

1. What is insulin and what role does it play in the human body?

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2. mRNA is called a messenger molecule. Can you think of a reason why?

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3. RNA polymerase unwinds DNA and directs insertion of the correct nucleotide into mRNA. Errors commonly occur in RNA polymerase insertion. What do you think may be consequences of this?

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4. Complete this table by matching the correct mRNA nucleotides to the DNA sequence.

DNA strand	C	G	C	G	C	T	C	T	C	A
mRNA strand										

5. Where does mRNA go when transcription is complete?

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6. What is the start codon for translation of mRNA?

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7. Describe how an amino acid chain is built.

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8. Why does a ribosome stop building a amino acid chain?

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9. What has to occur before an amino acid chain becomes a functioning insulin protein?

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