

## Genomics Review Concepts

- To sequence DNA, what kind of cells would we normally use?
- What does it mean to centrifuge a blood sample?
- How do we get to the nuclei from inside of cells? What must we do to the cells?
- How are nuclei separated from the rest of the cell?
- How is the DNA removed from the nucleus? How is the DNA separated from the rest of the cell contents?
- What method reads DNA letter by letter?
- What do we use to break up the DNA into manageable chunks?
- What do we use to make copies of the DNA?
- What does it mean to denature DNA?
- What does a primer do for DNA?
- Why is polymerase added to the DNA?
- What is a ddNTP? Why is it important for this process?
- Why is a gel needed for this process? What does it do for the DNA?
- How does a computer determine the base sequence from the DNA in the gel?
- What is the difference between an intron and an exon?
- How does a scientist tell the difference between an intron and exon?
- Why was the Human Genome Project important for science?