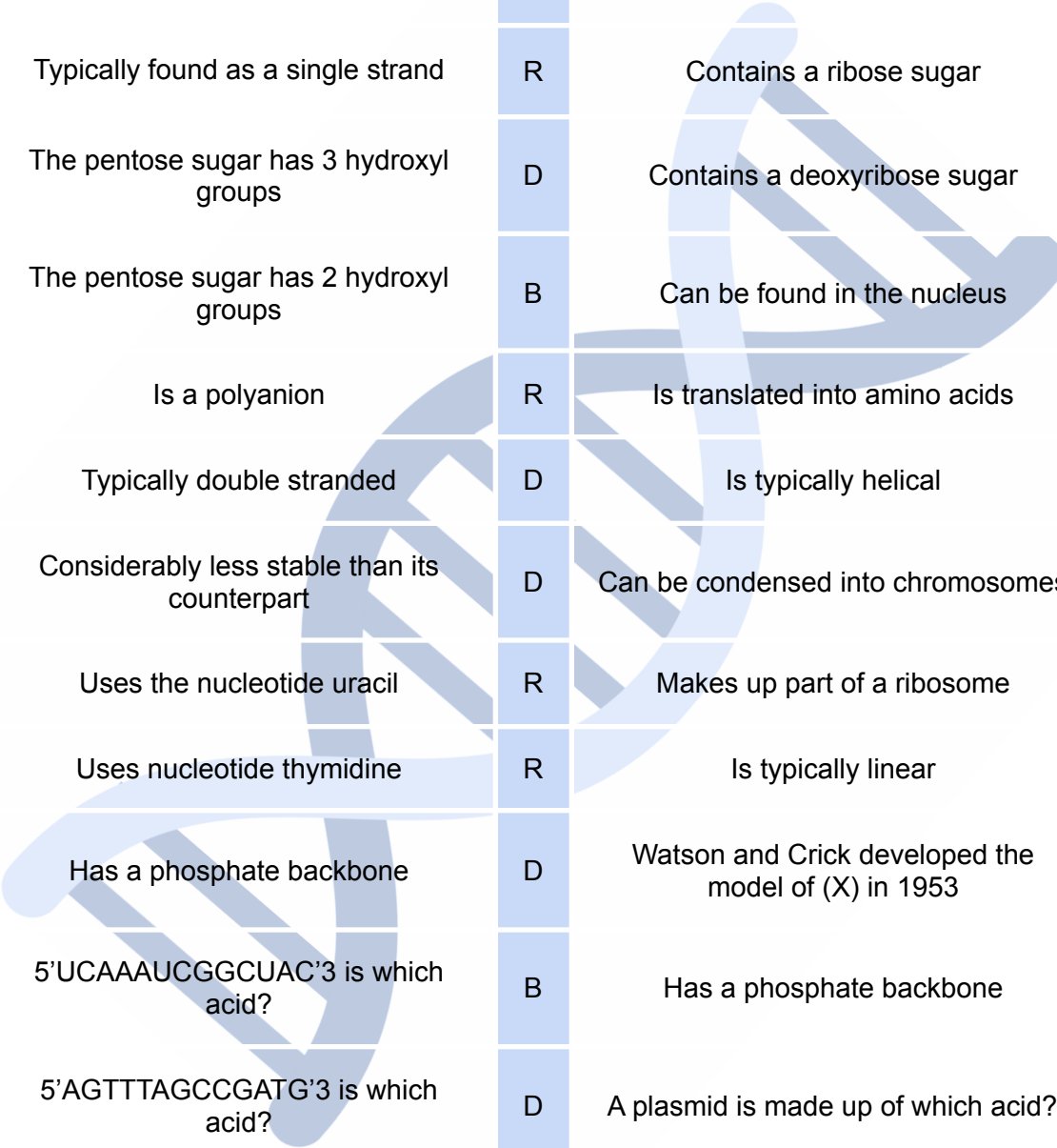


Name: _____

Date: _____

Understanding RNA and DNA

Directions: Write either DNA (D), RNA (R), or Both (B)



| | | | |
|---|---|---|---|
| B | Read in the 5' to 3' direction | B | Present in prokaryotes |
| R | Typically found as a single strand | R | Contains a ribose sugar |
| R | The pentose sugar has 3 hydroxyl groups | D | Contains a deoxyribose sugar |
| D | The pentose sugar has 2 hydroxyl groups | B | Can be found in the nucleus |
| B | Is a polyanion | R | Is translated into amino acids |
| D | Typically double stranded | D | Is typically helical |
| R | Considerably less stable than its counterpart | D | Can be condensed into chromosomes |
| R | Uses the nucleotide uracil | R | Makes up part of a ribosome |
| D | Uses nucleotide thymidine | R | Is typically linear |
| B | Has a phosphate backbone | D | Watson and Crick developed the model of (X) in 1953 |
| R | 5'UCAAAUCGGCUAC'3 is which acid? | B | Has a phosphate backbone |
| D | 5'AGTTTAGCCGATG'3 is which acid? | D | A plasmid is made up of which acid? |
| B | Contains nitrogenous bases | B | Uses the nucleotide cytosine |