redness, warmth, and irritation (Ricci et al., 2021).
4. Knowledge deficit regarding newborn care related to	The mom needs to know how many wet/ soiled diapers to expect each	**1.** Teach mom to look for a minimum of six wet diapers a day **Rationale:** The minimum number of wet diapers per	The nurse will explain to expect a minimum of six wet diapers per day. A decrease in wet diapers or hard stools

elimination and diapering as evidenced by inexperience and questions	day, as well as proper care of the circumcised baby and care to prevent diaper rashes	day indicates proper hydration status (Ricci et al., 2021). **2.** Teach mom to do frequent diaper changes and circumcision care **Rationale:** Frequent diaper changes help prevent diaper rash and skin breakdown. Circumcision care is essential for proper healing and decreasing the risk for infection (Ricci et al., 2021).	are signs of dehydration. Mom will be aware and committed to paying attention to the number of wet diapers and stool color, and consistency. The nurse will explain that frequent diaper changes and the application of barrier cream will help keep the skin soft and protected. Frequent diaper changes will also give mom the opportunity to inspect and care for the circumcised penis. Petroleum jelly should be applied to the tip of the penis to keep it from sticking to the diaper. Mom will feel educated and empowered to provide proper care of her newborn.

Other References (APA):

Ricci, S.S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing (4th ed.).* Philadelphia, PA: 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	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