18 Vision Development Milestones From Birth to Baby's First Birthday

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*To calculate "corrected age", subtract the number of weeks born before 40 weeks of gestation

from the chronological age. For example, chronological age = 6 months (24 weeks), Child born

at 28 weeks gestation. 40 weeks minus 28 weeks = 12 weeks. Chronological age of 24 weeks

minus 12 weeks equal 12 weeks (3 months). Corrected age is 3 months. You may find this age

calculator helpful: https://mymonthlycycles.com/premature baby age calculator.jsp

About this Tool:

- This document is a vision screening tool for Early Head Start, Parents as Teachers, and other early care and education programs.
- This tool is a table containing vision milestones in order of typical development.
- The 1st column lists the age.
- The 2nd column lists the milestones typically expected to occur for the age.
- The 3rd column lists the questions to ask.
- The 4th column lists Next Steps when a referral is required. It also provides activities that parents and caregivers can do to help with the milestones.
- Because each child develops differently and may meet the vision milestones at different ages, vision milestones may vary up to 6 weeks; some questions provide ages for rescreening before referring.
 - Although milestones may vary up to 6 weeks, if baby's eyes appear to be constantly misaligned (possible strabismus) at age 2 months or older, refer immediately for an eye examination.
- When using this tool with children who were born prematurely and have no health challenges, adjust chronological age to the corrected age* and use this tool based on corrected age (see above box). Visual development milestones may be delayed if babies have health challenges (i.e., genetic syndromes, neurologic and metabolic conditions, etc.). For these children, use vision screening results from the baby's primary care provider or eye examination results from the baby's eye care professionals to meet your vision screening mandate.

Instructions:

- 1. Visual skills typically develop in a particular order. To determine if the baby has met all vision milestones, begin with Page 2 regardless of baby's age. Do not skip to the chronological or corrected age of the baby you are screening.
- 2. Check the appropriate boxes in the "Questions" column. Some will require rescreening if the vision milestone has not been met.
- 3. Complete the "Questions" column of the table before completing the Pass/Rescreen/Refer Documentation pages beginning on page 10. This tool and/or the Pass/Rescreen/Refer Documentation can be placed the baby's file for record-keeping purposes.
- 4. Use this tool throughout baby's first year to review vision development milestones.

Child's Name:	DOB:	Age:
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AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
Birth through 1st month Image from BabyCentre: https://www.babycentre.co.uk/l1 048954/how-your-baby-learns-to-explore-photos Picture 1 – Baby looks at object 8 to 15 inches away from face.	 Baby begins to focus on lights, faces, and objects 8 to 15 (20.32 – 38.1 cm) inches away from his/her face. Baby begins to follow slowly moving lights, faces, and objects at near. 	 Does baby focus on lights, faces, and objects 8 to 15 inches (20.32 – 38.1 cm) in front of his/her face? Yes (pass). Not Yet (rescreen within 6 weeks). Date for rescreen: If "No" after rescreening, move to Next Steps. Is baby beginning to follow slowly moving lights, faces, and objects with his/her head and eyes? Yes (pass). Not Yet (rescreen within 6 weeks). Date for rescreen: 	 Refer to baby's primary health care provider for further evaluation and to coordinate a referral for an eye examination. Refer to Birth to 3 Early Intervention program. Activities parents and caregivers can do: Hold your baby in front of you, look at your baby, and slowly move your head from side to side. Play together and have fun! Hold a patterned, high-contrast
Image from Zero to Three: https://www.zerotothree.org/res ources/164-play-activities-for- birth-to-12-months Picture 2 – Passing a patterned object within 8 to 15 inches of baby's face.	NEXT MILESTONE DURING AGE 2 ND AND 3 RD MONTHS	□ If "No" after rescreening, move to Next Steps.	toy within 8 to 15 inches (20.32 – 38.1 cm) of your baby's face. Slowly move the object up and down or side to side. Play together and have fun! Place a small rattle or colorful, plastic right in your baby's hands and gently shake your baby's hands in front of your baby's face. Play together and have fun!

Child's Name:	DOB:	Age:
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AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 2 nd and 3 rd months 2 Months - Begins to smile at people Image from CDC: https://www.cdc.gov/ncbddd/act early/milestones/photolibrary/2 months.html Picture 5 – Lively visual communication with social smile. Image from Lea Hyvärinen, MD, PhD http://www.lea- test.fi/index.html?start=en/asses sme/lowvisio/index.html Picture 6 – Baby turns head	 Baby begins to notice his/her hands. Baby makes eye contact with parent or caregiver. Baby follows moving lights, faces, people, and objects with both eyes together. Baby has a social smile. IF BABY IS AGE 3 TO 4 MONTHS, ALSO DO THE FOLLOWING MILESTONE	 3. Is baby aware of his/her hands during the 2nd month? Yes (pass). No (refer and move to Next Steps). 4. Does baby look directly at parent's or caregiver's eyes? Yes (pass). Not Yet (rescreen within 6 weeks). Date for rescreen: If "No" after rescreening, move to Next Steps. 5. Is baby following moving lights, faces, people, and objects with both eyes together? Yes (pass). Not Yet (rescreen within 6 weeks). Date for rescreen: If "No" after rescreening, move to Next Steps. 6. Is baby smiling at his/her parent or caregiver by age 3 months? Yes (pass). No (Refer and move to Next Steps. 	 □ Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination. □ Refer to Birth to 3 Early Intervention program. □ Activities parents and caregivers can do: Look at your baby with his/her face about 8 to 15 inches from your face, wait for your baby to look at your face; and smile, sing, or talk to your baby. Play together and have fun! Hold a favorite toy, bottle, or patterned and high-contrast object within 8 to 15 inches (20.32 – 38.1 cm) of your baby's face. Slowly move the object up and down or side to side. Play together and have fun!
away from the parent.			

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS	
During 3 rd and 4 th months http://www.howwemontessori.co m/how-we- montessori/2011/07/grasping- and-in-hand-materials.html Picture 7 – Baby becomes aware of hands. http://www.flynnleitch.com/2017/ 02/ Picture 8 – Baby explores hands with mouth.	 Baby watches his/her hand movements. Baby reaches for objects or parent's or caregiver's face. Baby grasps and holds objects in his/her hands. person to person or object to object. NEXT MILESTONE AT AGE 5 MONTHS	 7. Does baby watch his/her hands? Yes (pass). Not Yet (rescreen within 6 weeks). Date for rescreen: If "No" after rescreening, move to Next Steps. 8. Does baby reach for objects or parent's or caregiver's face? Yes (pass). Not Yet (rescreen within 6 weeks). Date for rescreen: If "No" after rescreening, move to Next Steps. 10. Does baby bring objects to his/her mouth by age 4 months? Yes (pass). No (refer and move to Next Steps). 11. Does baby shift his/her eyes from person to person or object to object during age 4 months? Yes (pass). Yes (pass). No (refer and move to Next Steps). 	 □ Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination. □ Refer to Birth to Three Early Intervention program. □ Activities parents and caregivers can do: With baby's back on a flat surface, gently use baby's elbows to bring hands together at the middle of baby's chest. together and have fun! age-appropriate baby toys elp baby use his/her hands xplore. Play together and e fun! Hold a toy in one hand toward the right side of baby's face and shake or activate the toy. Repeat with a different toy in the other hand toward the left side of baby face. Alternate between toys, shaking or activating one toy at a time. 	
Home-Based Visitor/Nurse Signature: Date:				

AGE (Refer if eyes not straight by the 5th mo.)

By 5th month



Image from: http://britishmuslimmagazine.com/wp-content/ uploads/2016/07/baby.jpg\

Picture 9 – Straight eyes.



Image from: http://www.allaboutvision.com/c onditions/strabismus.htm

Picture 10 - Inward constant strabismus example.

MILESTONE

- 12. Baby's eyes appear straight.
- 13. Neither of baby's eyes turn up, down, in, or out for several minutes at a time, either constantly* or intermittently**
- *Constantly and constant means the misalignment is present all the time and could be up, down, in, or out (see Pictures 9 and 10 on left as examples).
- **Intermittently and intermittent means an eye turns in, out, up, or down, only for a short time.

NEXT MILESTONE AT AGE 6 MONTHS

QUESTIONS

- 12. Are baby's eyes straight?

 ☐ Yes (pass).
 - ☐ No, (refer and move to Next Steps).
- 13. Do either of baby's eyes ever appear to constantly or intermittently turn up, down, in, or out beginning at age 5 months?
 - ☐ No (pass).
 - ☐ Yes, (refer and move to Next Steps).

☐ If you think baby's eyes are not straight, or an eye appears to cross or drift outward, after age 4 months, **immediately** refer to an eye care professional for an eye

NEXT STEPS

☐ Refer to Birth to Three Early Intervention program.

examination.

Child's Name: _____ DOB: ____ Age: ____

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 6 th and 7 th months http://smartmomcenter.com/whe n-do-babies-crawl/ Picture 11 – Goal-directed hand arm movement to reach toy. http://www.fisher-price.com/en_US/playtime-guide/6-months/index.html Picture 12 – Goal-directed hand arm movement to reach toy.	14. Baby purposefully reaches for objects. 15. Baby follows objects with both his/her eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [182.88]). NEXT MILESTONE AT AGE 8 MONTHS	14. Does baby purposefully reach for objects baby wants? ☐ Yes (pass). ☐ Not Yet (rescreen within 6 weeks). ☐ Date for rescreen: ☐ If "No" after rescreening, move to Next Steps. 15. Does baby follows objects with both eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [182.88]) by age 7 months? ☐ Yes (pass). ☐ No (refer and move to Next Steps).	 □ Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination. □ Refer to Birth to Three Early Intervention program. □ Activities parents and caregivers can do: Place favorite toy or other object close to, but slightly out of reach, of baby and encourage baby to reach for the toy or object. ■ Give baby the toy/object after he/she reaches for it so he/she can play with the toy or object. Play together and have fun!
Home-Based Visitor/Nur	se Signature:		Date:

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
Image from: http://www.mirror.co.uk/news/world-news/tear-jerking-moment-baby-boy-10015286 Picture 13 – Wearing glasses, baby now recognizes his parent. Image from: https://www.whattoexpect.com/first-year/feeding-baby/best-finger-foods-for-babies/#04 Picture 14 – Baby looks at small	16. Baby recognizes family and/or caregiver faces. 17. Baby looks at small objects, such as cereal or a raisin. NEXT MILESTONE AT AGE 11 MONTHS	16. Does baby recognize family members and/or caregivers and have a welcoming smile before hearing his/her voices or seeing his/her smiles? Yes (pass) Not yet (rescreen at age 9 months) Date for rescreen: Rescreening at age 9 months. Yes (pass) Not yet (rescreen at age 10 months) Date for rescreen: Rescreening at age 10 months. Yes (pass) No (refer and move to Next Steps). 17. Does baby look at small objects, such as cereal or a raisin? Yes (pass) Not yet (rescreen at age 9 months) Date for rescreen: Rescreening at age 9 months. Yes (pass) Not yet (rescreen at age 9 months) Date for rescreen: Rescreening at age 10 months. Yes (pass) Rescreening at age 10 months. Yes (pass) Not yet (rescreen:	 □ Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination. □ Refer to Birth to 3 Early Intervention program. □ Activities parents and caregivers can do: • Wear the same colorful blouse/shirt when greeting baby each morning. • Use the same phrase when approaching your baby, such as "Here comes XXX" or "Hi XXX". • Say the names of family members. Ask "Where is Mommy?" Give baby time to look and locate Mommy's face. • Provide lots of face-to-face opportunities for interacting. Repeating these opportunities will help you baby visually tell the difference between faces and objects. • Have your baby look at his/her own face in a mirror. • Play Peek-a-Boo.
object.			

Date: _____

Child's Name:	DOB:	Age:
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AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 11 th and 12 th months https://www.ecda.gov.sg/growat beanstalk/Pages/Understanding andlearningabouttheworld_Birth to2years.aspx	Use this milestone if baby has been exposed to books: Baby uses his/her index finger to point to pictures in a book.	 18. A. When given a book with pictures, does baby use his/her index finger and point to pictures in the book? □ Yes (pass) □ No (refer and move to Next Steps). 	 Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination. Refer to Birth to 3 Early Intervention program. Activities parents and caregivers can do: Look at a book with pictures with baby. Point to simple, high-contrast pictures in an age-appropriate children's book and name the picture.
Picture 15 – Baby points to picture in a book. https://twintalkblog.net/tag/11-month-old-twins/ Picture 16 – Baby points to picture in book.	MOVE TO NEXT MILESTONE IF BABY IS NOT EXPOSED TO BOOKS		Remove hand. Ask your baby where is X (using same picture)? If your baby points to the same picture, praise baby. If your baby does not point to the same picture, again point to the same picture and name the picture. Then, gently move baby's finger to the same picture and name picture. Make it fun! If baby does not respond to the book, try a different book. Perhaps baby is not interested in the first book.
Home-Based Visitor/Nurs	se Signature:		Date:

Child's Name:	DOB:	Age:
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AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 11 th and 12 th months Image from: http://chasingcheerios.blogspot.com/2010/09/putting-objects-inlarge-container.html Picture 17 – Baby looking for object in container.	 Use this milestone if baby has not been exposed to books: 18. B. Baby looks for object dropped in containers. 	18.B. When an object (such as a toy block) is dropped into a container, does baby look in the container for the object? ☐ Yes (pass) ☐ No (refer and move to Next Steps).	 □ Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination. □ Refer to Birth to 3 Early Intervention. □ Activities parents and caregivers can do: ■ Use a block or favorite toy with a container nearby. Talk with your baby about the block or favorite toy. Drop the block or favorite toy and ask your baby where the X went. ■ If your baby does not look into the container, you look into the container and say "Here is X" and repeat 3 or 4 times. Make it a game.

Child's Name:		DOB:		Age:
Pass/Rescreen/Refer	Documer	ntation		
Birth through 1 st Month				
1. Does baby focus on lights, faces, and objects 8 to 15 inches (20.32 – 38.1 cm) in front of his/her face?	Screen Dat	е	Rescreen	Date:
Comments/ Observations:	□ Pass	☐ Rescreen	☐ Pass	□ Refer health care provider□ Refer El
2. Is baby beginning to follow slowly moving lights, faces, and objects with his/her head and eyes?	Screen Dat	e:	Rescreen	Date:
Comments/ Observations:	□ Pass	☐ Rescreen	□ Pass	□ Refer health care provider□ Refer El
During 2 nd and 3 rd Months				
3. Is baby aware of his/her hands during the 2 nd month?	Screen Dat	e:		
Comments/ Observations:	Pass	Refer health		
		care provider Refer El		
4. Does baby look directly at parent's or caregiver's eyes?	Screen Dat	e:	Rescreen	Date:
Comments/ Observations:	☐ Pass	☐ Rescreen	□ Pass	□ Refer health care provider□ Refer El
5. Is baby following moving lights, faces, people, and objects with both eyes together?	Screen Dat	e:	Rescreen	Date:
Comments/ Observations:	□ Pass	☐ Rescreen	☐ Pass	□ Refer health care provider□ Refer El
6. Is baby smiling at his/her parent or caregiver by age 3 months?	Screen Dat	e:		
Comments/ Observations:	☐ Pass	□ Refer health care provider □ Refer El		

Child's Name:		DOR:		Age:	
During 3 rd and 4 th Months					
7. Does baby watch his/her hands?	Screen Date:		Rescreen		
			Date:		
Comments/ Observations:	Pass	☐ Rescreen	□ Pass	□ Refer health	
				care provider	
				☐ Refer El	
8. Does baby reach for objects or parent's or caregiver's face?	Screen Date:		Rescreen		
			Date:		
Comments/ Observations:	□ Pass	☐ Rescreen	☐ Pass	☐ Refer health	
				care provider	
				☐ Refer El	
9. Does baby grasp and hold an object in his/her hands?		Screen Date:		Rescreen Date:	
Comments/ Observations:	☐ Pass	☐ Rescreen	☐ Pass	☐ Refer health	
				care provider	
	_			☐ Refer El	
10. Does baby bring objects to his/her mouth by age 4 months?	Screen Date:		-		
Comments/ Observations:	☐ Pass	□ Refer			
		health			
		care			
		provider			
		☐ Refer El	<u> </u> -		
11. Does baby shift his/her eyes from person to person or object to	Screen Date:				
object during age 4 months?		T =			
Comments/ Observations:	☐ Pass	□ Refer			
		health			
		care			
		provider			
		☐ Refer El			

Child's Name:		DOB:		Age:
				•
By 5 th Month				
12. Are baby's eyes straight?	Screen Da	te:		
Comments/ Observations:	□ Pass	□ Refer eye		
		care		
		provider		
		☐ Refer EI		
13. Do either of baby's eyes ever appear to constantly or intermittently	Screen Date:			
turn up, down, in, or out beginning at age 5 months?				
Comments/ Observations:	□ Pass	□ Refer eye		
		care		
		provider		
		☐ Refer EI		
- th - th -				
During 6 th and 7 th Months	1 -		T	
14. Does baby purposefully reach for objects baby wants?	Screen Date:		Rescreen Date:	
Comments/ Observations:	☐ Pass	☐ Rescreen	☐ Pass	□ Refer health
				care provider
	_			☐ Refer El
15. Does baby follows objects with both eyes at near (1 foot [30.48	Screen Date:			
cm]) and far (greater than 6 feet [182.88]) by age 7 months?				
Comments/ Observations:	☐ Pass	□ Refer		
		health		
		care		
		provider		
		☐ Refer EI		

Child's Name:		DOB:		Age:
During 8 th , 9 th , or 10 th Months				
16. Does baby recognize family members and/or caregivers and have a welcoming smile before hearing his/her voices or seeing his/her smiles?	Screen Date:		Rescreen Date:	
Comments/ Observations:	□ Pass	Rescreen at age 9 months	☐ Pass	□ Refer health care provider□ Refer El
	Screen Date:		9 month Rescreen Date:	
	□ Pass	Rescreen at age 10 months	☐ Pass	□ Refer health care provider□ Refer El
			10 month Rescreen	Date:
			☐ Pass	□ Refer health care provider □ Refer El
17. Does baby look at small objects, such as cereal or a raisin?	Screen Date:		Rescreen Date:	
Comments/ Observations:	☐ Pass	Rescreen at age 9 months	□ Pass	□ Refer health care provider □ Refer El
	Screen Date:		9 month Rescreen Date:	
	☐ Pass	Rescreen at age 10 months	☐ Pass	□ Refer health care provider□ Refer El
			10 month Rescreen	Date:
			☐ Pass	□ Refer health care provider□ Refer El

Child's Name:	DOB:		Age:
During 11 th and 12 th Months – If baby has been exposed to books			
18. A. When given a book with pictures, does baby use his/her index finger and point to pictures in the book?	Screen Date:		
Comments/ Observations:	□ Pass	Refer health care provider	
During 11th and 12th Months – If baby has NOT been exposed to boo	oks		
18.B. When an object (such as a toy block) is dropped into a container, does baby look in the container for the object?	Screen Dat	e:	
Comments/ Observations:	□ Pass	Refer health care provider	

Expert Contributors:

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