Monocular Fixation in a Binocular Field

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Learning Objectives:

1. Understand the levels of sensory fusion
	* Monocular
	* Monocular Fixation in a Binocular Field
	* Biocular
	* Binocular
2. Use activities in optometric vision therapy to develop each sensory level:
	* Equal vision skills in each eye (accommodation, fixation, pursuit, saccade, perception)
	* Improve monocular fixation when both eyes are open.
	* Awareness of simultaneous perception.
3. Learn techniques to decrease suppression.
4. Use activities that create luster.

**Monocular**

* Use one eye at a time
* Goal: Equal vision skills in each eye

**Monocular Fixation in a Binocular Field (MFBF)**

* One eye sees detail and the other eye sees the background in the same space.
* Goal: accurate perception of details with one eye and the perception of the background with the other eye.

Most Monocular Activities can be modified to MFBF –

1. Change the occluder to a filter

2. Change the target so it cannot be seen with one eye

**Occlusion Types**

* Complete: “pirate” patch, “Band-Aid” patch, occluder, hand
	+ Fully occluded? Then MONOCULAR

**Occlusion Types - MFBF**

* Translucent: light, but no detail.
	+ One eye can see background only? Then MFBF
* Red Lens
* Green Lens
* Blue Lens
* Cyan Lens

**Most important Concept:**

**RED plus GREEN = BLACK
RED plus WHITE = RED
GREEN plus WHITE = GREEN**

# **MFBF #1: WHITE background, RED detail, RED patch or Red/Green Glasses**

WORKSHOP: Red Ink Activities

1. White board/Red marker
2. Line scrubbing
3. Pegboard
4. Franzblau
5. Red Pencil
6. Copier with pink setting
7. Red mazes
8. Red dot-to-dot
9. Red letter tracking
10. Wayne directional sequencer
11. Red coloring book
12. Sudoku puzzles
13. White fish with red letters
14. Red/Red Rock tiles
15. White Sherman Cards
16. Red/Green Toy box train play set
17. Sanet Vision Integrator (SVI)
18. [**Joanna Carter**](https://www.facebook.com/joanna.carter.752?fref=ufi) I'd check [www.bernell.com](https://l.facebook.com/l.php?u=http%3A%2F%2Fwww.bernell.com%2F&h=ATNuWKQedbBnuTQYPdFmukqzelkkWQvCCbZCbSdOTSpHyqh2Ww5W66P_9BvshwO47tbjXT3GnZgXgtSizp09HnsRZr00Kx75V71lyPLVBK1cj9ff2SRUXniapvTKEc_4iVGHRJjHoaqqKkGgdSoQ) or Red Green Toy Box. On Amazon there's a Pinkalicious Pinkadoodles book that almost-entirely cancels. But we make our own, and others have shared theirs with us. The color combo that cancels is: R194, G24, B52. So you can make word finds, Hart Charts, etc. with that color. Hope that helps.

Red print test screen.

Modification: Green detail on White background

* White board/Green marker
* Green highlighter/crayon
* Workbooks
* Red/Green toy box activities
* Vision Tap and Opto Apps

MFBF #2: BLACK background, RED detail, RED patch or Red/Green Glasses
WORKSHOP ACITIVITY: Black Felt Activities

* Goal: accurate perception of details with one eye and the perception of the background with the other eye. Also, the perception of luster, Anti-suppression, and Detail recognition

WORKSHOP ACITIVITY: Tap-n-See Now Little Bear Sees

* Background = Black, Images = Red, Select size and speed
* Both eyes see the iPad, but only the left eye can follow the red bear.

Modification: Green Detail on Black Background

* Black Felt with Green pom poms
* Black Felt with Green felt shapes and letters
* Marble Game

MFBF #3: RED background, BLACK detail, GREEN patch or Red/Green Glasses

1. Black Print (eye under red lens sees detail)

* + Franzblau
	+ Red Sherman Cards
	+ Red Perceptive Cards
	+ Red Carl’s Cards
	+ Talking Pen
1. Modification: White Print (eye under green lens sees detail)
	* Fish Cards
2. Modification: Red Filter (eye under red lens sees detail)

# MFBF #4: GREEN background, RED/GREEN glasses

* + Eye under green lens sees detail

**MOST IMPORTANT CONCEPT:**

* **A red filter only allows RED light through and blocks all other colors**
* **A green filter only allows GREEN light through and blocks all others**
* **A blue filter only allows BLUE light through and blocks all others**

MFBF #5: RED background, RED LIGHT, RED/GREEN glasses

The red light is blocked by the green filter. Use the red lens on the fixating eye.

1. Saccadic fixator
2. Accuvision

Modification: Red Filter + White paper +White Light

1. Mazes with red filter
2. Posture Board
3. Red Light Red Ring
4. Lite Track

# MFBF #6: RED LIGHT, GREEN LIGHT, BLUE LIGHT

* Press Lites
* Finger lights

**Clinical Consideration**

* Alternate Red/Green or Red/Blue lenses with activities to fixate with each eye.
* Use flipper
* Biocular Activities that use Red/Green (or Red/Blue or Red/Cyan) glasses – are basically MFBF with alternation.
	+ *For MFBF: select just one color combination of a binocular or anti-suppression activity. For example, only the perceptive cards that are red with black ink.*

**Biocular (Bioc)**

* Goal: to improve the ability of both eyes to alternately shift focus in **an un-fused situation**, which will facilitate anti-suppression and prepare the patient for simultaneous perception.
1. Red Green filters placed side-by-side on reading material, crossword puzzle, hidden pictures.
2. Polarized or Red/Green bar readers with the appropriate glasses
3. Sherman Cards
4. Red/Red Rock
5. Perceptive or Carl’s Cards- entire deck
6. Anaglyphic projection= projected hart chart with overlays onto wall.
7. Dichoptic Training and Suppression Control

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