Binocular String

This activity helps you to know where your eyes are aiming.

Step 1. Cross the strings at the bead

You will need a piece of string about 60cm with a bead threaded onto it for this activity. Move the bead almost to one end of the string. Hold the far end of the string in your right hand so the hand is about 40cm directly in front of, and level with, your nose. (Make this hand like a fist with your thumb pointing upwards and thumbnail facing you.) Hold the string in your fist of this hand so the bead is on top of your thumb. Hold the other end of the string up to the tip of your nose with your other hand, so the string is taut.



Look at the bead at the far end of the string. You should see **two strings crossing at the bead** in a V shape.

The two strings should be **equally bright** and they should be **level**.

If the strings do not cross at the bead, try looking a little closer or further away. Where the strings cross depends on how close you think the bead is on the string. If the strings cross in front of the bead, you have judged the bead to be closer than it really is, so you are looking too close.

If one string is duller than the other, try to direct your attention to the duller string, while still looking at the knot, until the two strings are equal.

If the two strings are not level, your head is probably tilted try straightening your head to level them.

Step 2. Cross the strings at a closer bead

Move the bead on the string, so that when the string is held up to your nose the bead will be about 10cm from your eyes. Look at the closer bead until the strings form an X, crossing through this bead.

The two strings should be **equally bright** and they should be **level**.

Step 3. Cross the strings at the sliding bead

Move the bead back to the far end of the string and again see the two strings forming a V, crossing at the bead. Make sure the two strings are equally bright and level. Now slowly move the bead inwards, along the string, towards you, keeping the strings crossed at the bead at all times. **Slowly** move the bead into about 5 cm then slowly move it back out again until it hits your thumb on the further hand.

Keep moving the bead slowly back and forth along the string, making sure the strings cross through the bead and are equally bright and level.

Step 4. Bug on a string

Move the bead to the far end of the string, above your thumb, so you see the 2 strings forming a V at the bead. Now imagine there is a small bug walking along the string towards you, starting at the bead and coming in towards your nose. Do not move the bead. Follow the imaginary bug on the string so your eyes move smoothly and slowly inwards along the string. Move your eyes in as close to your nose as you can. Now imagine the bug is walking back toward the bead again, moving away from your eyes. Follow the imaginary bug out again, slowly and smoothly moving your eyes along the string.

When you first try this activity the 'bug' will seem to move in an almost jerky, stop/start manner because your eyes will not be moving smoothly along the string. Practice 'bug on string' until you can follow the imaginary bug smoothly and slowly, in and out, along the string.