

UPGRADE to the Bundle

Crash Course - BIOLOGY 2.0

50 Episode Series Bundle

✓ Classroom Ready - Just Print and Go!

✓ Active Engagement - Keep Students' Attention

✓ Direct Video Link Included

WATCH VIDEO



ALL 50 Episodes with Answer Keys and Direct Video Link

CLICK HERE



Crash Course Biology #38: Bacterial DNA & Genetics

Name: _____ Date: _____

You can access the video here → https://youtu.be/Y1LK0Hx_GrY?si=Lxg3BMGAPA-4S9qx

1. Humans have roughly as many _____ in their body as they have cells, often more.
2. The collection of bacteria in and on our bodies is known as the _____.
3. Bacteria are a type of organism classified as _____ because they lack a nucleus.
4. Unlike eukaryotes, bacteria store their genetic material in a region called the _____.
5. In addition to their main chromosome, bacteria often contain small circular DNA molecules called _____.
6. Bacteria can exchange genetic material through a process called _____ gene transfer.
7. The ability of bacteria to survive in the presence of antibiotics can be attributed to genes found on _____.
8. The process of making identical copies of a gene using bacteria is called _____.
9. A molecule produced using genes from two different species is referred to as _____ DNA.
10. The bacterium used to produce human insulin in laboratories is called _____.
11. The process by which a segment of DNA is copied into mRNA for protein production is called _____.
12. A protein that promotes gene expression by binding to DNA is called an _____.
13. A protein that stops transcription from occurring is known as a _____.
14. The classification system for Streptococcus bacteria, based on surface molecules, was developed by _____.
15. The molecules on bacterial surfaces that trigger immune responses are called _____.

Crash Course Biology #38: Bacterial DNA & Genetics – KEY

1. Humans have roughly as many *bacteria* in their body as they have cells, often more.
2. The collection of bacteria in and on our bodies is known as the *microbiome*.
3. Bacteria are a type of organism classified as *prokaryotes* because they lack a nucleus.
4. Unlike eukaryotes, bacteria store their genetic material in a region called the *nucleoid*.
5. In addition to their main chromosome, bacteria often contain small circular DNA molecules called *plasmids*.
6. Bacteria can exchange genetic material through a process called *horizontal* gene transfer.
7. The ability of bacteria to survive in the presence of antibiotics can be attributed to genes found on *plasmids*.
8. The process of making identical copies of a gene using bacteria is called *gene cloning*.
9. A molecule produced using genes from two different species is referred to as *recombinant* DNA.
10. The bacterium used to produce human insulin in laboratories is called *E. coli*.
11. The process by which a segment of DNA is copied into mRNA for protein production is called *transcription*.
12. A protein that promotes gene expression by binding to DNA is called an *activator*.
13. A protein that stops transcription from occurring is known as a *repressor*.
14. The classification system for Streptococcus bacteria, based on surface molecules, was developed by *Dr. Rebecca Lancefield*.
15. The molecules on bacterial surfaces that trigger immune responses are called *antigens*.

15 Questions

Answer Key Included

and SAVE 85%

Only \$0.15 per worksheet