

What does the presence of more rods at the periphery of the visual field do to the acuity of vision in that area?

When hunting in the dark, many hunters don't look directly at their target, instead looking at it through their peripheral vision. This may be because they don't want to scare their prey, but because there are more rods at the periphery of your vision, you get a clearer picture there in dark conditions.

Discuss convergence and divergence as they refer to the circuits of the rods and cones. Which confers greater visual acuity? Sensitivity?

The rods tend to converge into one nerve cell, and thus offer better vision in dim light, at the cost of blurring. The cones tend to have one nerve each, and thus give sharp color images while sacrificing sensitivity. To restate it: the cones convey greater visual acuity, but the rods have more sensitivity to movement and shapes.