$\qquad$

## SEEING THE WHOLE PICTURE: RODS \& CONES

Answer the questions below as you progress through the Seeing the Whole Picture: Rods and Cones lesson and slideshow.

1. In the lesson slideshow, you will see 20 sets of colored circles. For each set, try to determine whether the left ( $L$ ) or right ( R ) circle is overlapping the other. Circle your answer and mark ones you get wrong. After 5 sets, you will rotate your body and repeat. Record your answers in the table below.
2. Graph your results with $C$ being the number of sets you answered correctly.

|  | $\mathbf{0}^{\circ}$ | $\mathbf{3 0}^{\circ}$ | $\mathbf{6 0}^{\circ}$ | $\mathbf{9 0}^{\circ}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | L | R | L | R | L | R | L | R.


3. Fill in the KWL chart below considering the following question.

How do you see color?


## MAPPING YOUR RODS \& CONES

## MAKING THE POSTER BOARD

1. Use a pen and ruler to mark the center of the poster board $0^{\circ}$ near the top.
2. Make a small $X$ in the center below the $0^{\circ}$ mark. This is your fixation point.
3. Draw a line under the $0^{\circ}$ from one end of the poster board to the other.
4. Use a ruler to mark out to $120^{\circ}$ counting by 10 on both the left and right of the $0^{\circ}$. Make sure you are using a standard poster board ( 28 inches $\times 22$ inches) so that every 10 degrees $=1$ inch.

## MAKING THE MEASURING STICKS

1. Cut out nickel-sized circles from construction paper in at least three colors.
2. Use tape to attach each circle to the end of a stick.

3. Fill in the table below as you complete the steps in the lesson slideshow.

|  | Motion |  | Color |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Left | Right | Left | Right |
| Trial 1 |  |  |  |  |
| Trial 2 |  |  |  |  |
| Trial 3 |  |  |  |  |
| Average |  |  |  |  |

5. Why can the stick motion be detected long before the color is detected?
6. We only see color in a focused area in the central visual field. Why do we believe we can see color throughout our whole visual field?
