## EIGHT KEY VISION DEVELOPMENT MILESTONES TO MONITOR FROM BIRTH TO FIRST BIRTHDAY

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- Begin with 1<sup>st</sup> milestone, regardless of child's age.
- Check box if baby meets milestone Check 2<sup>nd</sup> box if baby does not meet milestone and move to Next Steps. Begin with 1<sup>st</sup> Milestone regardless of age and stop when milestone exceeds baby's age.

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	IMPORTANCE OF MILESTONE	QUESTIONS TO ASK OR BEHAVIORS TO MONITOR	NEXT STEPS
Birth to no later than 8 weeksImages from Lea Byvärinen, MD, PhD	<ul> <li>Maintains stable eye contact when awake and alert and initiated by parent or caregiver         <ul> <li>"Stable" is defined as holding eye contact.</li> </ul> </li> </ul>	<ul> <li>Babies have innate attraction to faces, especially smiling faces. Creates pleasant feelings in baby and parent.</li> <li>Stable eye contact with parents or caregivers is important to developing bonding and communication.</li> <li>Lack of stable eye contact can interfere with early emotional and general development.</li> </ul>	<ul> <li>Does baby maintain <u>stable</u> eye contact when awake and alert and initiated by parent and/or caregiver?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral for an assessment to include refraction and accommodation, if possible, to determine how well baby can see.</li> <li>If vision is found to be normal, refer to primary care provider to further discuss concerns.</li> <li>Refer to Birth to 3 Early Intervention program for supporting development of total communication through all senses, including hands and motor functions.</li> <li>In interim, help parents/caregivers help baby to develop communication through all the senses.</li> <li>Example: Talk close to baby's face while helping baby to feel parent's or caregiver's face.</li> </ul>

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	IMPORTANCE OF MILESTONE	QUESTIONS TO ASK OR BEHAVIORS TO MONITOR	NEXT STEPS
During 3 <sup>rd</sup> and 4 <sup>th</sup> months         State         State	2 <sup>nd</sup> Milestone • Lively communication with social smile	<ul> <li>A social smile means the brain is maturing, baby can vary accommodation, and baby sees clearly at several distances.</li> <li>Baby's social smile boosts bonding and is one of the cornerstones of communication between baby and parent/caregiver.</li> <li>A smile from baby as parent and/or caregiver approaches shows baby has learned a new skill: to be active socially instead of passive participant only when parent or caregiver smiles first.</li> </ul>	<ul> <li>When parent approaches baby, does baby respond with a smile?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess refraction and accommodation to determine how well baby can see.</li> <li>Refer to Birth to 3 Early Intervention program for assistance in communication between baby and parent/caregiver.</li> <li>Check in with Mother and gently ask these questions – without frightening Mother– to look at how Mother is doing emotionally and physically (perhaps Mother needs support):</li> <li>Did the birth go smoothly?</li> <li>Do you have help in caring for baby?</li> <li>Is baby sleeping several hours at a time?</li> <li>If Mother seems distressed, brainstorm with Mother on ways to support Mother (i.e., family member cares for baby while Mother sleeps).</li> </ul>

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During 3 <sup>rd</sup> or 4 <sup>th</sup> months	3 <sup>rd</sup> Milestone • Awareness of hands and exploration of hands with mouth	<ul> <li>Baby's hands are important for helping vision develop.</li> <li>Awareness of hands leads to exploring the hands with the mouth, which leads to using the hands to explore baby's world.</li> <li>Exploration with hands gives concrete information about abstract objects, including size, form, surface quality, and weight.</li> <li>This concrete information will be stored in baby's brain to combine with the visual concept of each object.</li> </ul>	<ul> <li>Does baby watch her hands?</li> <li>If "no", move to Next Steps.</li> <li>Does baby bring his hands to midline and to his mouth?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess refraction and accommodation to determine how well baby can see.</li> <li>If baby is not noticing hands, maybe baby cannot see hands.</li> <li>Refer to Birth to Three Early Intervention, with emphasis on helping baby to observe hands, bring hands to mid-line, and eye-hand coordination.</li> <li>Parent and/or caregiver can help baby explore hands and bring objects and hands to mid-line, for example:</li> <li>Gently use baby's elbows to bring hands to mid-line. Make it a game.</li> <li>Use small objects with variation in size, weight, and texture to help baby use hands to explore. Some toys for dogs make great objects for this activity.</li> </ul>

AGE (Though milestones may vary up to 6 weeks; refer if eyes not straight by 5 <sup>th</sup> mo.)	MILESTONE	IMPORTANCE OF MILESTONE	QUESTIONS TO ASK OR BEHAVIORS TO MONITOR	NEXT STEPS
By 5th monthImage: System of the syste	<ul> <li>Keenly watching hand movements of other children and adults and beginning to copy those hand movements</li> </ul>	<ul> <li>Keenly observing hand movements of others, and starting to copy those hand movements, leads to goal-directed reaching and grasping, which begins the process of learning from imitation, and understanding actions and goals of others.</li> </ul>	<ul> <li>Is baby keenly watching hand movements of other children and adults?</li> <li>If "no", move to Next Steps.</li> <li>Is baby beginning to copy hand movements of other children and adults?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess all parts of the visual system to determine why baby is not keenly watching and beginning to copy hand movements of other children and adults.</li> <li>Refer to Birth to Three Early Intervention program for assistance in helping baby observe and begin to copy hand movements of other children and adults.</li> </ul>
By 5 <sup>th</sup> month         Image: State of the state of	<ul> <li>5<sup>th</sup> Milestone</li> <li>Eyes are straight and do not appear to cross or drift</li> </ul>	<ul> <li>Eyes must be straight for good binocular vision to develop.</li> </ul>	<ul> <li>Are baby's eyes straight?</li> <li>If "no", move to Next Steps.</li> <li>Do baby's eyes ever appear to cross or drift?</li> <li>If "no", move to Next Steps.</li> </ul>	If baby's eyes appear to turn in or out after age 4 months, immediately refer baby for eye exam to assess all parts of the visual system to determine the cause of eye misalignment.

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During 6 <sup>th</sup> or 7 <sup>th</sup> months	<ul> <li>Goal-directed hand-arm movements</li> </ul>	<ul> <li>Reaching for a desired object leads to goal-directed behavior and shows desire, interest, and curiosity – critical elements for learning.</li> <li>If baby is not reaching for objects, maybe baby cannot see the objects.</li> </ul>	<ul> <li>Does baby reach for and grasp objects?</li> <li>If "no", move to Next Steps.</li> <li>Does baby look at the object when reaching?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess all parts of the visual system to determine why baby is not reaching.</li> <li>Refer to Birth to Three Early Intervention program for assistance in helping baby develop goal-directed hand-arm movements.</li> </ul>
http://birthways.org/wp- content/uploads/2011/06/b igstock_Babies_Playing_ With_Toys_2666238.jpg				

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	IMPORTANCE OF MILESTONE	QUESTIONS TO ASK OR BEHAVIORS TO MONITOR	NEXT STEPS
During 7 <sup>th</sup> , 8 <sup>th</sup> , or 9 <sup>th</sup> months	<ul> <li><b>7</b><sup>th</sup> <b>Milestone</b></li> <li>Recognition of family and/or caregiver faces</li> </ul>	<ul> <li>If baby does not recognize family and/or caregiver faces and does not look at, or into, the parent's and/or caregiver's eyes, and focuses instead on the parent's and/or caregiver's hair or forehead, for example, baby may be incorrectly diagnosed as being on the autism spectrum.</li> <li>If baby wants to be carried constantly, this is red flag. A parent is center of baby's world and baby will cling to parent from fear of losing contact with parent.</li> </ul>	<ul> <li>Does baby recognize family members and/or caregivers and have a welcoming smile before hearing their voices or seeing their smiles?</li> <li>If "no", move to Next Steps.</li> <li>Does baby recognize difference between familiar faces at home and visiting strangers?</li> <li>If "no", move to Next Steps.</li> <li>Does baby recognize family members outside the home among groups of people?</li> <li>If "no", move to Next Steps.</li> <li>Does baby recognize family members outside the home among groups of people?</li> <li>If "no", move to Next Steps.</li> <li>Does baby recognize caregiver among several adults in a center-based setting?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess all parts of the visual system to determine why baby does not recognize family and/or caregiver faces.</li> <li>Refer to Birth to 3 Early Intervention program to support attachment with parent/caregiver.</li> <li>To help baby recognize family members/caregivers, encourage family members/caregivers to use something specific for:         <ul> <li>Clothing - i.e., wearing same colorful blouse/shirt when greeting baby each morning,</li> <li>Hair - i.e., colorful headband, and</li> <li>Voice - i.e., same phrase when approaching baby.</li> </ul> </li> </ul>

AGE (Milestones may vary up to 6 weeks.)	MILESTONE	IMPORTANCE OF MILESTONE	QUESTIONS TO ASK OR BEHAVIORS TO MONITOR	NEXT STEPS
During 9+ to 12 months	<ul> <li>8<sup>th</sup> Milestone</li> <li>Use this one if baby has been exposed to books:</li> <li>Points to individual pictures in a book and vocalizes while pointing</li> </ul>	<ul> <li>Baby is beginning to coordinate gestures and words.</li> <li>If baby shows no interest in books or does not point to pictures, perhaps baby cannot see the pictures.</li> </ul>	<ul> <li>When given a book with pictures, does baby point to individual pictures and vocalize?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess refraction and accommodation to determine how well baby can see.</li> <li>Refer to Birth to 3 Early Intervention program for assistance in encouraging baby to look at individual pictures in book and vocalize.</li> <li>Encourage parent or caregiver to:         <ul> <li>Look at a book with pictures with baby.</li> <li>Point to a picture.</li> <li>Name the picture.</li> <li>Vocalize something about the picture (i.e., make "moo" sound for cow).</li> </ul> </li> <li>Praise baby when baby points to a picture and vocalizes.         <ul> <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>

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During 9+ to 12 months	<ul> <li>8<sup>th</sup> Milestone</li> <li>Use this one if baby has <u>not</u> been exposed to books:</li> <li>Uses thumb and first finger to pick up objects, such as crumbs on floor</li> </ul>	<ul> <li>Helps baby to better explore baby's world in more detail and to improve fine motor skills of hands.</li> </ul>	<ul> <li>Does baby use thumb and first finger to pick up objects?</li> <li>If "no", move to Next Steps.</li> </ul>	<ul> <li>Refer to primary care physician to coordinate eye exam referral to assess refraction and accommodation to determine how well baby can see.</li> <li>Ask parent or caregiver to:         <ul> <li>Encourage baby to eat food with fingers.</li> </ul> </li> </ul>
http://twinpossible.com/8- month-milestones-for- your-baby-or-twins				