

Unit 2: Appendix A – Student Questions

Howard Hughes Medical Institute video: Adult Stem Cells and Regeneration *View this video at <u>http://www.hhmi.org/biointeractive/stemcells/lectures.html</u>, <i>then answer each question below in complete sentences.* Part 2

- 1. How is stem cell division different from that of a mature differentiated cell?
- 2. Why are there proportionately fewer stem cells in adult tissues than in embryos?
- 3. Which cells in Planaria (flat worm) are capable of regenerating an entirely new planaria?
- 4. What is a blastema?
- 5. What types of cells do the muscle stem cells become when a salamander's leg is amputated?
- 6. Can newts regenerate organs with stem cells? What can they regenerate?