



**Name of School System**  
 Name, Teacher of the Visually Impaired  
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## Functional Vision Evaluation & Reading Media Assessment

**Name:** \*\*\*\*\* **DOB:** \*\*\*\*\*  
**Estimated Acuity:** **Right Eye (OD): 20/20 Left Eye (OS): 20/25**  
**Visual Diagnosis:** hypothalamic hamartoma  
**Evaluator:**  
**Dates of Evaluation:**

### BACKGROUND INFORMATION:

\*\*\*\*\* is a 7 year old boy who attends first grade at \_\_\_\_ Elementary in \_\_\_\_\_. \*\*\*\*\* has been diagnosed with hypothalamic hamaroma. He has undergone 3 surgeries to remove the brain tumor. He currently receives his ophthalmologic care from Dr. \_\_\_\_\_, a neuro ophthalmologist at \_\_\_\_\_. He was most recently seen on \_\_\_\_\_. In his report, Dr. \_\_\_\_\_ states that \*\*\*\*\*'s diagnosis is hypothalamic hamartoma which results in a visual field loss. Dr. \*\*\*\*\* indicated that the widest diameter in the remaining field in each eye was 50. \*\*\*\*\* has the field loss on the right side of each eye. His visual acuity is 20/20 OD (right eye), 20/25 OS (left eye) for distance. No notations were made about \*\*\*\*\*'s prognosis, however, Mrs. \_\_\_\_\_ indicated that \*\*\*\*\* has been referred to a cataract specialist as he is developing a cataract and may eventually need surgery to remove the cataract.

- According to Barrow Neurological Institute, **Hypothalamic Hamaroma** are rare, benign (noncancerous) tumors of the hypothalamus. It is common for surgery to lead to visual field deficits.

This functional vision evaluation is being conducted as part of an initial referral for vision services to determine eligibility as well as to identify what \*\*\*\*\* sees and what helps or hinders his visual performance. The intent is to acquire an understanding of \*\*\*\*\*'s functional vision in a variety of environments and to determine what environmental conditions serve as "visual assists" that help \*\*\*\*\* to see or "visual obstacles" that interfere with seeing.

### FUNCTIONAL VISION OBSERVATIONS:

\*\*\*\*\* was observed in his classroom, transitioning through the halls of his familiar school and was formally assessed in a separate room. \*\*\*\*\* navigated throughout his classroom and school with relative ease when the halls were quiet and there was no congestion. \*\*\*\*\* had more difficulty navigating well when the halls are busy and people and objects move in and out of his field of vision. Lighting in the hallways and in the classroom came from overhead fluorescent lights. He was observed during whole group BINGO game with a substitute teacher. During this instruction, \*\*\*\*\* visually attended to hand-written math problems that were presented on the board from approximately 10 feet. He shifted his gaze between the board and his BINGO card on his desk and on the board. He was on task at all times. \*\*\*\*\* initially missed information on the lower part of his BINGO board, but was able to independently identify his error. \*\*\*\*\*



was directly assessed in a quiet work room as well as in the media center. No other students were present at this time.

**Appearance Of Eyes & Preference:** *Within Normal Limits*

\*\*\*\*\*'s eyes appeared healthy at the time of the evaluation. \*\*\*\*\* was presented with a kaleidoscope and demonstrated a right eye preference.

**Convergence** *Abnormal Results*

\*\*\*\*\*'s eyes were balanced but unable to converge (move toward each other as an object was brought close) which can be attributed to field loss in each eye. The inability to converge indicates that the eyes do not work as a team when looking at words when reading. This may result in eyestrain and fatigue when reading. \*\*\*\*\* should be provided with extended time and be permitted to take breaks to rest his eyes when he experiences visual fatigue.

**OCULOMOTOR BEHAVIORS:**

**Fixation:** *Within Normal Limits*

Fixation is the ability to hold an object steadily in view for a period of time. \*\*\*\*\* is able to establish a steady visual fix on materials at a near, midrange, and distances beyond 10'.

**Tracking:** *Abnormal Results*

Tracking is an essential skill needed to read a line of print and return to the next line. Tracking skills are also required in many sports and in everyday activities such as watching a passing car and driving. \*\*\*\*\* was able to maintain a visual fix in order to track the movements of slowly moving materials horizontally to the right and to the left. He had significant difficulty tracking materials as they moved vertically both up and down. \*\*\*\*\* would "lose" the object and have to search to locate it again. Difficulty with vertical tracking could impact \*\*\*\*\*'s ability to copy information from the board. \*\*\*\*\* was provided with several line guides with various colored highlighters. He demonstrated a preference for the line guide with a yellow highlighter but also wanted to continue to trial the blue highlighter. Use of a line guide can assist \*\*\*\*\* in keeping his place when reading, but can also help him keep his place when he is viewing information on the board and then at his desk. Tracking could also impact \*\*\*\*\*'s safe movement and for that reason, as well as concerns with visual field loss, \*\*\*\*\* should be evaluated by an Orientation and Mobility specialist to determine if he is in need of this service.

**Shift of Gaze:** *Abnormal Results*

Shift of gaze is the ability to visually fix on an object, shift to another object, and then return. Non-parallel shift of gaze is needed when copying information from the board. Parallel shift of gaze is used frequently in school when transferring information from a book to a paper or answering on a separate sheet. \*\*\*\*\* was able to shift his gaze between materials presented parallel and non parallel on the same visual plane without any observable difficulty. He had more difficulty shifting his gaze between information on a central plane to information on a lower plane. Again, this could present difficulties with copying from the board and losing his place. When presenting passages to be copied from the board, provide \*\*\*\*\* with a copy of notes to minimize the amount of information that he must copied. This will reduce the need for frequent shift of gaze.

**Scanning:** *Within Normal Limits*

\*\*\*\*\* is able to scan his near, midrange and distance environments to locate requested and desired materials. \*\*\*\*\* is able to scan and locate information throughout the school and classroom. He was able to scan information at near in books and activities with and without visual clutter. \*\*\*\*\* enjoyed playing a visual hide-and-seek activity where 1/2" beads were placed on various visual planes and surfaces. He was able to scan to locate all beads without difficulty and locate requested items within a visually cluttered ISpy book.



## ACUITIES & FIELDS

### **Visual Field:** *Abnormal Results*

The visual field is the entire area of vision that can be seen without shifting the eyes or moving the head. \*\*\*\*\*'s current eye report indicated that he has 50 degrees diameter in his remaining visual field. His field loss presents on the same side (right) of each eye. \*\*\*\*\* responded well to materials presented in his left, lower and upper visual fields. He responded to materials located at 45 degrees from center on the right. \*\*\*\*\* should be provided with preferential seating to take advantage of his useable visual field. Position \*\*\*\*\* to the right of instruction allowing him to view information in his left field but defer to \*\*\*\*\*'s visual preferences should he determine a better location that allows him to visually access the widest angle of information.

Reading may be affected as the field loss is on the right which is the "anticipatory" field and \*\*\*\*\* may lose his place when reading. Currently, \*\*\*\*\* uses his pointer finger to keep his place while he is reading. \*\*\*\*\* should be permitted to either use his finger to keep his place or use a line guide. With \*\*\*\*\*'s blind spot in his right field, the blind spot moves as he reads down the text like a curtain hiding what he is trying to read next. This will block the end of the line of text making it difficult to locate the end of the line and may also block the end of long words. A simple technique, such as sticking a Post-it note along the side of a column of print to mark the end of the column or bottom of page may help \*\*\*\*\*. It may be helpful for \*\*\*\*\* to learn to locate the end of long words or the end of passages prior to reading the passage so he is aware of where the end is. A reading card with a border line on the right can also be used to help \*\*\*\*\* locate the end of a line. A yellow filter can additionally help provide contrast.

\*\*\*\*\* did not demonstrate difficulty with surface changes although he was not observed on stairs as his school is on a one story level. Although it was not observed during this evaluation, \*\*\*\*\* and Mrs. \*\*\*\*\* report that \*\*\*\*\* often runs into doors and objects on his right. \*\*\*\*\* was told by his ophthalmologist that he will not be eligible to be a driver due to his field loss. \*\*\*\*\* should be evaluated by an Orientation and Mobility Specialist to address concerns, strategies, and skills for being a non-driver.

### **Near Visual Acuity:** *Within Normal Limits*

Near vision is the ability to perceive objects at a reading distance. Near distance is usually measured at 14 to 16 inches. \*\*\*\*\*'s near vision was assessed during this functional vision evaluation to determine his threshold and comfortable font size for sustained reading with the classroom lighting. The LEA Near Symbols Chart was used with Number Symbols.

At the prescribed distance of 14"

Distance Comparison	M	Font Comparison	Accuracy	Comments
20/50	1.0	8 pt	5/5	Identified all with ease
20/40	.8	6 pt	5/5	Identified all with ease
20/32	.6	5 pt	5/5	Identified all with ease
20/25	.5	4pt	5/5	Identified all but slow and deliberate

This demonstrates that \*\*\*\*\* is able to access standard font sizes at a comfortable reading distance.

### **Distance Visual Acuity:** *Within Normal Limits*

Distance vision is the ability to perceive objects at a distance usually measured at 20 feet. \*\*\*\*\* was formally assessed by Dr. \_\_\_\_\_. He was also tested and observed at this distance and at a closer distance of 5 feet according to test requirements during this Functional Vision Assessment. The instrument used was the Good-Lite distance Vision Chart with Numbers.



<u>Distance Equivalent</u>	<u>Results</u>	<u>Comments</u>
20/40	100%	with ease
20/32	100%	able to read but reading speed slowed
20/25	100%	able to read but reading speed slowed
20/20	0%	unable to identify any numbers

The results were similar to what Dr. \_\_\_\_ found in his clinical assessment. \*\*\*\*\* is able to use his distance vision to attend to and locate materials as small as 1/2" at distances of 20 feet with details and separation of 1/8".

## VISION OTHER SKILLS

### **Color Vision:** *Within Normal Limits*

Color perception is a determination of a person's ability to perceive colors and shades of colors. \*\*\*\*\* knows primary and secondary colors. When presented with color paint swatches, he was able to match color swatches and hues. He initially made some errors matching hues but was able to self correct. \*\*\*\*\* was unable to identify all items on the Ishihara Color Test indicating that he does not have color blindness.

### **Depth Perception:** *Cautious Results*

\*\*\*\*\* was not observed to under or over reach for materials presented at near during the assessment and any depth perception difficulties did not present themselves while completing schoolwork. Mrs. \*\*\*\*\* has indicated that she has observed him to under/over reach during therapy. \*\*\*\*\* was not observed to pause or have difficulty moving from tile to carpet or vice versa. When descending the steps at recess, \*\*\*\*\* held on to the hand rail which could be due to motor difficulties but could also be related to difficulties with depth perception. Depth perception should be evaluated by a certified Orientation and Mobility specialist to determine if \*\*\*\*\* needs to learn skills or strategies for safe movement.

### **Contrast, Lighting, & Glare:** *Within Normal Limits*

The observation took place within \*\*\*\*\*'s classroom and media center under normal lighting conditions. He was not observed to squint or have difficulty with lighting and glare. Contrast is the difference between foreground and background in terms of color or shading which enables items to be seen well. \*\*\*\*\* was able to complete activities with lower contrast but did prefer when there was higher contrast. Using the line guide with a highlighter will create higher contrast for \*\*\*\*\* in addition to helping him keep his place.

### **Visual Clutter & Complexity** *Within Normal Limits*

\*\*\*\*\* did not demonstrate difficulty with visual clutter or complexity during this evaluation

### **Visual Motor Skills** *Abnormal Results*

Visual motor skills are the skills needed to coordinate eyes and hands. \*\*\*\*\* is currently receiving occupational therapy to address his fine motor skills. During this evaluation, \*\*\*\*\* demonstrated the ability to use a visually directed reach to obtain materials without over or under reaching. Although it took him slightly longer, he was also able to string 1/2" beads. \*\*\*\*\* is right handed and his handwriting is legible to himself and others but it takes him a longer time to produce letters.

### **Visual Discrimination & Recognition** *Within Normal Limits*

Visual discrimination is the ability to recognize details in visual images. It allows students to identify and recognize the likeness and differences of shapes/forms, colors and position of objects, people, and printed materials. \*\*\*\*\* was able readily match pictures that were similar and visually complex. Additionally, he was able to visually discriminate letters, numbers and words. \*\*\*\*\* was able to identify partially hidden objects in pictures and was able to locate an object in a complex picture. He was able to locate a picture among a group of pictures with similar detail and configuration. He was also able to locate a specific object when only part was visible.



## Other

\*\*\*\*\* reports that his interests include being on the families boat and tubing. He also enjoys fishing, camping, and raising chickens. His mother reports that he also enjoys bee keeping. \*\*\*\*\* is not as interested in video games but did tell me he likes to play on his Nitendo 2 when he is in the car or waiting at appointments.

## LEARNING/READING MEDIA ASSESSMENT

### Reading:

\*\*\*\*\*'s primary learning and reading media is his vision. This is followed by an auditory mode which he uses as a back-up mode to learning. \*\*\*\*\* is currently being presented with materials in 14-20 pt font as this is the standard font sizes presented in his text and reading materials. \*\*\*\*\* is able to access this font, and smaller fonts, comfortably.

\*\*\*\*\*'s reading was formally assessed using the Jerry Johns Reading Program. The words and passages were presented in Sans Serif (a simple and easy to read font) 16 pt font.

Results for the **word lists** are as follows:

Grade band	Scoring	Errors	Reading Level Implications
Pre Primer	15/20	Street/start, first/find, party/please, got/goat, coal/know	Instructional/Frustration
Primer	15/20	Has/his, new/now, dry/dress, friend/father, clock/cookie	Instructional/Frustration
1 <sup>st</sup> grade	7/20	Right/ready, must/mother, ground/grough, laugh/long, nore/near, before/befriend, lamb/___, ride/right, store/star, high/hug, began/begun, made/bate, cry/cra	Frustration

\*\*\*\*\* is reading pre-primer and primer words at an instructional/frustration level \*\*\*\*\* is reading 1<sup>st</sup> grade words at the frustration level. He was provided with large print text, but his difficulty was not in identifying the letters within words, but had more to do with word attack skills.

\*\*\*\*\* was also assessed reading passages. The following are the results from the **reading passages**:

Grade Level	Oral Reading Rate	Total Miscues	Significant Miscues	Word Rec. Level	Comprehension
Pre Primer Level 1	47 WPM	0	0	Independent	Independent/instructional
Pre Primer Level 2	19 WPM	8	7	Frustration	Independent
Primer	37 WPM	8	8	Frustration	Independent
1 <sup>st</sup> grade	NA- listened	NA	NA	NA	Instructional

The results of this reading evaluation demonstrate that \*\*\*\*\* is reading independently between a pre-primer and primer level. His instructional level of word recognition is between the pre-primer and primer levels while his comprehension is at a first grade instructional level. \*\*\*\*\* is receiving school support for reading. \*\*\*\*\* is having difficulty with his word attack skills, but is able to comprehend passages on grade level instruction. \*\*\*\*\*'s oral reading rate significantly slowed as he read more difficult passages. This further emphasizes that \*\*\*\*\* should be provided with extended time to complete reading assignments.



## Writing:

\*\*\*\*\*'s dominant hand is his right hand. As stated earlier, \*\*\*\*\*'s handwriting is legible to himself or others. He is able to write within a given space and form letters correctly but it takes him extended time to do so. He uses regular pencils to complete assignments.

## SUMMARY

\*\*\*\*\* is a delightful seven year old boy who has been diagnosed with hypothalamic hamartoma which does not impact his visual acuity, but does impact his visual fields. \*\*\*\*\* is a visual learner and uses his vision along with auditory skills to learn. He is able to access standard size print from a comfortable reading distance. He demonstrated some difficulty with tracking vertically and shift of gaze activities involving different planes. \*\*\*\*\* would benefit from a line guide to assist him in keeping his place when he is shifting his gaze from the board to his paper as well as to keep his place when reading. \*\*\*\*\*'s eyes do not converge which could lead to visual fatigue when reading longer passages. A reading pane with a right side indicator may assist \*\*\*\*\* in detecting the edge of the page. \*\*\*\*\* may experience visual fatigue and should be given visual breaks when reading longer passages. \*\*\*\*\* should receive a low vision evaluation for the purpose of determining if optical devices will reduce the negative impact of his visual field loss. \*\*\*\*\* may benefit from a slant board to position materials closer to his face and in more of a central visual plane. \*\*\*\*\* should be permitted to either continue using his finger to help track a line of print or use a line guide to help him follow a line as he reads. \*\*\*\*\* preferred using a line guide with a highlighter to increase the contrast of the print. It is also advised that \*\*\*\*\* receive an evaluation from a Certified Orientation and Mobility Specialist (COMS) to determine if he needs to be taught skills for safe movement as well as skills and strategies for being a non-driver.

## Statement of Eligibility

According to the (State) Department of Education State Rules, a student must have a visual acuity of 20/70 or less in the better eye after correction or a visual field loss that negatively affects visual performance. \*\*\*\*\*'s visual acuity in his right eye is 20/20 and 20/25 in his left eye. Dr. \_\_\_\_\_ identified that \*\*\*\*\* has 50 diameter remaining in his visual field. Using a combination of information gained from \*\*\*\*\*'s eye report and this Functional Vision Evaluation, it is my professional opinion that \*\*\*\*\* is eligible and in need of service from a Teacher of Students with Visual Impairments at this time as his field loss is impacting his safe movement and his reading skills.

## RECOMMENDATIONS:

### General

- It is recommended that \*\*\*\*\* receive an **clinical low vision evaluation** for the purpose of assessing \*\*\*\*\*'s vision and prescribing any low vision devices to meet his visual needs.
- It is recommended that \*\*\*\*\* receive an evaluation from a Certified Orientation & Mobility specialist (COMS) to determine if he needs instruction in skills for safe travel.
- The school needs to have **copies of eye reports** when \*\*\*\*\* sees the eye doctor. Please forward copies to the Teacher of Students with Visual Impairments so his condition can be monitored for changes and new findings.
- Teacher's should be aware that \*\*\*\*\*'s **visual performance may fluctuate** due to changes in fatigue or illness.

### Instructional Accommodations

- \*\*\*\*\* may experience eye fatigue and may need **extra time** to complete tests and assignments with extensive reading and writing.
- \*\*\*\*\* should notify the teacher when eye fatigue occurs and he should be **given a break** if needed.



### Seating Placement

- \*\*\*\* should have **preferential seating (front and on the right side of instruction)** in the classroom to minimize the negative impact of his visual field loss.
- \*\*\*\* should be provided with the option to have **preferential seating for all films and assemblies, labs, and demonstration lessons**. Please allow him to be accompanied by a peer to avoid being isolated.

### Presentation

- \*\*\*\* should be given **copies of any notes** if students are expected to take notes from the board.

### Material Adaptations

- Provide \*\*\*\* with a **line guide** to assist him in reading. \*\*\*\* preferred a line guide with a yellow highlighted filter as it increased the contrast of the print.
- Provide \*\*\*\* with a **reading pane** with a right sided indicator to assist \*\*\*\* in locating the edge of the page so he does not miss information. Alternatively, a Post it could be attached to the right hand side of the page to draw \*\*\*\*'s attention to the end of the line.
- Provide \*\*\*\* with a **slant board** for reading and writing to bring the print closer to his eyes and on a closer visual plane.

### Student Responsibilities

- \*\*\*\* should let the teacher/presenter know when he is not able to see.
- \*\*\*\* should **self advocate** for his visual needs.

Name

Teacher of Students with Visual Impairments  
Date

