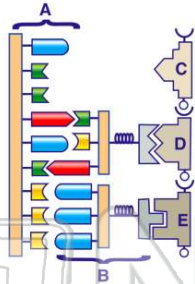




Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 How many **codons** are located on the **messenger RNA molecule** in the diagram?

- A 1
- B 6
- C 3
- D 9



2 One **similarity** between **DNA** and **messenger RNA** molecules is that they both contain

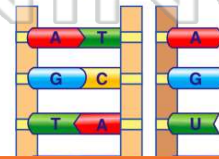
- A the same sugar
- B genetic codes based on sequences of bases
- C a nitrogenous base known as uracil
- D double-stranded polymers

3 A **DNA nucleotide** may contain

- A deoxyribose, cytosine, and a lipid
- B deoxyribose, thymine, and a phosphate group
- C ribose, uracil, and a polypeptide
- D ribose, adenine, and thymine

4 Which **base** is normally used in the synthesis of **RNA** but **not** in the synthesis of **DNA**?

- A adenine
- B uracil
- C cytosine
- D guanine



5



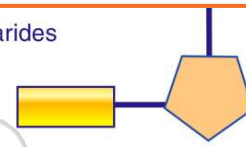
## PREVIEW

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7

- C thymine and guanine
- D guanine and cytosine

- C monosaccharides
- D fats



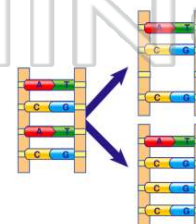
9 During the **replication** of a **DNA molecule**, **bonds are broken** between the

- A nitrogenous bases
- B phosphate groups
- C 5-carbon sugars
- D sugars and phosphates



10 Which process has taken place when the **base sequence** of a **DNA molecule** is altered?

- A replication
- B blending
- C segregation
- D mutation

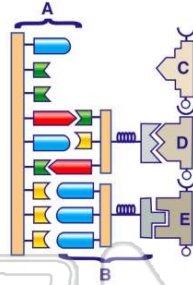




## ANSWER KEY

How many **codons** are located on the **messenger RNA molecule** in the diagram?

- A 1
- B 6
- C 3
- D 9



(C)

One **similarity** between **DNA** and **messenger RNA** molecules is that they both contain

- A the same sugar
- B genetic codes based on sequences of bases
- C a nitrogenous base known as uracil
- D double-stranded polymers

(b)

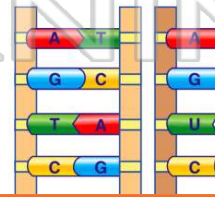
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- D ribose, adenine, and thymine

(b)

Which **base** is normally used in the synthesis of **RNA** but **not** in the synthesis of **DNA**?

- A adenine
- B uracil
- C cytosine
- D guanine



(b)



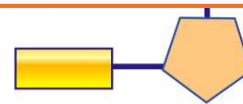
## PREVIEW

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D guanine and cytosine



D fats



During the **replication** of a **DNA molecule**, **bonds are broken** between the

- A nitrogenous bases
- B phosphate groups
- C 5-carbon sugars
- D sugars and phosphates

(a)



Which **process** has taken place when the **base sequence of a DNA molecule** is altered?

- A replication
- B blending
- C segregation
- D mutation

(d)

