

## **QUESTIONS ABOUT GLASSES**

1. How come the glasses that match person B did not match person C, in which they are both blurred?
2. How can both lens magnitude project a clear picture?
3. Why does the image go out of focus when the 'eye glasses' are moved slightly?
4. Individuals with vision problems see at individual strengths?
5. What exactly did adding another lens to the system do?
6. What makes the vision blurry?
7. What is the vision of A, B, C?
8. How much strength is needed for perfect vision for A, B, C?
9. Why or how did the eye-glasses fix vision for one and not the other?
10. In what do the glasses being different?
11. Are the plus and minus corrective lenses the same relative strength, as positive and negative distances on the 'normal' eye are very similar when both lenses are in place?
12. Why does it only project to a certain distance? You can't project to before the lens.
13. Is there a distance where someone else's glasses work for someone else?
14. What is the difference between the two eyeglass frames? Which one is for near/far?
15. Does position come in to play in the focussing aspect?
16. Are the distances equal?
17. Does the distance effect the clarity for A, B, C when wearing eyeglasses?
18. Why does size of print change when magnifier is placed in front of lens as opposed to behind lens?
19. Why is it that the closer you get to the object, the smaller it becomes?
20. Why are the word sizes different at A, B, C if the words are the same when in focus?
21. Why are the images different sizes for A, B, C when in clarity?
22. Are the letters that people A, B, C are equal?

## **QUESTIONS ABOUT THE EYE**

1. Why is the image flipped over?
2. Are the lens the same, or is one stronger than the other?
3. Why does it get flipped around?
4. If the lens flips the image upside down, shouldn't we see things upside down?
5. What's the difference between the two lenses?
6. What physical properties of the lens effect focal distance?
7. Why does a bigger curve give better vision closer up?
8. Why does a thinner concave lens see better at distance?
9. How come object disappears as we get closer?
10. Why is the lens correction needed for viewing at greater distances?
11. One lens seems to be magnified, the one used for distance viewing
12. Why is it only focused at one specific point?
13. About what distance is the image no longer detectable?

## **QWWWNDWATT**

1. What effect does thickness and size play?
2. Why is one lens flat on the back and one is curved?
3. The thinner lens tends to reflect image at a smaller size.
4. Does it matter which way the power is facing?
5. Does the light beam play a factor?
6. Does the curvature of a lens effect it's power and focal length?
7. What's the difference between the two lenses?
8. Why are both lenses concave?
9. Does the intensity of the light matter?
10. Does the lens represent the human eye and how does it get transferred to the brain?
11. Are the light sources the same? Does it matter
12. Are any lenses the same exact curvature as the eye?
13. Are the glasses in a specific ratio in regards to the curvature of the eye?
14. How is sharpness maintained with variation in the projections reproduction ratio?

## **QUESTIONS ABOUT BACKGROUNDS**

1. Why do background colors change the boldness of words?
2. What effect does the background have on a color's appearance (planted)?
3. Why does the darker background project the word more clearly when stripes are applied?

## **QUESTIONS ABOUT BACKGROUND & STRIPES**

1. Colors like yellow and dark blue seem to have a bigger impact in altering the color instead of black. Why?
2. Why does the background and foreground effect how much the word stands out?
3. Does the background color have prevalence over the stripes?
4. Why are some colors more dominant than others?
5. How different do the colors of the stripes and words have to be (planted)?
6. How do the filter papers effect the appearance of the white square singly and as a whole?

## **QUESTIONS ABOUT STRIPES**

1. When using purple stripes letters fade into background. Why?
2. Why does size of lettering seem to change when stripes are added?
3. Why do the lines across words change their color and appearance?
4. Why do the lines across the words change (a) the boldness of the words and (b) the color of the words?
5. How can dashed lines appear to change the entire background color?
6. What mostly changes the color of the letters when we put the stripes on?
7. What would happen if the transparent filter wasn't lined?
8. Will other patterns besides stripes work (planted)?

## **QUESTIONS ABOUT FILTERS**

1. Why does the filter only effect one color alone but when it's the whole picture it does not?
2. Why did the colors of the squares not change when we put the filter on all of them than when we put on individually?
3. How can the individual boxes change color but when one solid color filter overlaps them all, they are the same?
4. Why do our eyes ignore a filter when it's applied over the whole distance or area of our sight?
5. Why does the large filter not change individual colors?
6. Why does a filter tend to change color of white square when used on white alone, but when used with all color squares it seems to darken squares?
7. Why does the small filter change colors more than the large filter?
8. Does the lack of light play into the equation?
9. Does the filter have an effect on the colors?
10. How does the filter material play into this?
11. Why does a white square look different with a small filter than with a big filter (planted)?
12. Does the thickness of the filter matter?
13. Why, when overlapping the same color, does it get sharper and clearer? Is it like the same way pixels on a screen work?

## **QUESTIONS ABOUT FILTERS**

1. Will the white square always look white with any large filter (planted)?
2. Why are lighter colors more strongly effected by filtering?
3. How do the surrounding squares effect the color of the white square (planted)?
4. The lighter colors like white and yellow retain their color better than the darker ones like red and blue. Why?

## **QWWWNDWATT**

1. Are our eyes built to ignore constants and only detect change? - **EXCELLENT!**
2. How is color blending affected through patterns perceived?
3. What are the peak responses of the human eye?
4. What would the effects be if the person was color blind? - **EXCELLENT!**
5. How does light effect the visibility of the colors?

## **QUESTIONS EXPLORED**

1. Do we see objects upside down and images are inverted right side up?
2. Are lenses magnifying or does distance from the object affect the way we see objects?
3. How do different colored stripes effect different colored words (planted)?
4. Does the thickness of the stripes matter (planted)?
5. How does the multitude of filters effect the light source when filters are stacked compared to separated (such as at given distances)?