

# AP Biology 024 – Development: Timing and Coordination Video Review Sheet

[www.bozemanscience.com/024-development-timing-and-coordination](http://www.bozemanscience.com/024-development-timing-and-coordination)

1. Cellular Differentiation – will \_\_\_\_\_ specific proteins
2. Seed Germination: what two things does a seed need to germinate?
3. Cell Differentiation/Induction:
  - a. Once a stem cell has become something specific....it can never
  - b. Tissue specific proteins: The DNA is \_\_\_\_\_, however the only DNA that is expressed is the DNA needed for that specific tissue. The rest is:
  - c. Define cell differentiation:
  - d. Stem cells can become.....
  - e. What does the transcription factor do?
  - f. All of us are born \_\_\_\_\_
  - g. SRY gene: What do the letters stand for and what does this gene do?
  - h. Define induction:
  - i. What did the transplantation experiment with the fish show?
4. Cell Death: not only \_\_\_\_\_ but cell death is important.
  - a. What is apoptosis?
  - b. What were the names of the three genes that caused cell death in Drosophila?
  - c. Define microRNA and tell what it does:
  - d. What did the microRNA regulate?
5. Homeotic genes:
  - a. In what organisms are they found in?
  - b. Define what they do in a fruit fly:
  - c. What is the important set of these genes called?
  - d. Homeotic genes lay down the landscape of....