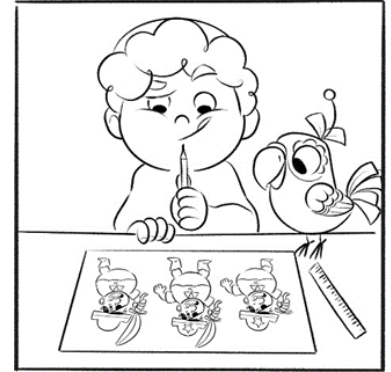


Flat Fusion Cards (binocular fusion & eye teaming)

This activity helps develop a flexible interaction between the focusing and eye-teaming systems. Effective binocular fusion and eye teaming skills help you see crisp, sharp images and provide good depth perception because your brain effectively combines the images it has received from each eye separately and creates a single 3D image. This combining of the two eye views, often simply called fusion, is controlled by the sensory and motor functions of our eyes and is the basis of our depth perception. If the separate views from your two eyes were not fused together, you would not be able to see in 3D.

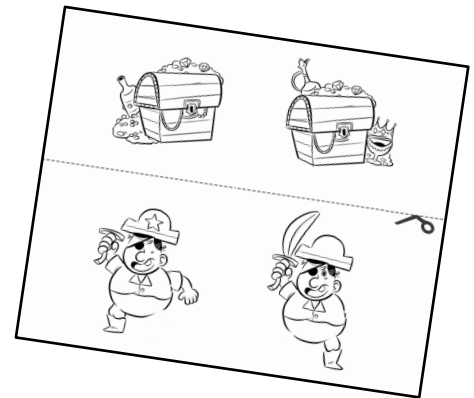


What you need

- A pencil
- A pair of scissors
- Fusion practice cards
- A tracking sheet to document your practice

Preparation

- Download fusion practice cards and a tracking sheet from the website.
- Separate the cards by cutting along the dotted lines.

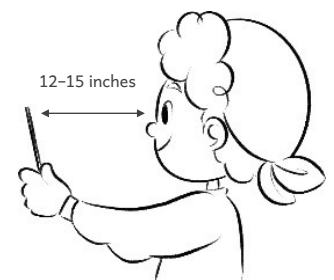


Activity

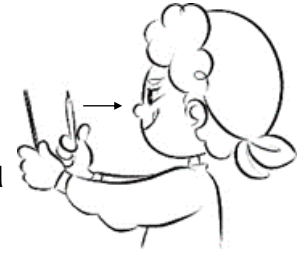
This activity can be done in a sitting or standing position.

Level 1 - Emerald

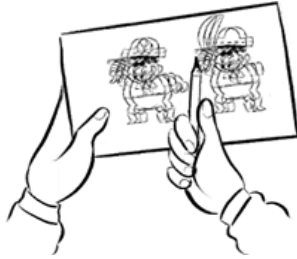
- Center the card between your eyes. Hold it at eye level in front of you, so it's about 12-15 inches away from your eyes. You can also set the card on a table or lean it against something. Sometimes that's easier so you can focus better on the next steps.
- Hold a pencil (with the tip pointing up) centered (vertically and horizontally) between the two images and close to the card. Focus all your attention on the tip of the pencil and only look at that. As you focus on the tip of the pencil, you will notice that you see the two pictures out of the corner of your eyes (this is called peripheral vision). Keep focusing all your attention only on the tip of the pencil.



- Move the pencil very slowly toward your nose. Keep looking at the tip of the pencil the whole time as you bring the pencil closer to your nose. Never look away from the tip of the pencil.



- When the pencil is about 7 or 8 inches away from the card (or above the table), you should notice in your peripheral vision that the pictures are doubling up. You'll see four pictures. Even though you notice all of this, keep focusing only on the tip of the pencil. Keep moving the pencil toward your nose. You'll notice the two middle pictures merging into one single picture. The first few times, it can take a little while. It may look like the two pictures are merging, but then they pull apart again. It may take you 15-30 minutes or even longer to have the pictures merge. Don't give up. When you do this for the first time, you may need to



move the pencil back and forth a little until you find the spot where the two middle pictures can merge. When the two middle pictures merge, a slight 3D effect will happen (this will be weak since you're using 2D pictures). From your peripheral vision you'll still see two other pictures (that's normal, these are the partial pictures), but only the middle, fused picture is complete. It's also a bit sharper and closer.



- Note how long and with which pictures you practiced. You may also notice some tricks that you can share with others.

Important Notes

The first time you do this activity it can take some time before you can complete it successfully. Don't give up. It may take over 20 tries. Try different pictures. Pay attention to the distance of the card and make sure the pencil is centered horizontally and vertically between the pictures. Your eyes need to stay on the tip of the pencil in between the pictures the whole time. Your eyes can't jump back and forth between the pictures. Also, vary the speed with which you move the pencil towards your nose. In the beginning, it's very common to move the pencil too fast. If it seems like you're getting stuck, or if the fused pictures become unfused again, slow down the movements, go back a little and move forward again or start over from the beginning. Take enough time to practice. After you have successfully completed this exercise once, the next times will be much easier because your brain has learned how to fuse the pictures. Give your brain enough time and practice opportunities and you'll find out that your brain is genius!

Give the child at least a week to practice. If a child still struggles with the exercise after many tries, it is recommended to visit a behavioral/developmental optometrist to ensure the child's brain is not suppressing the vision of one eye. The following websites have useful resources to locate specialists nearby:

<https://locate.covd.org> and <https://www.oepf.org>.

Recommended Practice

Practice 5 minutes, 2-3 times per day, 3-5 days per week depending on a person's performance level. Notable improvements can be achieved within days or weeks.

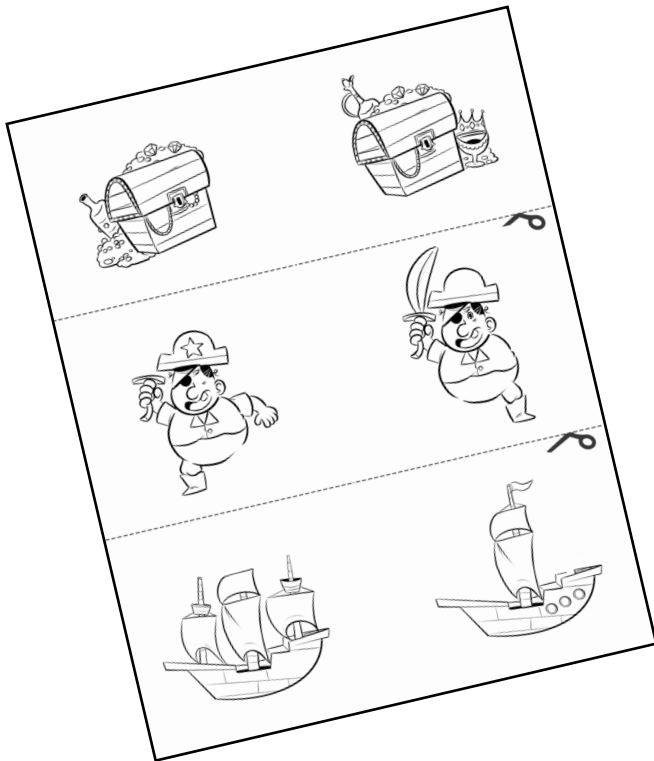
More Advanced Levels

Only move to more advanced levels if the current level can be completed successfully.

Download additional practice cards from the website.

Level 2 - Sapphire

- Download the Level 2 practice cards. You'll notice the pictures on these cards are farther apart.
- Separate the cards by cutting along the dotted lines.
- Follow the directions and recommendations from Level 1.
- When the two middle pictures merge into one single picture, keep focusing on the merged picture while removing the pencil. Can you keep the merged picture in your vision without the pencil? If you lose the picture, simply start over to restore the merged picture.
- Note how long and with which pictures you practiced. You may also notice some tricks that you can share with others.

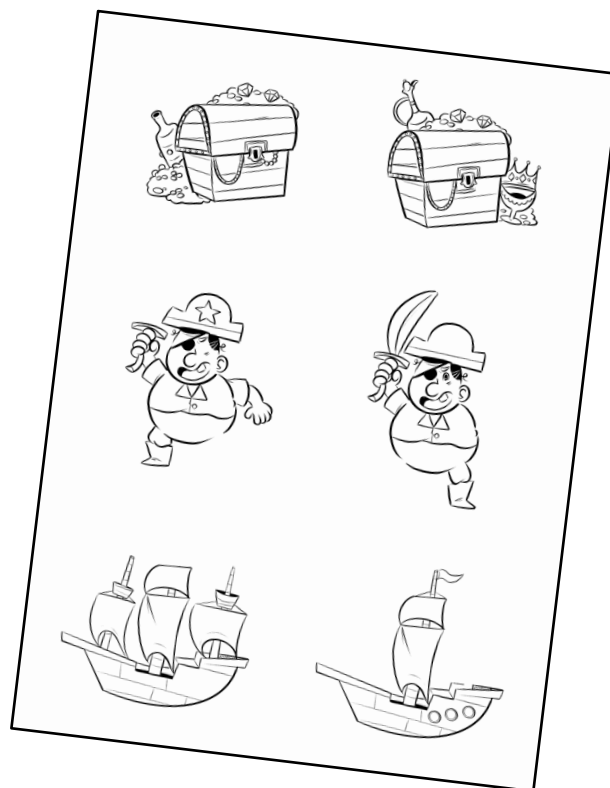


Level 3 - Fire Agate

- Download the Level 3 practice cards. You'll notice the pictures on these cards are even farther apart.
- Separate the cards by cutting along the dotted lines.
- Follow the directions and recommendations from Level 1.
- When the two middle pictures merge into one single picture, keep focusing on the merged picture while removing the pencil. Can you keep the merged picture in your vision without the pencil? If you lose the picture, simply start over to restore the merged picture.
- Note how long and with which pictures you practiced. You may also notice some tricks that you can share with others.

Level 4 - Blue Fluorite

- Download the Level 4 practice cards. For this activity, you won't cut up the cards. The three groups of pictures are kept together.
- Follow the directions and recommendations from Level 1 to fuse the two middle pictures in the top group. When those two pictures have merged into one single picture, keep focusing on the merged picture while removing the pencil. Can you keep the merged picture in your vision without the pencil? If you lose the picture, simply start over to restore the merged picture.
- When you can hold the merged picture in your vision without the help of a pencil, move your gaze down between the pictures in the second group. Can you see the merged picture there? If so, move your gaze farther down between the pictures in the third group. Can you see the merged picture there too? If so, move your gaze up and down between the three groups of pictures. Can you jump up and down between the merged pictures? If you lose the merged pictures, simply start over to restore the first merged picture.
- Note how long and with which pictures you practiced. You may also notice some tricks that you can share with others.



Level 5 - Tiger's Eye

- Can you fuse the pictures without the help of a pencil?
- Start with the Level 1 cards and work your way up to the Level 4 cards.
- Note how long and with which pictures you practiced. You may also notice some tricks that you can share with others.