**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?**