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

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## 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 includes vision milestones in order of typical development.
- The 1<sup>st</sup> column lists the age.
- The 2<sup>nd</sup> column lists the milestones typically expected to occur for the age.
- The 3<sup>rd</sup> column lists the questions to ask.
- The 4<sup>th</sup> 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 misaligned (possible strabismus) by age 5 months, 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 the first milestone on Page 2 regardless of baby's age for the first screening. Do not skip to the chronological or corrected age of the baby you are screening. If you use this tool multiple times with a child, and the child did not require a referral, begin the next screening with the milestone matching the child's chronological or corrected age.
- 2. Check the appropriate boxes in the "Questions" column. Some will require rescreening if the vision milestone has not been met.
- 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 scanned into electronic medical records and included in the baby's hard file for record-keeping purposes.
- 4. Use this tool monthly throughout baby's first year to review vision development milestones.

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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 equals 12 weeks (3 months). Corrected age is 3 months. You may find this age calculator helpful:

https://mymonthlycycles.com/premature\_baby\_age\_calculator.j

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
Birth through 1st monthImage from BabyCentre: babyCentre: co.uk/lt 048954/how-your-baby-learns- to-explore-photosInter 1 - Baby looks at object 8 to 15 inches away from faceImage from Zero to Three: https://www.zerotothree.org/res 	<ol> <li>Baby begins to focus on lights, faces, and objects 8 to 15 (20.32 – 38.1 cm) inches away from his/her face.</li> <li>Baby begins to follow slowly moving lights, faces, and objects at near.</li> <li>NEXT MILESTONE DURING AGE 2<sup>ND</sup> AND 3<sup>RD</sup> MONTHS</li> </ol>	<ol> <li>Does baby focus on lights, faces, and objects 8 to 15 inches (20.32 – 38.1 cm) in front of his/her face?         <ul> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> </ul> </li> <li>Is baby beginning to follow slowly moving lights, faces, and objects with his/her head and eyes?         <ul> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreen within 6 weeks). Date for rescreen:</li> <li>Mot Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> </ul> </li></ol>	<ul> <li>Refer to baby's primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to 3 Early Intervention program.</li> <li>Activities parents and caregivers can do:         <ul> <li>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!</li> <li>Hold a patterned, high-contrast 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!</li> <li>Place a small rattle or colorful, plastic right in your baby's hands and gently shake your baby's face. Play together and have fun!</li> </ul> </li> </ul>

Pass/Rescreen/Refer	Documen	ntation		
Birth through 1 <sup>st</sup> Month				
<ol> <li>Does baby focus on lights, faces, and objects 8 to 15 inches (20.32 – 38.1 cm) in front of his/her face?</li> </ol>	Screen Date	е	Rescreer	n Date:
Comments/ Observations:	Pass	Rescreen	D Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
2. Is baby beginning to follow slowly moving lights, faces, and objects with his/her head and eyes?	Screen Date	e:	Rescreer	n Date:
Comments/ Observations:	Pass	Rescreen	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 2 <sup>nd</sup> and 3 <sup>rd</sup> months 2 <sup>Months Begins to smile at people</sup> 2 <sup>Months Begins to smile at people 2<sup>Months Begins to smile at people</sup> 2<sup>Months Begins to smile at people 2<sup>Months Begins to smile at people at people at people 2<sup>Months Begins to smile at people at people at people at people 2<sup>Months Begins to smile at people at pe</sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup>	<ol> <li>Baby begins to notice his/her hands.</li> <li>Baby makes eye contact with parent or caregiver.</li> <li>Baby follows moving lights, faces, people, and objects with both eyes together.</li> <li>Baby has a social smile.</li> </ol>	<ul> <li>3. Is baby aware of his/her hands during the 2<sup>nd</sup> month?</li> <li>Yes (pass).</li> <li>No (refer and move to Next Steps).</li> <li>4. Does baby look directly at parent's or caregiver's eyes?</li> <li>Yes (pass).</li> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> <li>5. Is baby following moving lights, faces, people, and objects with both eyes together?</li> <li>Yes (pass).</li> </ul>	<ul> <li>Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to 3 Early Intervention program.</li> <li>Activities parents and caregivers can do:         <ul> <li>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!</li> <li>Hold a favorite toy, bottle, or</li> </ul> </li> </ul>
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         away from the parent.	IF BABY IS AGE 3 TO 4 MONTHS, ALSO DO THE FOLLOWING MILESTONE	<ul> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> <li>Is baby smiling at his/her parent or caregiver by age 3 months?</li> <li>Yes (pass).</li> <li>No (Refer and move to Next Steps.</li> </ul>	<ul> <li>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!</li> </ul>

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Pass/Rescreen/Refer	Documer	ntation	
During 2 <sup>nd</sup> and 3 <sup>rd</sup> Months			
3. Is baby aware of his/her hands during the 2 <sup>nd</sup> month?	Screen Dat	e:	
Comments/ Observations:	Pass	Refer health	
		care provider	
		Refer El	
			December Deter
4. Does baby look directly at parent's or caregiver's eyes?	Screen Dat		Rescreen Date:
Comments/ Observations:	Pass	Rescreen	Pass Refer health care provider
			Refer El
5. Is baby following moving lights, faces, people, and objects with	Screen Dat	e:	Rescreen Date:
both eyes together?		•	
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	

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 3rd and 4th monthsSecond and a strengthSecond and a strengthSecond and a strength montessori/2011/07/grasping- and-in-hand-materials.htmlSecond a strength and strengthSecond a strength strengthSecond a strength strengthSecond a strength 	<ol> <li>Baby watches his/her hand movements.</li> <li>Baby reaches for objects or parent's or caregiver's face.</li> <li>Baby grasps and holds objects in his/her hands.</li> <li>Baby brings objects to his/her mouth.</li> <li>Baby moves eyes from person to person or object to object.</li> <li>NEXT MILESTONE AT AGE 5 MONTHS</li> </ol>	<ol> <li>Does baby watch his/her hands?         <ul> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> </ul> </li> <li>Does baby reach for objects or parent's or caregiver's face?         <ul> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> </ul> </li> <li>Does baby grasp and hold an object in his/her hands?         <ul> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> </ul> </li> <li>Does baby pring objects to his/her mouth by age 4 months?         <ul> <li>Yes (pass).</li> <li>No (refer and move to Next Steps).</li> </ul> </li> <li>11. Does baby shift his/her eyes from person to person or object to object during age 4 months?         <ul> <li>Yes (pass).</li> <li>No (refer and move to Next Steps).</li> </ul> </li> </ol>	<ul> <li>Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to Three Early Intervention program.</li> <li>Activities parents and caregivers can do:         <ul> <li>With baby's back on a flat surface, gently use baby's elbows to bring hands together at the middle of baby's chest. Play together and have fun!</li> <li>Use age-appropriate baby toys to help baby use his/her hands to explore. Play together and have fun!</li> </ul> </li> <li>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.</li> </ul>
Screener's Signature:			Date:

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Pass/Rescreen/Refer	Documer	ntation		
During 3 <sup>rd</sup> and 4 <sup>th</sup> Months				
7. Does baby watch his/her hands?	Screen Dat	te:	Rescreen Date:	
Comments/ Observations:	Pass	Rescreen	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
8. Does baby reach for objects or parent's or caregiver's face?	Screen Dat	te:	Rescreen Date:	
Comments/ Observations:	Pass	Rescreen	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
9. Does baby grasp and hold an object in his/her hands?	Screen Dat	te:	Rescreen D	Date:
Comments/ Observations:	Pass	Rescreen	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
10. Does baby bring objects to his/her mouth by age 4 months?	Screen Dat	te:		
Comments/ Observations:	D Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>		
11. Does baby shift his/her eyes from person to person or object to object during age 4 months?	Screen Dat	te:		
Comments/ Observations:	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>		

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By 5 <sup>th</sup> month       12. Baby's eyes arraight.         Image form: mage form: means the paraser arraight. Packar of the baby's eyes are and three mittently and intermittent means an eye turns in, out, up, or down, only for a short time.       12. Are baby's eyes straight?         Image form: means three mittently form: means three mittently turn up, down, in, or out (see Picture 9 - Straight cores).       13. Neither of baby's eyes are not on the baby's eyes ever appear to constantly or intermittently turn up, down, in, or out beginning at age 5 months?       13. Do either of baby's eyes ever appear to constantly or intermittently turn up, down, in, or out beginning at age 5 months?       13. Do either of baby's eyes ever appear to constantly or intermittently turn up, down, in, or out beginning at age 5 months?       13. Do either of baby's eyes are not straight, or an eye appears to constantly or intermittently are intermittently are intermittently are intermittently are intermittently and intermittent means an eye turns in, out, up, or down, only for a short time.       13. Do either of baby's eyes ever appear to constantly or intermittently and intermittent means an eye turns in, out, up, or down, only for a short time.       14. Yes (pass).       13. Do either of baby's eyes ever appear to constantly and constant means the present all the time and could be up, down, in, or out (see Pictures 9 and intermittent means an eye turns in, out, up, or down, only for a short time.       14. Yes (pass).       14. Hermittent events in events in events in event turns in, out, up, or down, only for a short time.       14. Hermittent events in event turns in, event turns in, out, up, or down, only for a short time.       14. Hermittent event turns in, out, up, or down, only for a short time.       14. Hermittent ev

Child's Name:	
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Age:

# Pass/Rescreen/Refer Documentation

By 5 <sup>th</sup> Month			
12. Are baby's eyes straight?	Screen Date	e:	
Comments/ Observations:	Pass	Refer eye care provider	
		Refer El	
13. Do either of baby's eyes ever appear to constantly* or intermittently** turn up, down, in, or out beginning at age 5 months?	Screen Date	e:	
Comments/ Observations:	Pass	Refer eye care provider	
		Refer El	

\*Constantly and constant means the misalignment is present all the time and could be up, down, in, or out.

\*\*Intermittently and intermittent means an eye turns in, out, up, or down, only for a short time.

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 6th and 7th monthsImage: Strain of the st	<ul> <li>14. Baby purposefully reaches for objects.</li> <li>15. Baby follows objects with both his/her eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [1.8288 m]).</li> <li>NEXT MILESTONE AT AGE 8 MONTHS</li> </ul>	<ul> <li>14. Does baby purposefully reach for objects baby wants?</li> <li>Yes (pass).</li> <li>Not Yet (rescreen within 6 weeks). Date for rescreen:</li> <li>If "No" after rescreening, move to Next Steps.</li> <li>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?</li> <li>Yes (pass).</li> <li>No (refer and move to Next Steps).</li> </ul>	<ul> <li>Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to Three Early Intervention program.</li> <li>Activities parents and caregivers can do:         <ul> <li>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.</li> <li>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!</li> </ul> </li> </ul>
arm movement to reach toy. Screener's Signature:			Date:

Pass/Rescreen/Refer I	Documen	tation		
During 6 <sup>th</sup> and 7 <sup>th</sup> Months				
14. Does baby purposefully reach for objects baby wants?	Screen Dat	e:	Rescreen	Date:
Comments/ Observations:	Pass	Rescreen	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
15. Does baby follow objects with both eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [1.8288 m]) by age 7 months?	Screen Dat	e:		
Comments/ Observations:	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>		

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 8th, 9th, or 10th monthsImage from: http://www.mirror.co.uk/news/w orld-news/tear-jerking-moment- baby-boy-10015286Image from: http://www.mirror.co.uk/news/w orld-news/tear-jerking-moment- 	<ul> <li>16. Baby recognizes family and/or caregiver faces.</li> <li>17. Baby looks at small objects, such as cereal or a raisin.</li> <li>NEXT MILESTONE AT AGE 11 MONTHS</li> </ul>	<ul> <li>16. Does baby recognize family members and/or caregivers and have a welcoming smile before hearing his/her voices or seeing his/her smiles?</li> <li>Yes (pass)</li> <li>Not yet (rescreen at age 9 months) Date for rescreen:</li></ul>	<ul> <li>Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to 3 Early Intervention program.</li> <li>Activities parents and caregivers can do:         <ul> <li>Wear the same colorful blouse/shirt when greeting baby each morning.</li> <li>Use the same phrase when approaching your baby, such as "Here comes XXX" or "Hi XXX".</li> <li>Say the names of family members. Ask "Where is Mommy?" Give baby time to look and locate Mommy's face.</li> <li>Provide lots of face-to-face opportunities for interacting. Repeating these opportunities will help you baby visually tell the difference between faces and objects.</li> <li>Have your baby look at his/her own face in a mirror.</li> <li>Play Peek-a-Boo.</li> </ul> </li> </ul>

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Pass/Rescreen/Refer Documentation				
During 8 <sup>th</sup> , 9 <sup>th</sup> , or 10 <sup>th</sup> 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	<ul> <li>Rescreen at age 9 months</li> </ul>	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
	Screen Date:		9 month Rescreen Date:	
	Pass	Rescreen at age 10 months	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
			10 month	
			Rescreen Date:	
			Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
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	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
	Screen Date:		9 month Rescreen Date:	
	Pass	Rescreen at age 10 months	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>
			10 month	
			Rescreen	
			Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 11 <sup>th</sup> and 12 <sup>th</sup> months	<ul> <li>Use this milestone if baby has been exposed to books:</li> <li>18. A. Baby uses his/her index finger to point to pictures in a book.</li> <li>MOVE TO NEXT MILESTONE IF BABY IS NOT EXPOSED TO BOOKS</li> </ul>	<ul> <li>18.A.</li> <li>When given a book with pictures, does baby use his/her index finger and point to pictures in the book?</li> <li>Yes (pass)</li> <li>No (refer and move to Next Steps).</li> </ul>	<ul> <li>Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to 3 Early Intervention program.</li> <li>Activities parents and caregivers can do:         <ul> <li>Look at a book with pictures with baby.</li> <li>Point to simple, high-contrast pictures in an age-appropriate children's book and name the picture. Remove hand. Ask your baby where is X (using same picture)?</li> <li>If your baby points to the same picture, praise baby.</li> <li>If your baby does not point to the same picture and name the picture. Then gently move baby's finger to the same picture. Make it fun!</li> <li>If baby does not respond to the book, try a different book. Perhaps baby is not interested in the first book.</li> </ul> </li> </ul>

Pass/Rescreen/Refer Documentation					
During 11 <sup>th</sup> and 12 <sup>th</sup> 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	e:			
Comments/ Observations:	Pass	<ul> <li>Refer health care provider</li> <li>Refer El</li> </ul>			

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	QUESTIONS	NEXT STEPS
During 11th and 12th monthsImage form: http://chasingcheerios.blogspot.Picture 17 - Baby looking for logicat in container.	<ul> <li>Use this milestone if baby has not been exposed to books:</li> <li>18.B. Baby looks for object dropped in containers.</li> </ul>	<ul> <li>18.B. When an object (such as a toy block) is dropped into a container, does baby look in the container for the object?</li> <li>Yes (pass)</li> <li>No (refer and move to Next Steps).</li> </ul>	<ul> <li>Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</li> <li>Refer to Birth to 3 Early Intervention.</li> <li>Activities parents and caregivers can do:         <ul> <li>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.</li> <li>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.</li> </ul> </li> </ul>

Pass/Rescreen/Refer Documentation				
During 11 <sup>th</sup> and 12 <sup>th</sup> Months – If baby has NOT been exposed to books				
18.B.	Screen Date:			
When an object (such as a toy block) is dropped into a container,				
does baby look in the container for the object?				
Comments/ Observations:	Pass	Refer health care provider		
		Refer El		

# **Expert Contributors:**

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