

Transcription

- making messenger RNA (mRNA) from DNA
- takes place in the nucleus
- Start with a strand of DNA
- Step 1 - RNA polymerase enzyme splits open the DNA strand and adds the complementary RNA nucleotides (adenine pairs with uracil; cytosine pairs with guanine)
- Step 2 - When completed, the mRNA strand is detached from the DNA template strand.
The DNA strands zip back together.
- Step 3 - The detached mRNA strand leaves the nucleus through the nuclear pore and moves into the cytoplasm

mRNA carries copies of the instructions for polypeptide synthesis (the creation of a chain of amino acids) from the nucleus to ribosomes in the cytoplasm.