

9.01 Quiz 5

10/17/2003

Name _____
(print on back of this sheet also)

1. The protein called Sonic Hedgehog plays an important role in the induction of the nervous system from the primitive ectoderm. In our phylum, this molecule comes from the _____ (a structure in the embryo). Later it is also secreted by the _____ of the neural tube. (2 points)
2. What is the difference between symmetric and asymmetric cell division during the stage of proliferation in the neural tube? (4 points)
3. In the early development of the neocortex, proliferating cells migrate from the ventricular or subventricular layer to the cortical plate by what mechanism? (2 points)
4. Describe one experiment that demonstrated chemical guidance of growing axons. (4 points)