

## **Eukaryotic Gene Regulation - Lactase**

**As you work your way through the eukaryotic gene regulation – lactase interactive activity, answer the following questions to help you collect the relevant information.**

- 1. When is a gene expressed?**
- 2. How is transcription regulated in eukaryotes?**
- 3. How do general transcription factors work?**
- 4. Explain the function of activators, repressors, and enhancers.**
- 5. What is alternative splicing? What is its purpose?**
- 6. How is translation regulated in eukaryotes?**
- 7. What are proteasomes? What do they do?**

8. Describe and explain how the LCT gene is turned off.

9. What is the lactase persistence mutation? Where is it found?

10. What are two possible mechanisms for lactase persistence?