

# DNA JEOPARDY



Structure

Replication

Transcription

Translation

Applications

100

100

100

100

100

200

200

200

200

200

300

300

300

300

300

400

400

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500

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500

**Final Jeopardy**

# Help

- (1) Save a duplicate of this template.
- (2) Enter all answers and questions in the normal view. (view/normal)
- (3) Change the category headings in the normal view (view/normal)
- (4) View as a slideshow.
- (5) Use the home red button after each question.



# A-100

- **ANSWER:**  
**bases, sugar and phosphate**
- **QUESTION:**  
**What is a nucleotide?**

Answer

Question



# A-200

- **ANSWER:**

**James Watson and Francis Crick**

- **QUESTION:**

**Who deduced the three dimensional structure of DNA?**

Answer

Question



# A-300

- **ANSWER:**

**adenine, thymine, cytosine and guanine**

- **QUESTION:**

**What are the 4 nucleotides in DNA?**

Answer

Question



# A-400

- **ANSWER:**

**Double ring structures versus single ring structures**

- **QUESTION:**

**What is the difference between purines and pyrimidines?**

Answer

Question



# A-500

- **ANSWER:**

**The strands run 5' to 3' and 3' to 5'.**

- **QUESTION:**

**What is the antiparallel nature of DNA?**

Answer

Question



# B-100

- **ANSWER:**

**semi-conservative**

- **QUESTION:**

**What is the method by which DNA replicates?**

Answer

Question





# B-200

- **ANSWER:**

**short strands of RNA complimentary to the DNA template that act as a starting point for DNAP**

- **QUESTION:**

**What is primer?**

Answer

Question



# B-300

- **ANSWER:**

**Enzyme that splices together Okazaki fragments on the lagging strand**

- **QUESTION:**

**What is DNA ligase?**

Answer

Question



# B-400

- **ANSWER:**

**Adds nucleotides to a free 3'OH end**

- **QUESTION:**

**What is DNAP?**

Answer

Question



# B-500

- **ANSWER:**

**The ability of DNAP to recognize non paired base pairs and to excise the incorrect base**

- **QUESTION:**

**What is proof reading function?**

Answer

Question



# C-100

- **ANSWER:**

**The product of reading the DNA template  
3' to 5'**

- **QUESTION:**

**What is mRNA?**

Answer

Question



# C-200

- **ANSWER:**

**The making of a precursor m-RNA or soft copy from a hard copy**

- **QUESTION:**

**What is the first step in the central dogma?**

Answer

Question



# C-300

- **ANSWER:**

**The steps of transcription**

- **QUESTION:**

**What is initiation, elongation and termination?**

Answer

Question



# C-400

- **ANSWER:**

**Unwinds the DNA strands to free up the sense strand**

- **QUESTION:**

**What is helicase?**

Answer

Question





# C-500

- **ANSWER:**

**Poly-A-tail, splicing of introns and a 5'G cap**

- **QUESTION:**

**What is modification of the mRNA before its entry into the cytoplasm?**

Answer

Question



# D-100

- **ANSWER:**

**A long strand of nucleotides shaped like a clover leaf that carries a precise amino acid**

- **QUESTION:**

**What is tRNA?**

Answer

Question



# D-200

- **ANSWER:**

**Grooves in the rRNA where tRNA binds**

- **QUESTION:**

**What is the A site, the P site and the E site?**

Answer

Question



# D-300

- **ANSWER:**

**The first amino acid picked up and coded for**

- **QUESTION:**

**What is methionine?**

Answer

Question



# D-400

- **ANSWER:**

**Catalyzes the addition of the correct amino acid on the 3' end of this molecule**

- **QUESTION:**

**What are activating enzymes?**

Answer

Question



# D-500

- **ANSWER:**

**Catalyzes bond formation between two amino acids in the growing chain**

- **QUESTION:**

**What is peptidyl transferase?**

Answer

Question



# E-100

- **ANSWER:**

**Cut the DNA at specific sites called  
palindromes**

- **QUESTION:**

**What are restriction enzymes?**

Answer

Question



# E-200

- **ANSWER:**

**Pattern of bands formed by using gel electrophoresis on DNA fragments**

- **QUESTION:**

**What is a DNA fingerprint?**

Answer

Question





# E-300

- **ANSWER:**

**Method of replicating DNA using a cycle of heating and cooling**

- **QUESTION:**

**What is PCR (polymerase chain reaction)?**

Answer

Question



# E-400

- **ANSWER:**

**An organism produced by moving DNA from one organism to another in order to create a new combination**

- **QUESTION:**

**What is a transgenic organism?**

Answer

Question



# E-500

- **ANSWER: Determining of the sequence of the three billion base pairs that make up a human**
- **QUESTION: What is the Human Genome Project?**

Answer

Question



# FINAL JEOPARDY

- **ANSWER: Provide variation for natural selection and evolution**
- **QUESTION: What are mutations?**

Answer

Question

