

## CHAPTERS 17/18: DNA Technology

1. How does the shot-gun approach differ from the whole-genome sequencing?

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2. What is a transposable element? What is a transposon?

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3. Describe potential problems caused by transposons.

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4. What is a multigene family?

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5. Multigene families are hypothesized to have evolved from...

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6. What is the function of restriction enzymes in bacteria?

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7. How do bacteria protect their DNA from the effects of the restriction enzymes?

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8. How do biologists make use of restriction enzymes?

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9. How are DNA fragments of different sizes separated?

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10. What is meant by "recombinant DNA technology?"

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11. What are vectors?

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12. What are plasmids?

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13. What are reporter genes?

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14. What is a genomic library?

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15. How is cDNA different from typical eukaryote DNA?

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16. Define biotechnology.

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17. Why is DNA cloning considered an important technology?

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18. Describe the steps involved in cloning a gene.

