

BETTER VISION CLASS

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EYESIGHT IMPROVEMENT THROUGH AWARENESS.

People live longer and better by exercising on a regular basis. Appropriate action prevents poor health. Almost everyone takes time to brush their teeth. Millions go to health spas to work their muscles and climb imaginary steps toward greater strength and cardiovascular health or relax into yoga postures to improve neuromuscular elasticity and self-control. Everyone takes for granted that piano playing, horse riding, golfing, swimming and jogging improve through practice. **Why not eyesight and ocular health?**

Authorities don't really know why or how poor eyesight develops. Yet they advise with great certainty that eyes get worse, not better, and once the eyes start to go, nothing can be done about it. It is as if the eyes have a mind of their own and we don't have much to do with what happens. In my experience, we don't have to be passive victims. **Eye deterioration can be stopped and even reversed.**

To improve your eyes, you must learn to **relax excess muscle tension and mental strain**. This is difficult because chronic eye tension feels "normal" and eyestrain goes unnoticed. Poor vision is a habit and changing habits is not easy because they are unconscious and penetrate our deepest structure.

Take your glasses off. Do this especially in non-demanding, non-threatening situations. Spend some time without your contact lenses. You are not blind, and though you can't see what you think you are supposed to see, you can see what you can see. So pay attention to that. You can also get a weaker pair of glasses. Some people experience strong emotions when go with no glasses or a reduced prescription. This will pass and as your eyes improve you will feel more comfortable without glasses.

Stop staring! Often we try to see more than is there. Fear of misreading or misunderstanding what we see makes us strain for the details and neglect the whole. Like a startled rabbit, we freeze and stare to search for hidden danger. **Self-awareness evaporates**, blinking stops, breathing diminishes, and neck and back muscles tighten. This loss of mental flexibility creates a numb, unconscious strain, a mental blindness that ultimately distorts vision. Poor sight is rarely noticed until after the fact. Staring is the enemy.

Blinking and breathing is the best chance you have for monitoring and relaxing eye tension. It's easier to notice breath-holding than eye tension. So relax, enjoy, and make sure you are exhaling and inhaling.

The exercises below make you aware of how you stiffen to see. But awareness is only the first step. **Remembering to be aware** is next. Make a "**BLINK AND BREATHE**" sign for your dashboard, desk, refrigerator, wristwatch, book-mark, etc. Make a point of breathing and blinking when you prepare a salad, pay your bills, read your mail. . . .

Once you remember to be aware, you must teach yourself to **extend the awareness** for more than a few seconds. To do this, choose a task of about thirty seconds duration as a goal. Try to blink, breathe and release tension for the whole thirty seconds until the task is completed. Then find another short task as a goal. Each time you succeed add another short task. For example, in driving you can find a bridge or sign thirty seconds down the road and **blink and breath** until you get there. Next, choose another point a short distance away, then another, etc. If you select too long a period, you will forget for sure. **Start with simple activities that don't require much concentration.** After you get used to breathing for long stretches while doing easy tasks, try prolonged breathing and relaxing in more demanding ones like reading or using the computer. Soon you will break the habit of staring and holding your breath.

Here are four key steps to changing a habit:

1. Become aware that something needs changing
2. Remember to be aware
3. Prolong your attention span for the awareness
4. Maintain awareness in demanding situations

Blink and Breathe Now!

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BASIC EXERCISES FOR VISUAL RELAXATION

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To be done several times a day to relax your eyes during prolonged computer work. Do for thirty seconds, three minutes or a quarter hour they can make a big difference in relieving eye and mental strain. The more often and longer you can remember to do them the better. Remove your glasses and when possible your contact lenses.

PALMING

This is a simple and natural act with profound effects. It calms the mind, reduces anxiety, relaxes eyestrain and improves vision. All you have to do is sit down, lean forward, rest your elbows on your desk, close your eyes, and cover them with the palms of your hands. It's the palms (concave part), not the fingers or heel of your hands that cover the eye sockets. As you lean over, bend from your pelvis and lengthen your back up to your skull so that your neck and spine are extended, not flexed back, and your shoulders are broad. You can also sit with your elbows propped on your knees, a chair back or cushion or you can rest on your back or side with pillows to support your arms. Clear your mind, relax your muscles, and breathe continually.

Feel your eyes give up the tension of trying to see. Let go as much as possible. Relax your hands, feel them pulling energy through your eyes. Let go to allow visualization without strain. Palming sessions can last for just ten breaths or for several hundred. The most important thing is to keep breathing. Most people can see more clearly after a just few minutes of palming.

Palm daily. Do it in the morning to start the day with relaxation and awareness. Do it at night just before bedtime for a more relaxed and healing sleep. Palm before any visually demanding task or when you feel the need to relax your eyes or calm yourself. Make it a life-long habit. Two things happen after several weeks of palming. You get better at it — the relaxation becomes more profound and you get to it more quickly. Also you **memorize the feeling of palming**. Now you have something to compare with the unconscious ocular tension that feels normal but locks your mind and eyes in an unhealthy posture.

SHIFTING

Close your eyes. Slowly rotate your head to the left and right. Keep it level and free. Release tension in your eyes. Let them float as you move your head back and forth around your neck. Imagine your nose is a long paintbrush extending to the wall in front of you. Keep your attention on the brush and visualize objects in the room shifting past the brush as you turn. Become aware of how your knees, the desk, computer, walls, floor, etc. seem to flow past the brush. Imagine the background objects moving together in a three dimensional unit. Allow your mind to release into the movement. Imagine the paintbrush extending to various distances - 10 feet, 10 yards, 10 miles beyond the wall. Also try this with eyes open (keep blinking) while visualizing the movement. **KEEP BREATHING**. Relax your body and eyes.

SUNNING

Face the sun (or other bright light source such as a 120W “spot” reflector light bulb). **EYES CLOSED**. Allow the warmth to penetrate deeply into the skin of your eyelids and face. Feel the position and movement of the sun and other objects as in the shifting exercise above. Keep your neck upright and relaxed as you slowly turn your head left and right. **KEEP BREATHING**. Alternate between **twenty breaths of sunning and ten of palming**. Try to do at least once a day for five minutes.

BLINKING AND BREATHING

Beware of staring. Learn to catch yourself staring. It is a bad habit. Try Blinking and Breathing instead. Whenever you become aware of staring, contracting your body, or holding your breath, **blink your eyes rapidly and take two big breaths**.

Also become aware of how you over-tense your body as you try to see. Check your **jaw, tongue, throat, neck, shoulders, chest, hands, feet, stomach and pelvis**, for tension. Other activities also help. Yoga, meditation, massage, Feldenkrais, Alexander, Rolfing, dancing, running, walking, swimming, breathing are all excellent supports for vision work.

Other exercises and more complete descriptions can be found in the following:

S. Berne: [Creating Your Personal Vision](#)

J Goodrich: [Natural Vision Improvement](#)

R-M Kaplan: [Seeing Beyond 20/20](#)

T. Quackenbush: [Relearning to See](#)

M. Corbett: [Help Yourself to Better Sight](#)

A. Huxley: [The Art of Seeing](#)

J. Liberman: [Take Off Your Glasses and See](#)

T. Quackenbush: [Better Eyesight](#)

Procedures that calm your mind and relax your eyes.

VISUALIZATION EXERCISES FOR PALMING

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THE LIGHT TOUCH

Vary how hard your hands press on your face as you palm. There is a **special feeling of spreading relaxation** that comes at a certain point as you reduce the pressure. First push firmly on your face and then ease the pressure little by little. Continue for several minutes making the touch lighter and lighter. Imagine feeling the bones around your eyes expand as if to keep in contact with your hands. Imagine your hands getting larger, fingers longer and feel your facial bones expand to keep contact. Imagine your eye sockets stretching. Let your eyeballs grow to fill in the space. **Feel as if your hands are drawing a flow of energy out of your eyes.** Continue for several minutes. When you get good at it, you will be able to relax yourself at any time by recalling the feeling of this special touch.

THE BIG SQUEEZE

The basic procedure is as follows. Palm, breathe, and tighten your eyelid muscles to squeeze both eyes shut. At the same time, relax all facial muscles except those needed for the squeeze. Release your forehead, between your eye brows, your mouth, lips, ears and jaws. Concentrate on isolating the squeeze muscles from the rest. **Pay attention to your breathing.** Relax other places in your body as much as you can while still squeezing and breathing. Throat, back of neck, shoulders, hands, arms, stomach, pelvis, knees, feet, or toes don't have to be tight in order to squeeze your eyes closed.

Start by squeezing a full, hundred percent. Hold it and then relax as described above. After several breaths, squeeze again, but this time use only half the force of the first effort. Hold, breathe, isolate, and again release after several good breaths. Keep breathing and continue the same process but squeezing only one-fourth of the original. Repeat again at one-eighth power and feel for the spread of relaxation after releasing the squeeze.

The next step is to go through the whole procedure again **in your imagination.** Imagine squeezing a hundred percent. Isolate the feeling by imagining that only the necessary muscles are contracting. Relax the others in your face and body. After several breaths release the imaginary squeeze and feel your mind and body let go. Continue through the rest of the process reducing the imagined squeeze at each step.

Practice the final 1/8 imaginary squeeze several times. The goal for this is two-fold: to become sensitive to subtle tension in and around your eyes and to learn the action of willing your eyes to relax. Remember to bring this new skill into awareness throughout the day.

FIVE FINGERS EXERCISE

Willing your body to relax is not easy. If you concentrate on relaxing the tension in one part, other parts can tense up. You often find yourself chasing tension around your body, relaxing one part while being unconscious of tightness elsewhere. In this exercise the fingers provide an organized map for systematically relaxing the whole body. **Each finger represent a different section of the body** and the procedure is to relax each finger and at the same time the matching body parts.

1. The **little fingers** cover the toes, feet, ankles, lower legs, knees, thighs, groin and pelvis.
2. The **ring fingers** cover the pelvis, lower back, abdomen, middle back, and chest up to the arm pits.
3. The **middle fingers** cover all the fingers, hands, wrists, forearms, elbows, upper arms, shoulders, back of neck and head, top of head and forehead.
4. The **index fingers** cover the throat, back of tongue, jaw, mouth and lips.
5. The **thumbs** cover in and around the eyes and the mind.

Palm, breathe, relax the pressure of your hands on your face, and think of relaxing your little finger. Imagine it getting longer and looser. At the same time, go through each part listed above for this finger. Put your mind on the finger and then on the leg and pelvis and then back and forth as you imagine letting go of deeper levels of tension as you find them. Imagine the joints opening into more space and the other parts getting longer. You can do this for just a few breaths or as many breaths as you need to cover all the tightness you discover.

Go through each finger alternating between the body parts and the fingers. Try taking three breaths for each finger. If you feel like you want to do more after completing all five fingers, start the whole process again from the little finger. You can do this as many times as you want. Try one breath for each finger.

You will probably discover tension in parts of your body that you are not now aware of. You will get better as you do this and soon just thinking about a finger will automatically relax its corresponding body part. It is not necessary to palm while doing the five finger relaxation.

DOING THE "ABC'S"

If you have trouble seeing pictures in your mind. Trying to visualize makes many people anxious and frustrated. To learn to visualize, try the following exercise. Palm for one hundred breaths to calm yourself. Count each breath. If your mind wonders and you forget what number you are on (a sign of anxiety), go back to one and start over. You may have to make many attempts before you finally succeed. When you do, you will be relaxed enough to continue with the next phase. Don't worry if you fall asleep in the procedure, the deep rest will do you good and in the morning you may have better luck.

Continue palming and say to yourself, "I call for the letter A." Wait for the letter to come but don't try to do anything to make it come. Do this for three breaths without judging or frustrating yourself. Then let go of A and "Call for the letter B." After three breaths, drop B and call for C. Continue through the rest of the letters without expectation, effort or judgment.

Do this in the morning and at night for two months. At first you may get no images but after several days or even weeks, letters may come. Soon more letters and then all of them will appear. As they become stronger you will be able to manipulate them with just a thought. You might make the letters shrink or grow larger. You might turn a letter up-side-down or make one of wooden blocks and see three dimensional. It may take a long time and require much of patience but if you want to be able to visualize, this exercise may work for you.

CHANTING TWELVE THROUGH ONE

In this exercise you make a long sustained sound using different parts of your vocal mechanism. Voicing sounds make the inside of your head vibrate. Different sounds vibrate different parts of your head. Try the following: close your ear holes with a finger tip; make the sound of the letter N; feel the sound vibrate the inside of your head; change the sound to that of a V; feel the sound vibrations move to different places in your skull. Try the different vowel sounds. These vibrations seem to relax and cleanse your brain.

The first twelve numbers contain many different sounds. And it is easy to remember the sequence even if your mind lets go into the feelings. Proceed by closing your ear holes, taking a big breath and then vocalizing the number twelve in slow motion — ttttttt-wwwwwwww-eeeeeee-l-l-l-l-l-l-v-v-v-v-v-v-v-v-eeeeeee — making the segments last for the whole exhale. Take another big breath and do eleven — eeeeeee-l-l-l-l-l-l-l-l-eeeeeee-v-v-v-v-v-v-v-v-eeeeeeee-n-n-n-n-n-n-n-n . . . , then ten, nine, eight and so on. Feel the vibrations open up the inside of your head. Experiment with opening your throat and nose to get maximum vibration and energy.

PALMING EYE STRETCH VISUALIZATION

Eye stretching is good for your eyes because it increases the blood flow to your eyes.

Palm in a comfortable posture and breathe slowly and deeply for ten breaths while relaxing. Imagine your neck is relaxing, allowing your spine to get longer, your shoulders to broaden and drop and your stomach to release tension. Pay attention to the symmetry of the two sides of your body.

Feel for subtle details, for a slight torque in your physique. Do your hips, shoulders, chest or neck feel aligned or twisted left, right, up or down? Do your relaxed eyes aim forward or seem to pull in some other direction. Relax into the sensation that your body and eyes are radiating a beam of energy aimed straight ahead of you extending to infinity. Hold this forward orientation, untwisted and unified in your awareness as you breathe.

Once you achieve the sense of your body's direction, begin the eye stretching exercise.

Inhale and then move your eyes all the way to the left. Stretch them but don't over-do it. As you slowly exhale keep your eyes left. Feel your body. Does it seem to twist in reaction to your eye stretch? Work to keep the centered, forward orientation described above. Inhale as you continue with eyes oriented left and body forward. Now move your eyes to the center and exhale, letting go of all effort. Feel your body relax. Continue as you slowly inhale.

Next stretch eyes to the right and exhale repeating the steps above: Move, exhale and inhale for each eye position. Return to center between each direction. Stretch first to the left, then center, right, center, up, center, down, center, upper-left, center, lower-right, center, upper-right, center, lower-left, center. Work to develop subtle awareness of body orientation and a unified, relaxed anatomy that does not twist off center in response to eye posture. These eye stretches can be practiced with eyes open or closed, palming or not.

LOVE, TRUST AND GRATITUDE

Try the following visualization. You can do this visualization at any time, even without palming. It takes just a moment when you get good at it.

Remember a person or animal for whom you have a strong love. Recall an actual event or make one up. Stay in the scene allowing the feeling of loving that person, place or thing to grow until you experience an outflow of energy from your body towards the object of your love. Once you feel this bodily shift, let it build. Now you are ready for trust.

Develop trust feelings by recalling the many times you succeeded beyond your expectations even though at some time in the process of getting there you were convinced that you would fail. Regardless of the real truth -- you almost always succeed, -- during times of struggle you still see doom rather than victory. Say to yourself, "How can I predict failure with such certainty when with so many examples that my anxiety was premature. Who am I, from my lowly perspective, to doubt that some larger force helps and blesses me in my efforts." Remember a time of great success. Experience the sense of accomplishment and a connection beyond yourself. Let your body sense a fullness and certitude about yourself and that a love and commitment is extended to you from a higher power.

When you experience this in your body, go back to your love pictures. When the love streaming come, shift again to fill yourself with trust. Go back and forth until both physical sensations blend, the peace of trust and the joy of love. Bath yourself in love and trust for a few moments.

From deep inside let a bubble of gratitude expand and burst and flow out to blend with love and trust. Experience the clarity and grace of the love, trust and gratitude consciousness. This feeling is you and you can attain it by playing with the above images as often as you will. The more you play, the more you will sing.

Learn to look with love in your eyes. It's easy to see emotion in a person's eyes. Actors learn to make their eyes angry or fearful. They also learn to make them loving or trusting. So can you. Angry eyes appear less relaxed than loving, trusting or grateful eyes. These are healthier ways to use your eyes. Practice looking in ways that produce wellness. Practice by consciously gazing with love, trust and/or gratitude at something easy: a pet, a photo of a loved one, or if you're lucky, at an actual loved one. Expand your practice to include everyday objects like your computer, a book you are reading, and the TV newscaster. Eventually you will even be able to do it with your tax forms. Now try it with co-workers, family members, service people or, if you dare, strangers and people with whom you are in conflict.

REMEMBERING BLACK

Remembering blackness can be very restful to the eyes and mind. Palm, breathe, relax and remember something that you once saw. My grandmother had a very black coat. I once saw a Cadillac painted metallic black, it was at night in yellow sodium street lamps and I still remember how black it looked. Patent leather shoes. Albert, our neighbor's dog, a black cat I running away from me on the sidewalk.

Think of a black hat for three breaths. Breathe and wait for the memory of the black hat. Then think of a black shoe for three more breaths. Continue with a black cat, dog, horse, umbrella, licorice, ink blot, dress, purse, belt, piano, bird, whale, car, or book. Continue with as many items that fit into your practice time of or repeat some of the same ones. Don't strain for an image and don't feel badly if one doesn't come. Just wait with patience and energy.

Chart Work – Relax While Clearing Details

Use this chart to learn to look at details in a new way. Work on this after you've practiced palming, sunning, shifting and blinking and breathing in order to become more aware of your tension patterns and have begun to learn to attend with patience in order to let go of the effort or strain to see. Always prepare yourself for chart work by palming. Use the light touch, the five fingers procedure and the sunning exercise (use a bright 120w spot reflector bulb or the sun). Take frequent breaks 50 per cent of chart work should be relaxation and 50 per cent learning to look in a new way. Stop when you sense visual stress or fatigue.

Use the ABC chart under bright light. Sit or stand where you can read the larger letters easily but not the smaller ones. Rid your mind of the anxious desire to see. Be patient. Don't strain for clarity by immobilizing eyes and mind. Instead practice glancing at a letter, softly closing your eyes, breathing and recalling the glance. Relax and then repeat. Be content to glance without expectation, negative judgment or self-doubt. If you see blurred images, do nothing. Make no effort, breathe and allow the image to change by itself. Breathe, blink and practice letting go in your feet, legs, pelvis, stomach, hands, shoulders, neck, jaw, and eyes.

Try rapid and slow blinking. Rapid or butterfly blinking breaks the stare. Look around your everyday world to practice this blink all through the day. Do the letters get blacker and clearer when fluttering your lids? In slow blinking you close your eyes longer to let them relax (practice the imagined 1/8th squeeze then relax) and then gently open. Can you feel how your eyes tighten as you strain to see? Breathe and relax instead as you gaze with love, trust and gratitude to see the letter. You can also try the "Quick Deep Blink." To do this: squeeze your eyes closed, quickly snap your eyes open and look again while blinking and breathing. Repeat as you watch the letters clear. Be sure to blink and breathe after each deep blink. Exercise with each eye alone and then both together. Palm your eyes before starting and after each step of this drill.

Step One: Glance over your left shoulder and with eyes open and blinking, sweep your head and eyes to the big 'A' on the top line. Close and rest your eyes as you breathe, recall the 'A' as you continue turning your face toward your right shoulder. Open, breathe, blink and turn your head to the 'B'. Close, relax and breathe as you move to the left shoulder. Open, breathe, blink and to the 'C'. Repeat with the ABCD on the next line and the ones below. Slide your gaze along the bottom of the row to get to the letter you want. That teaches the eye to shift, then to centralize or see the one letter better than all the others in that pattern of shapes. Palm and relax your eyes.

Step Two: This is a conscious motion done by the big muscles of the eyes. Breathe deeply; open the eyes on the large 'A' in the upper line, then drop your sight to the smaller 'A' on the next lines. Close your eyes and relax. Open again on the big 'A' and drop to next smaller 'A' and then the one below that. Repeat for the whole set of 'A's even though you won't see anything but fuzzy blobs as the letters get smaller. Close and breathe. Continue with the big 'B' and then the big 'C'. Be sure to close after every shift. Clear vision comes only while your eyes are rested and relaxed. Palm often to relax the eyes.

Step Three: Practice systematically, with very short rhythmic swings, deep and slow breaths and rapid blinking, look at the large 'A'. Pay attention first to the top of the letter, then to the base; then shift the eyes and mind once more to the top and again to the base. Up and down, up and down, two or three more times. Then close the eyes in a relaxed way and breathe deeply but gently. Repeat for the other large letters. Try the smaller letters, moving your chair closer if necessary for the smaller ones. Palm and relax the eyes.

Step Four: Palm. With eyes closed think of a letter. Open and see how quickly you can find it on the line with the smallest letters you can distinguish, quickly close your eyes, think of it again and find it on a next smaller line of letters. Do the same with other letters (A-G).

Don't try to rush through the entire chart, practice a little of each step and then go back to the part that felt the easiest or best. Close your eyes often. If you rest before you tire you won't tire. Practice this throughout the day on everyday details. Find, close, remember and keep breathing and moving.

A B C

100

A B C D

75

A B C D E

50

A B C D E F G

35

A B C D E F G

25

A B C D E F G

20

A B C D E F G

15

A B C D E F G

10

A B C D E F G

7.5

A B C D E F G

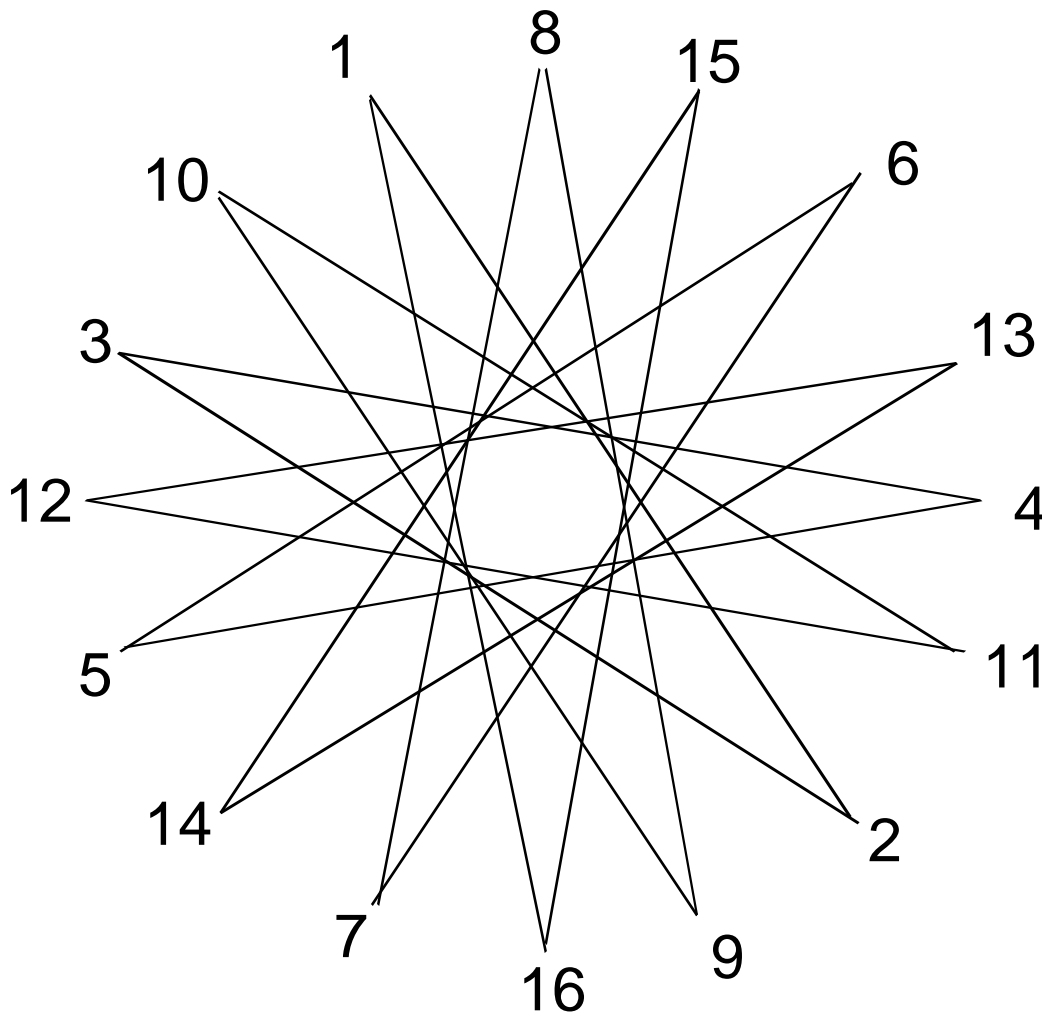
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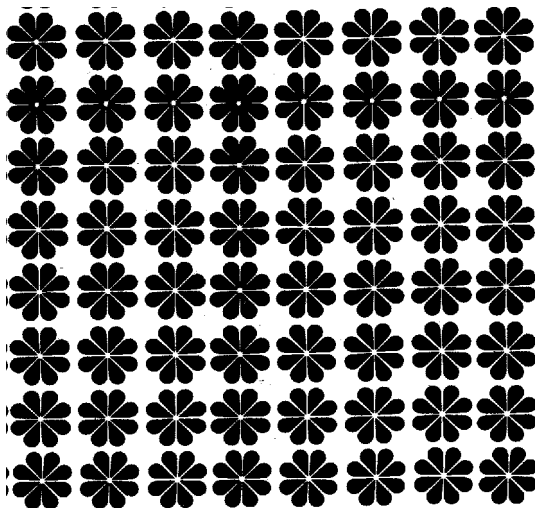
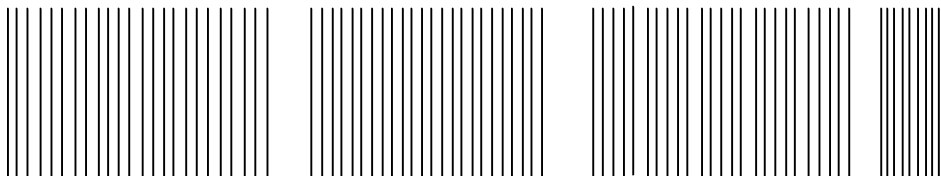
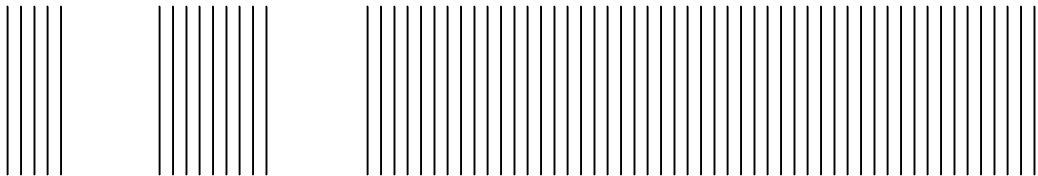
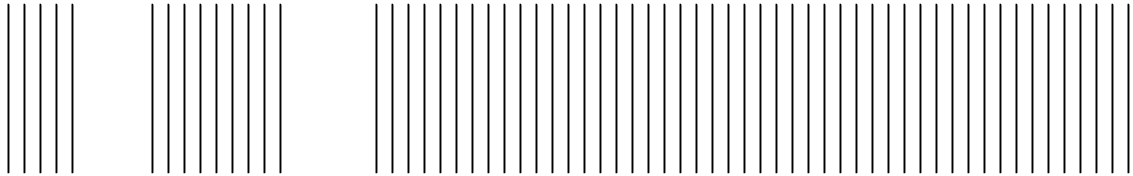
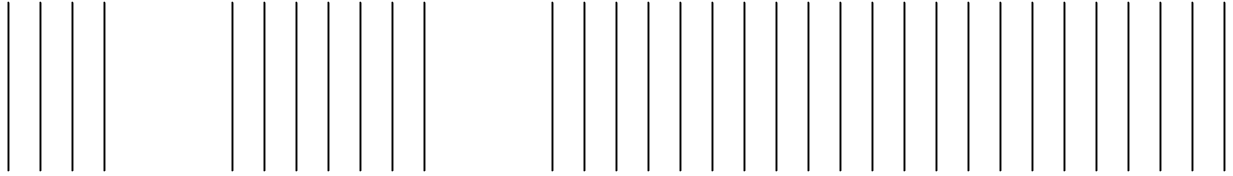
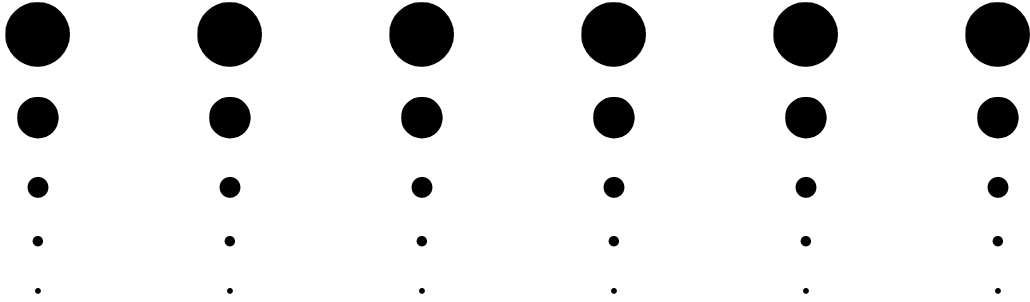
EYE MOVEMENTS USING THE STAR CHART

This is a simple and effective exercise to enable you to reach a relaxed, meditative mental state while improving the speed, accuracy and ease of eye movements. You will need a metronome or music with a solid beat. Use the sixteen-pointed star pictured here. The procedure is to move your eyes so they land on each number exactly on the beat. Go from one number to the next in sequence repeating one through sixteen over and over. Continue for at least ten minutes at a time.

The goal is to let yourself move into a state of dynamic relaxation as you meditate on the movement. Notice if the exercise makes you so anxious that you hold your breath or stare unblinking as you move your eyes. Your first priority should always be to breathe and blink normally, not necessarily on the beat. So keep the tempo slow enough to blink and breathe. As you practice you may find your body tenses up in particular patterns. Check for tension in your eyes, forehead, neck, shoulders, hands, feet, mouth, jaw and pelvic area. As you become more familiar with your body's reaction to the stress of this task you will notice these same tension patterns and breath holding as you read, drive, watch TV, or work at your computer.

With time and attention you will learn to relax as you breathe and blink and move your eyes. When you learn to relax at the easiest tempo, work to develop meditation eye movements at a variety of speeds, slow as well as fast. (You will need a metronome for this.) Be sure to practice at each speed until you reach a relaxed, meditative state, and can maintain it for ten minutes. This may take weeks, but over time you will learn to relax at faster and faster speeds (some people reach nearly four beats per second). If you keep a daily routine of doing this for several months, the relaxation learned during the eye movement exercise will automatically transfer to your outside activities.





Dot and Line Chart Instructions

There are several different types of exercises on this chart. They are not one group and not all of them have to be done.

Black and White Patterns

The two graphic figures at the bottom of the page are to teach you about how the brain tells the eye what to see. We talk about “bottom-up” and “top-down” vision. We typically think that the eye tells the brain what to see (bottom-up). Of course, this is true as far as it goes, but the brain’s centers of vision and perception also have a say in what we see (top-down). Look at the star-shaped figure in the bottom right. Is it a white cross on a black background or a black X on a white background? You can see it either way but not both ways. That’s because of top-down vision. The ink isn’t moving and the image on the retina isn’t changing. It’s the higher-up central brain networks that make it change. At first you may see it just one way for a while and then suddenly something changes and you realize that the figure and background have switched. As you continue to look, it switches again and then again, perhaps a little more often. Finally you learn how to make it change voluntarily, when you will it. Once you see the switching, it is difficult if not impossible to stop it from changing.

Another example of top-down vision is the graphic made up of the array of eight peddled flowers. The page should be in good light and in sharp focus. Look at the small white dot in the center of one of the flowers near the middle of the array. Keep looking and let your peripheral vision take in the whole array. After a short time, you’ll notice horizontal and vertical squares made of white lines pop out of the figure. These squares may not be visible for long but they’ll pop back again. Top-down vision is at it again. Now, keep looking and see if you notice another set of squares. These are also made of intersecting white lines but are slightly smaller and are oriented diagonally at 45 degrees. It’s normal for these two sets of squares to disappear and reappear or change from one to the other. Here is the point of this exercise: When the 45° squares look pretty strong or solid, notice the white lines that seem to cross each other in the white spaces to the left and right of the flower you are looking at. The white lines form an X right in the middle of the white space as part of the 45° square pattern. We know that there is no white line printed there yet we see them as if they were printed on the page. Amazing, isn’t it, how far the brain will go to bring meaning and order to what we see. Learning to observe these top-down illusions as they appear and change will teach you how to clear your vision.

Horizontal Lines

The brain is always telling us what to see and can even make us see images that exist only inside our brain. This also occurs when images are slightly out-of-focus as in these horizontal line practices. The top-down brain mechanism attempts to sharpen blurry lines and edges by configuring a second or third set of fake lines or edges parallel to the real one. Usually we just assume that we see blur as smudge as it is in badly focused photos. But if you look for these false lines in strong light at high contrast, you’ll begin to notice them whenever you see blur. If you learn this practice and remember to do it throughout the day, your vision will improve.

This is an important exercise because it teaches how to view without effort and in so doing to observe how your visual system changes as it attempts to configure visual information for maximum sharpness. Top-down vision likes to make sharp edges so when the image is slightly out-of-focus we don’t see a kind of smudgy blur like we see when a photograph is not in focus. So as you look at the lines on this page, instead of a smear let yourself see one or two false lines parallel to the real printed one. The page must be in bright light and slightly out of focus. So hold the page where it is blurred (some may have to remove their glasses and others wear them). There are lines of differing thickness to allow a range of distances.

Palm for ten slow breaths then blink, breathe and relax your body by doing the “Five Finger Exercise” as you view one of the long parallel lines. It’s best to practice with one eye covered. Move slowly (4 seconds, a slow inhale or exhale, from one end to the other) along the line. As you relax and let go of doubts and expectations, you’ll become aware of the false lines. Don’t try to make them change. Learn to just observe them as you stay aware of your eye’s fixation point moving slowly along the line. Move back and forth along the same line or start with the thick line and move left to right and back, then do the same on the next thinner line and the next until the thinnest. Stop and breathe and palm if you become anxious or stressed in the process. The idea is to learn to look with purpose but not expectation. This is not a pass-or-fail experience. Remember that this is a training, a practice. You’ll only improve if you let your higher visual centers experience the external environment. Anxiety blocks this. If you are not breathing, you are not doing the exercise. As you observe the lines you may see them merge together as the false lines disappear to become one sharp, black line. At first this comes as a surprise and will last for just a brief moment. With practice it occurs more often and for longer periods. Finally you learn the “trick” and it will stay focused. Sometimes you will feel a wave of relaxation or integration in your head, eyes or body. Learn to look for black or high contrast lines everyday situations at all distances. This is the essence of how to improve your near and far vision. It also works for improving astigmatism. To do this, practice with the page tilted at different orientations, vertically, 45°, etc. You can use the lines on the eye movement star chart. The essence of astigmatism is that different orientations are more blurred than others with the most difference on lines oriented 90° from each other (like a plus or a times symbol. Play with it at different distances to learn the orientation of your astigmatism axis.

Dot Exercise

This teaches how to relax in order to coordinate your mind to look at where your eye fixates. This is called “Central Fixation”. You’ll need a pointer to do the dot exercise, so find a pencil with a sharp point, a pen that has run out of ink or a skewer like they sell in markets for making shish-ka-bob.

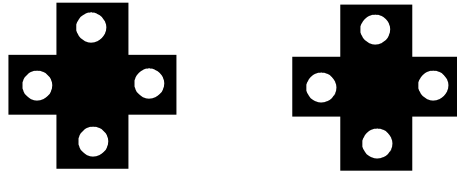
Start by breathing ten or twenty times as follows. Breathe for a slow count of four. You can make your own tempo or use a metronome set at one beat a second. Practice this until it becomes automatic. Cover one eye. Hold the pointer next to your ear aimed at the page. Inhale counting to four as you fixate the middle of the first big dot. Exhale (four count) as you slowly move the point to the dot, timing it to touch at the fourth beat of the breath. Make sure to hold your mind and eye fixation on the dot as you inhale and start to withdraw the pointer to its ear position timed to arrive at the fourth beat of the inhale. Look at the next big dot, exhale and repeat the procedure for each of the big dots. Then do the same using the next smaller dots and so on until you finish with the tiny dots. This takes a long time, especially when you do each eye by itself and then both together. If time is a problem or you experience discomfort due to strain and/or anxiety even when you attempt to relax, stop while you’re ahead and practice the dots at another time. You can also shorten this practice by using fewer dots of each size before moving to the next smaller size. The most important things: make sure to time your moves to the breathing and to keep your eye and mind on the dot for the entire exhale and inhale before aiming at the next dot. The goal is to make this automatic and graceful. As you get better at this, practice expanding your visual awareness to the other dots while noticing the peripheral dots are not as black as the dot you are fixating.

Counting Lines

Start with the easiest set of vertical lines, the ones with the fewest that are the farthest apart. Start by palming to relax your mind and body using four-beat breathing. When ready, view the first vertical line and count, “One,” to yourself. On each beat of your breath, or every other beat, or at the end of each breath, move your eye to the next line and count, “Two.” Continue counting the group of lines. As this becomes automatic and graceful, try the groups made up of more and crowded lines. This teaches how to look with less strain and anxiety. Without patience and presence, the eyes will “stutter” causing momentary suppression of conscious awareness (“inattention blindness”), and you will lose count.

This is how to clear your eyesight.

These different practices teach how to look while breathing and observing without habitual strain and anxiety. This teaches a new sense of “conscious presence” that you can bring into daily awareness as often as you can remember to. After you practice these exercises you can find real world targets such as door frames, lined paper, letters and numbers, computer screens, floor and rug patterns, car headlights, etc. (they’re everywhere). Do these in your imagination, eg., imagine that you have a pointer that can reach that flower or auto in your mind or in the real world distance. And be sure to apply these practices when you look at eye chart charts such as the ABC visual acuity chart.



DOUBLING CHARTS

Converging and Diverging

This exercise improves focusing and aiming of the two eyes so they can they work better as a team. Do the exercises with and without your glasses or contacts. Always use both eyes. Start by practicing convergence/ divergence - crossing and uncrossing your eyes by looking at near and far targets. Hold your thumb ten inches in front of your eyes. Look back and forth at the thumbnail and then at a more distant target. If this is easy, move your thumb and inch or two closer to your nose. Repeat the near and far aiming, bring it closer again. How close in you can bring your thumb before it appears double? This is called the near point of convergence.

You can improve your convergence by working at this daily. If this strains your eyes, stop, relax your eyes by palming, and try the exercise later. After a short time (immediately for some people but days or weeks for others) you will see single as near as just three inches away. To further help improve your convergence, hold your thumb at your near point and move it up, down, right and left or around an imagined steering wheel in front of your face. When first trying these exercises only work for three minutes at a time. You can practice several times a day.

When you get better at converging/diverging, try the doubling charts. **There are two ways to use these charts:** converging and diverging. You will probably be better at one than the other. If so, the difficult way is more important for you to practice but **always do the exercises each way in a practice session.**

Converging the Crosses

In the exercise above, did you notice two thumbs when you look at the distance? Try it. Hold up your thumb and look at a far object. If both eyes are working, you will notice a second thumb. Now look at your thumb and notice that the distant object appears as two. If so, you are ready for the exercise using the charts. Place the crosses sixteen inches in front of your eyes. Hold the tip of a pen on the page between the crosses. Look at the tip as you move it toward the bridge of your nose. To make sure the pen is not blocking your view of the crosses, hold it slightly below the crosses. At about eight inches, if you stay focused on the pen point, you should see three crosses! Do this several times. Next, look back and forth between the pen (at eight inches) and the crosses. Notice the number of crosses change from two to three.

If this is easy, look at the pen, see the three crosses and allow your mind to move to the center cross. Move only your mind, not your eyes. Notice that the middle cross has a white dot in each of its arms. If you can see this, you are ready for the big step. Look at the center cross and remove the pen. Can you see the three crosses without using the pen? Does the middle cross have all four dots? The next step is to get three crosses merely by crossing you eyes without the pen as a crutch. Keep working at this a few minutes several times a day. Don't strain. With practice you will get better but it may take some time for certain people. If you can't see three or don't improve, you may want to seek the help of an optometrist who specializes in vision therapy.

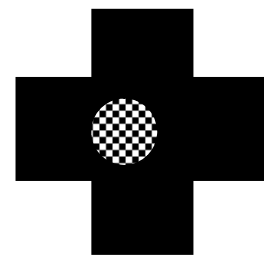
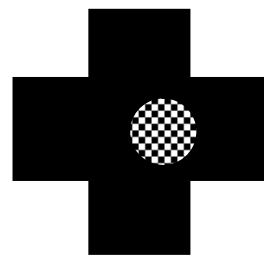
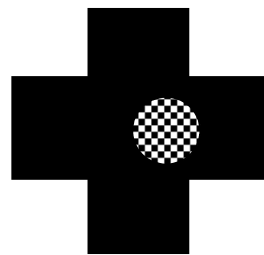
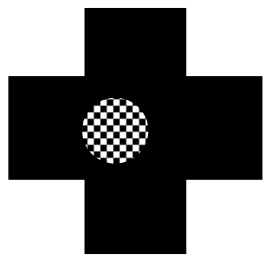
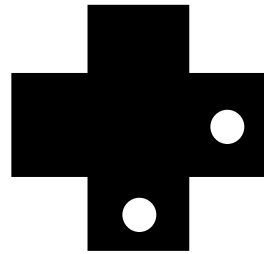
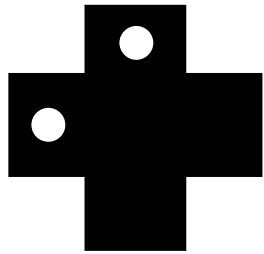
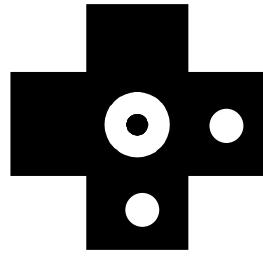
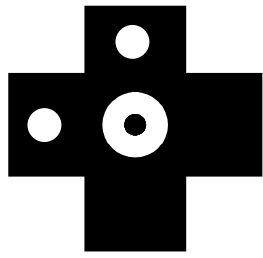
Soon you will be able to keep three crosses for several minutes without the pen. Work to increase your skill by moving the target slowly up and down, left and right, closer and farther, or in a circle movement. Make sure to hold the crosses level so one is not higher than the other. Stand up, walk around, do the swinging exercise described above. Now try looking away and then back to seeing three crosses.

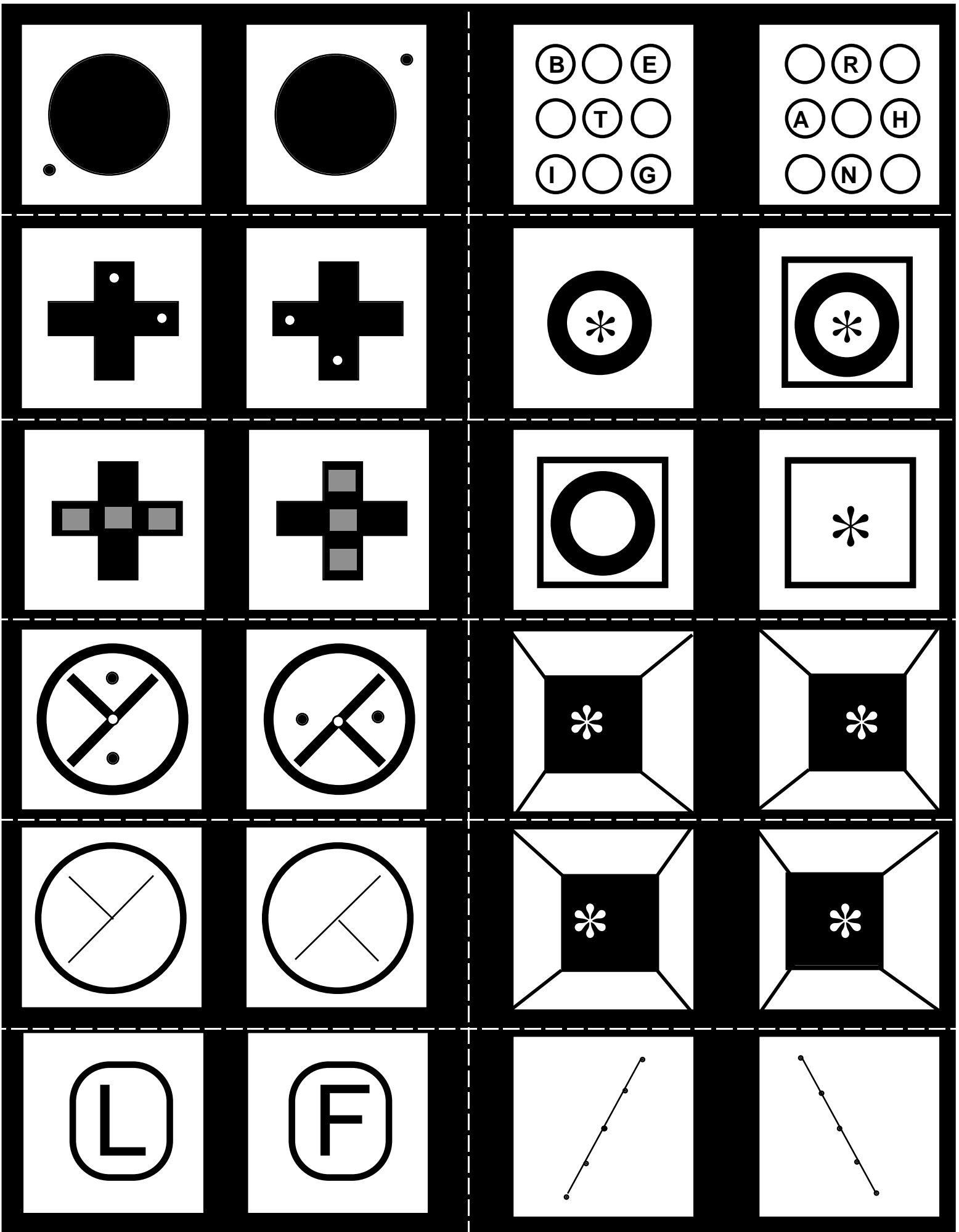
Diverging the Crosses

Touch the two crosses chart to your nose right below your eyes with a cross under of each eye. Look at a distant object and then slowly move the chart up to block your view. There will be a cross directly in front of each eye. Keep looking as if you can still see the distant object. Don't look at the crosses. Notice them without focusing on them. You should see one big, blurred cross. Relax, breathe, blink and keep the one big cross. Now slowly move the cross away. At about two or three inches notice two other crosses on each side of the center one. Try to keep the three crosses as you move the target further away. If you lose it and see only two crosses, bring the chart back to your nose and start the exercise again. Soon you will be able to keep three crosses at any distance. Work until you can get three at any distance without having to start with the target at your nose but by pretending to look far away. Increase your strength by moving yourself and the targets around as in the above paragraph.

When you get good at this, try the other doubling charts.

These charts are similar but require your eyes to work harder. The first two pairs of crosses only have two dots in each cross. When you converge or diverge these crosses, the center one should still have four dots. Can you see all four? Do some of them disappear? The goal is to keep all four dots turned on in the center cross with no fading for at least one minute. The lower crosses give a three dimensional appearance. Can you see the checkerboard dot closer to you when you converge and farther away when diverging?





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Cross your eyes to clear this print. Hold a pen, point up, half-way to this page. Look at the point. Notice the dots above. See four? Move the pen nearer or farther to see three. To learn to hold three dots without a pen, look at the middle dot and bring the pen slowly to your nose. Is this clearer with crossed eyes?

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If you cannot read this fine print, do not strain. The more you strain the worse you'll see. The secret to better vision is relaxation. Excess tension in eye muscles stops circulation and makes vision inflexible and insensitive. To clear this print, cross (converge) your eyes as above. Can you see the print through either dot while converging? Can you read it?

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You can overlap these eight paragraphs seven ways by converging at different distances. Hold your pen closer to converge more or further to converge less. Do you have to converge more to clear this print? Notice the depth in the center paragraphs as you change convergence. Breathe!

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Relax while clearing this tiny print. Learn to wait for the letters to clear. If you see blurred images, ghost letters or black or white lines, do nothing. Allow the image to change by itself. Don't strain for clarity. Breathe, blink and practice letting go in your feet, legs, pelvis, stomach, hands, shoulders, neck, jaw, and eyes. Breathing should not be forced. Try rapid and slow blinking. This new way to focus will become stronger and more automatic. Eventually you will see clearly without converging.

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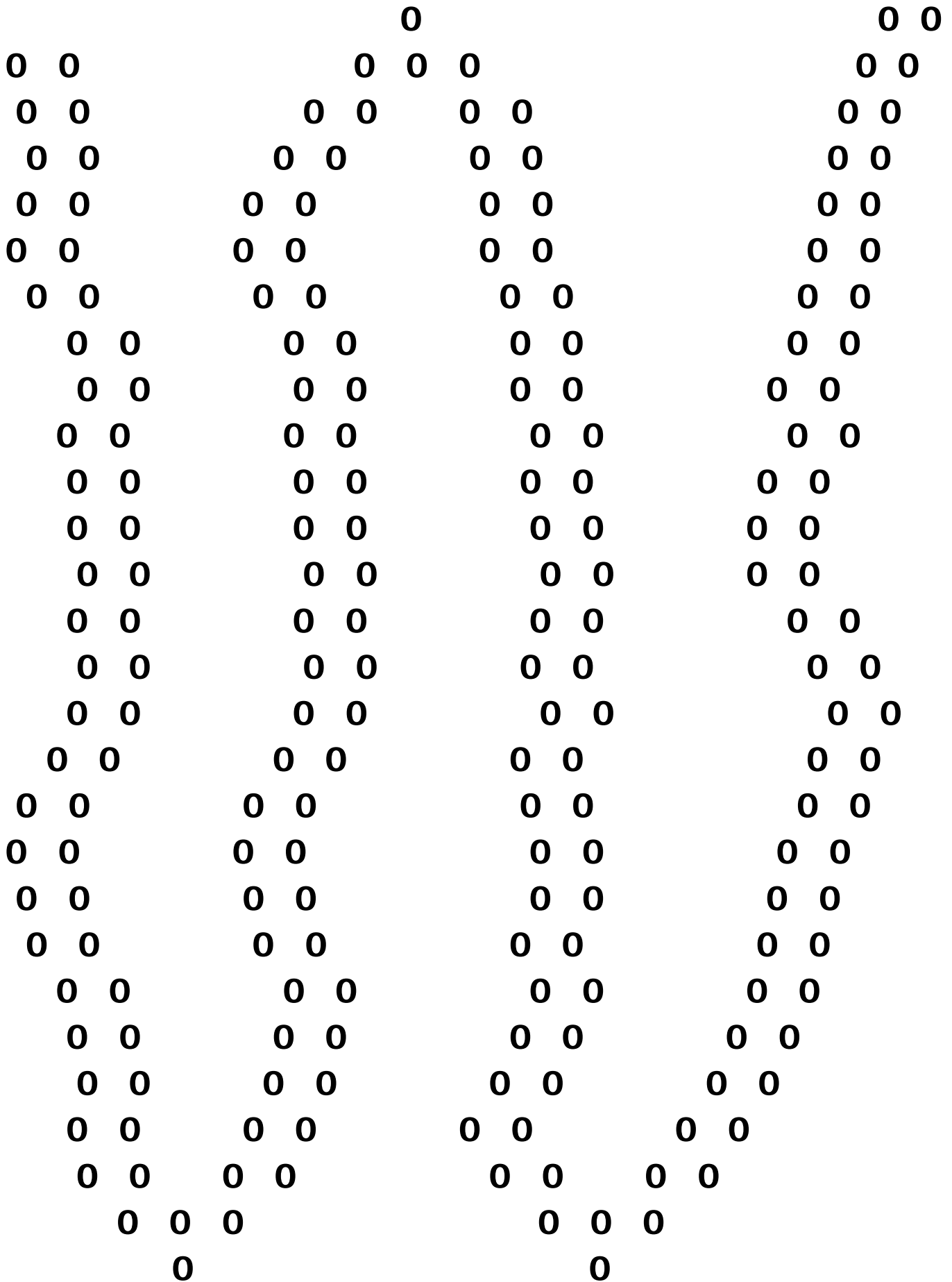
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STRING OF PEARLS CHARTS

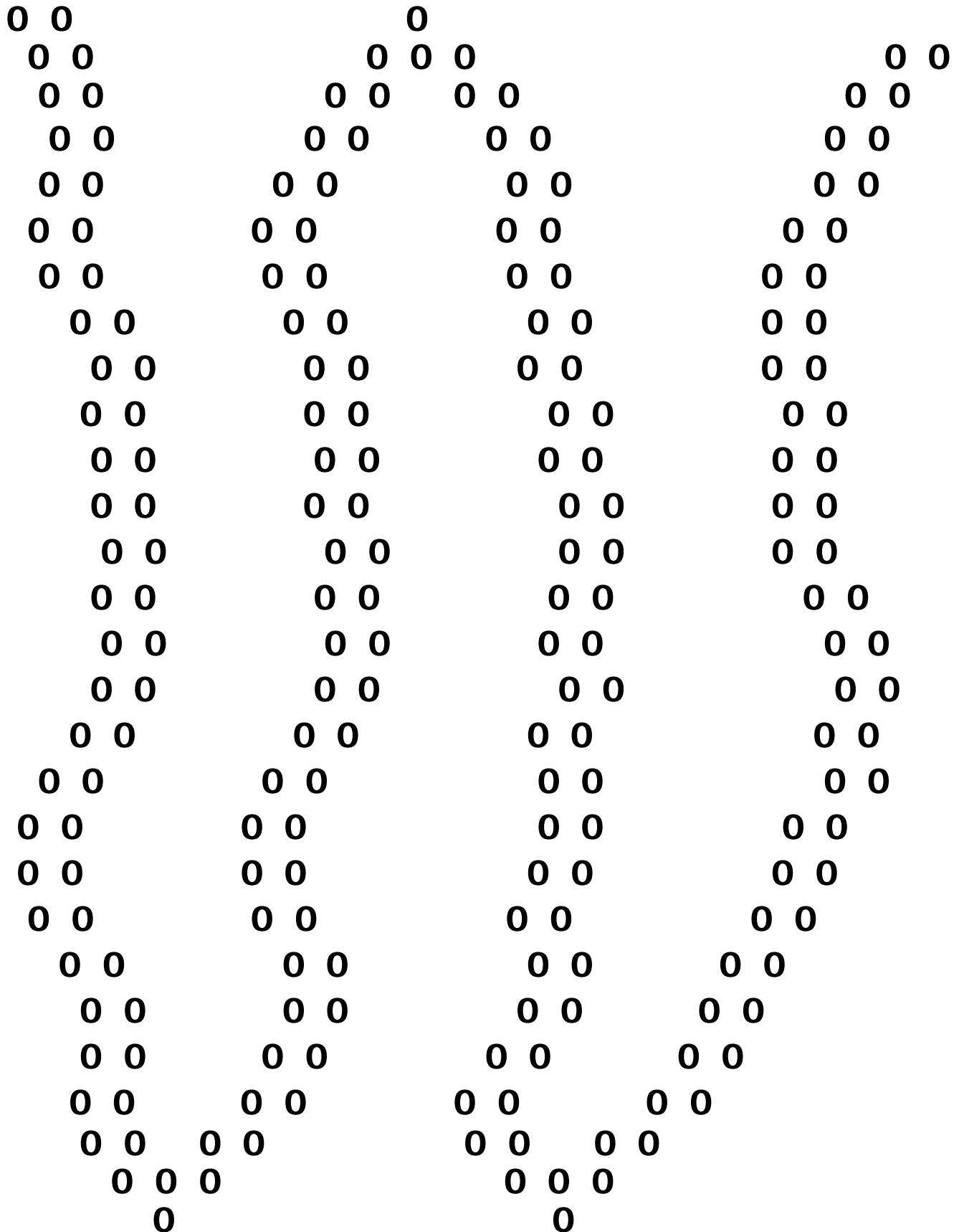
Advanced fusion training procedure to be done after mastering the larger convergence charts.

- Purpose:** To develop fine convergence/divergence control and 3D awareness.
- Equipment:** String of Pearls Convergence charts starting with the largest.
- Set up:**
1. Hold the chart at normal reading distance parallel with your face.
 2. Keep it level.
 3. Don't strain. Keep breathing and blinking.
 4. Practice with and without wearing your glasses if possible.
- Convergence:**
1. Look at the top left pair of circles. Converge to make three. This is tricky, and requires relaxation and fine control. Look at a small target (needle or unfolded paper clip) near the page just below the O's.
 2. Depth awareness is the secret to holding small amounts of convergence. The center circle should float towards you. Hold a pen or pin near the page to increase the 3D illusion.
 3. Follow the string of pearls, slowly, moving one-by-one along its whole length. Count the pearls as you go. Be aware of depth as you move from point to point. Spread your stereo awareness to see a raised line of circles down the middle. Move your eyes in a steady flow from the beginning to the end of the string. If you lose convergence, start again at the beginning.
 7. When you succeed, speed up, following the raised string of pearls.
 8. Practice closing and opening your eyes or looking away and back. Try to regain fusion and the 3D illusion as quickly as possible.
 9. Move the chart closer & farther, up & down, in a circle, Can you walk around the room while following the raised string of pearls?
- Divergence:**
1. Diverge to make three O's by looking slightly beyond the page. Make a transparent xerox and practice looking at a small target an inch or less beyond.
 2. See the depth -- the middle circle should project away, as if behind the page. Depth awareness is the secret to holding small amounts of divergence.
 3. Repeat steps 3-9 while diverging.
- Advanced Procedures:**
1. Repeat the whole procedure with the smaller String of Pearls charts.
 2. Repeat alternately diverging and converging each pair of O's along the string.
- Keys to Improvement:**
1. When you see three and hold the tiny amount of convergence or divergence.
 2. When you can see 3D.
 3. Increasing awareness to see 3D along the length of the whole string.
 4. Moving your eyes along the pearls until you succeed all the way.
 5. When you can blink, breathe, and succeed without effort and feel your eyes, body and mind relax.
 6. When you can move the page and walk around without losing the illusion.
 7. When you can succeed at even the smallest separations.

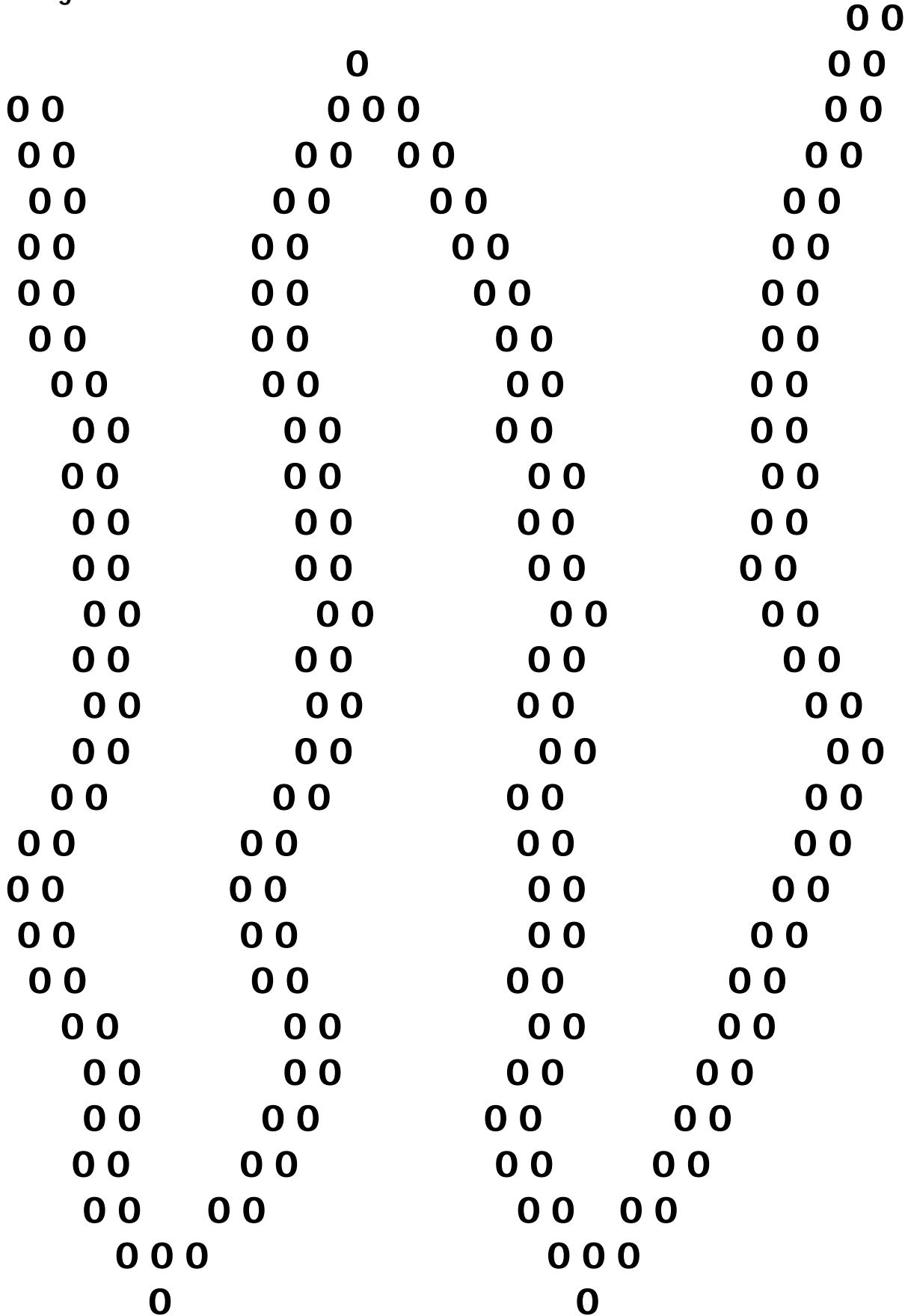
String of Pearls -1



String of Pearls – 2



String of Pearls - 3



String of Pearls – Four Sizes

