How Vision Develops

Like all skill development (gross/fine/speech etc.), vision develops in an orderly manner and improves over time as the child learns to make sense of what he or she sees. The brain and motor systems must work together with the eyes for vision to be effective and for vision to develop in a normal visual continuum.

The Visual Response Continuum
(Note: The principles and progression described below are reprinted with permission from the publisher of *Reach Out and Teach Parent Handbook*, Chapter 6, pages 180-184, Kay Alicyn Ferrell, Ph.D., 1985, the American Foundation for the Blind.)

Foundation Skills Continuum:

1. **Awareness → Attention → Understanding**
   A child will be *aware* of lights and people or objects before he or she will pay *attention* to them, and finally *understand* who/what the person or object is.

2. **Lights → People → Objects**
   A child will react to *lights* before he or she will react visually to the *face* of his or her parents and to his or her *toys (object).*

3. **Fixation → Shifting → Tracking**
   A child will *fixate,* or focus, on lights and people or objects before he/she is able to move her eyes *from one object to another (shift)* and finally *follow (track)* them as they move.

4. **Near → Far**
   A child will respond to lights, people or objects that are *close (near)* to him/her before responding to those that are *farther* away. Like the muscles responsible for gross and fine motor skills, the eye muscles at first are fairly tight. With use, they become more flexible and can adjust to focus at greater and greater distances.

5. **Peripheral → Central**
   A child will respond to lights and people or objects located in the *outer areas (peripheral)* of his/her visual field before he or she responds to those in his/ her *central field (front)*.

6. **Familiar → Unfamiliar**
   A child will initially respond visually to *familiar* rather than new or *unfamiliar* items. Eventually he/she will *prefer* to look at new (unfamiliar) objects.

7. **Parts → Whole**
   A child will look at *parts* of faces and objects before he or she can see the *whole* face or object *all at one time*. Generally babies don't recognize their parents as being different from anyone else until they are five months or older.

8. **Simple → Complex**
   A child will respond first to *simple patterns* (plain, e.g. simple toy of 1-2 colours) before he or she will respond to more *complex patterns* (e.g. mobiles, busy boxes). Visually complex objects are difficult for the child to separate the *figure* (the toy) from the *ground* (the sheet).

9. **Large → Small**
   A child will respond to *large* patterns/objects before he or she responds to *smaller* ones. *(Note*: Depending on the eye condition, the large to small continuum may not apply to children with visual impairments. If there is a field loss, a large object may be so large that all the child sees is one solid color with no lines or contours. If the child has a central loss, a small object may be missed altogether.)

There is no set formula for how to use this continuum, except to think of all the response possibilities as guidelines for activities and expectations.

Talk to your local vision teacher or other vision consultant to help develop a plan to help move your student along the visual development continuum.

Remember:
Principals (Foundation Skills):
- There are 9 general principals/foundation skills that describe how children respond visually.
- Vision develops in an orderly manner and improves over time as the child learns to make sense of what he/she sees.
- Each principle/skill is a continuum, or range of responses, from the basic or minimal response to the highest level of response that can be expected for that skill.
- A child will respond at any point along each skill continuum and will usually be at different points in each continuum.
- Children with visual and/or multiple disabilities will follow each continuum to a greater or lesser degree (i.e. changes along the continuum are affected by the child's disability).