**Physics Ch 14 –Refraction, lenses, and your eye Review Sheet**

1. Know the definition of refraction. Why does light bend? When would it bend towards the normal? Away from the normal?
2. Differentiate between the angle of incidence and the angle of refraction
3. Use the index of refraction for various materials to make calculations **n = c/v** where c = speed of light in a vacuum (3x 108)
4. Make calculations using Snell’s Law **n1(sin ʘI) = n2(sin ʘR)**
5. Recognize that lenses are transparent and have two focal points
6. Know the differences between convex and concave lenses and the images they make. (Use your lens matrix!). Real or virtual? Smaller or bigger? Converge or diverge? Uses? Etc
7. Give examples of how refraction can cause optical illusions i.e. mirages, “broken” stick, atmospheric refraction with stars and the sun etc
8. Explain how prisms cause refraction and color dispersion
9. Be able to label the parts of the eye and give their basic functions
10. Describe what causes nearsightedness, farsightedness, blindness and colorblindness
11. How can optometrists fix vision problems?