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**PCR Virtual Lab**

This animation will allow you to learn a little about Polymerase Chain Reaction and then run a virtual PCR lab. <http://learn.genetics.utah.edu/content/labs/pcr/>

From Intro:

1. What does PCR stand for?
2. What is the purpose of PCR?
3. What are three uses for PCR?

a.

b.

c.

From Animation

1. How many base pairs are in the human genome?
2. What is the purpose of primers?
3. What are the nucleotides that are added?
4. What is the purpose of DNA Polymerase?
5. What is special about this particular DNA Polymerase?
6. What is the role of the DNA Thermal Cycler?
7. What happens to the target DNA sample when it is heated to 95°C (203°F)?
8. What happens to the target DNA sample when it is cooled to 50°C (122°F)?
9. What happens to the target DNA sample when it is heated to 72°C?
10. After 30 cycles, how many copies of the target DNA sequence have been created?