



## Vision Screening – Objective Testing

Child's Name:		DOB:	
Evaluator Name:		Date:	

For a child who does not yet demonstrate head control, they should be lying down or well supported in someone's lap or a seated position during the following tests.

If the child is unable to participate in the objective testing, rescreen at the first opportunity (e.g., Initial IFSP meeting or first provider visit).

**At conclusion of Objective Testing, transfer results to the child's "Results Summary and Recommendations for Follow Up Rubric."**

Note, if performing instrument-based screening with a child one year or older, SKIP Objective Testing. Provide result of instrument-based screening with evaluation documentation.

### References:

Kansas Department of Health and Environment Bureau of Family Health, Kansas State Department of Education. *Kansas Vision Screening Requirements & Guidelines*, June 2018, Sixth Edition

## 1. Fixation (three months and up)

**Purpose:** To check if both eyes fixate on an object at eye level placed in front of child's nose.

**Materials Needed:** Small colorful toy or finger puppet. For a child less than age 4 months, the human face can be a target.

**Procedure:**

1. Facing the child at eye level, present a small toy approximately 14 to 16 inches in front of child's nose and observe the child's eyes.
2. Both eyes should be directed toward the object for at least two (2) seconds. It is acceptable to use noise at the start of the test to gain attention; however, do not provide continuous sound stimulation to keep attention.

**Outcome:**

<input type="checkbox"/>	No Concerns: Child fixes on object with both eyes for at least two (2) seconds.
<input type="checkbox"/>	Concerns Identified: Child does not fixate on object or fixates with one (1) eye only. Eye drifting is abnormal.
<input type="checkbox"/>	Unable to test

## 2. Visual Tracking (three months and up)

**Purpose:** To check movements of both eyes when following a continuously moving target to determine if both eyes work together and are symmetric when following an object.

**Materials Needed:** Small colorful toy that does not make noise or a penlight. For a child less than age four months, the human face can be a target.

**Procedure:** Begin with child facing straight ahead, gently held steady, and not moving to provide best vantage point for observing any deviation in the child or child’s eye movements. The parent or caregiver can help gently steady the child or child’s head.

- **Binocular Horizontal Tracking.**

1. Hold target 14 to 16 inches away from child’s eyes, centered in front of them.
2. Slowly move the target horizontally to your right until the child’s eyes are in their extreme left viewing position.
3. Slowly move the target to your left, crossing midline until the eyes are in the extreme right viewing position.
4. Return target to center point.

- **Binocular Vertical Tracking.**

1. Hold target 14 to 16 inches away from child’s eyes, centered in front them.
2. Slowly raise the target until the child’s eyes reach the extreme up viewing position.
3. Slowly lower the target past the center point of the child’s eyes until the eyes reach the extreme down viewing position.
4. Return target to center point.

**Record Results:**

<input type="checkbox"/>	Horizontal smooth	<input type="checkbox"/>	Jerky	<input type="checkbox"/>	Not present
<input type="checkbox"/>	Vertical smooth	<input type="checkbox"/>	Jerky	<input type="checkbox"/>	Not present

**Outcome:**

<input type="checkbox"/>	No Concerns: Eyes follow smoothly both horizontally and vertically.
<input type="checkbox"/>	Concerns Identified: Eyes do not follow in unison or tracking is jerky or not present.
<input type="checkbox"/>	Unable to test

### 3. Pupillary Reflex (6 months and up)

**Purpose:** To check for the presence or absence of the pupillary reflex to a light source.

**Materials Needed:** Penlight and object in room. Distant target for child fixation.

**Procedure:** Dim the room lights, if possible.

1. Facing the child at eye level hold the penlight in “off” position directly in front of the right eye about 3” away. Direct the child’s attention to a toy/object that is stationed away from the penlight.
2. Turn the penlight on, shining it directly into the right eye, and watch to see if the pupil size in both eyes quickly decreases in size (constricts).
3. Move the penlight away from the eyes and watch for an increase in pupil size in both eyes (dilates).
4. Shine the penlight directly into the left eye, and watch to see if the pupil size in both eyes quickly decreases in size (constricts).
5. Shine the penlight in the right eye again and observe the pupil size. It should remain small. Repeat the swinging motion of the penlight between each eye two to three times.

Pupils should be round, black, and equal in size. They should change size, by getting smaller with light and larger when pen light is removed. Seizure medications, neurological problems, and other medications can inhibit this response. Both eyes should react equally to changes in light at the same time.

**Record Results:**

Right eye pupil response to light:

<input type="checkbox"/> Absent	<input type="checkbox"/> Sluggish	<input type="checkbox"/> Quick (i.e., immediate)
---------------------------------	-----------------------------------	--------------------------------------------------

Left eye pupil response to light:

<input type="checkbox"/> Absent	<input type="checkbox"/> Sluggish	<input type="checkbox"/> Quick (i.e., immediate)
---------------------------------	-----------------------------------	--------------------------------------------------

**Outcome:**

<input type="checkbox"/>	No Concerns: Both pupils constrict quickly and are round, black, and equal in size.
<input type="checkbox"/>	Concerns Identified: Absent or sluggish response to light in either eye or either pupil is not round/black/equal in size.
<input type="checkbox"/>	Unable to test

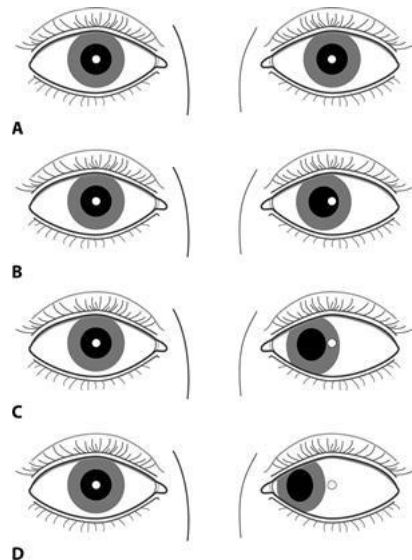
## 4. Corneal Light Reflection (Hirschberg) (6 months and up)

**Purpose:** To check for milder forms of constant strabismus (i.e., eyes are misaligned)

**Materials Needed:** Small toy and penlight

**Procedure:**

1. Minimize light sources (e.g., windows, overhead lights), if possible.
2. Ensure no other light sources reflect from child’s pupils.
3. With penlight off, hold the penlight 14 to 16 inches from the child’s head.
4. Hold the fixation target beneath the penlight.
5. Turn on penlight and shine the penlight at the center of the child’s forehead directly above and between the child’s eyes.
6. Ensure the child is focused on the target.
7. Observe the pupils and check the position of the light reflection from each eye.



**Record Results:**

<input type="checkbox"/>	Centered in BOTH eyes.
<input type="checkbox"/>	Equally centered SLIGHTLY nasal in BOTH eyes.
<input type="checkbox"/>	Not centered in one or both eyes.

**Outcome:**

<input type="checkbox"/>	No Concerns: Reflected light appears to be in a symmetrical position near the center of the pupil of each eye.
<input type="checkbox"/>	Concerns Identified: Reflected light appears to be near the center of the pupil of one eye and displaced nasally, outward, or upward from the pupil in the second eye.
<input type="checkbox"/>	Unable to test