

AP Biology 044 – Cellular Specialization

Video Review Sheet

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1. What is cellular specialization?
2. Name two current researchers in this area and what they are doing:
 - a.
 - b.
3. What are tissues?
4. Name and describe the two cues:
5. Both cues impact:
6. Give an example of the environment influencing specialization.
7. What makes stem cells significant? They can become
8. What does it mean to be pluripotent?---
Totipotent?

Unipotent?
9. How does a cell become something specific/differentiate? It gets cues, Transcription Factors (chemicals), which only turn on some genes. Transcription factors say, “Turn that _____”
10. At five weeks old, male and female embryos look...
11. But also at five weeks old, testes start producing: _____ protein, triggered by the transcription factor, making boys.
12. Heat Shock Factor (transcription factor) is a: (name the organic molecule):