COGS 17 A03 Week 6 Problem Set

1) How do receptor cells convert light signals into neural signals?

2) What are the types of receptor cells in the retina? What are the differences between them?

3) Fill out the table below:

|  | Receptor Cells | Bipolar Cells | Ganglion Cells | Interneurons |
| --- | --- | --- | --- | --- |
| Which kind of potential? |  |  |  |  |
| Excitatory or inhibitory NT? |  |  |  |  |
| Spontaneous Firing? |  |  |  | N/A |

4) How does receptor convergence account for acuity between rods & cones?

5) How does receptor convergence account for sensitivity between rods & cones?

6) What is the receptive field? What determines the size and type of a receptive field?

7) What is lateral inhibition? Can you find an example?

8) Briefly explain visual crossover.

9) What are the two visual pathways and what are they in charge of?