

Name _____

Date _____

DAY 1: Read the section and complete the reading guide

section 12.1 DNA: The Genetic Material

Main Idea

Details

Scan Section 1 of the chapter. Identify the results of three DNA experiments.

1. _____
2. _____
3. _____

Review Vocabulary

nucleic acid

Use your book or dictionary to define nucleic acid.

New Vocabulary

double helix

Use your book or dictionary to define each term. In the box to the right, make a sketch to help you remember each term.

nucleosome

Academic Vocabulary

transform

Define transform to show its scientific meaning.

Section 12.1 DNA: The Genetic Material (continued)

Main Idea _____

Discovery of the Genetic Material

I found this information on page _____

Details _____

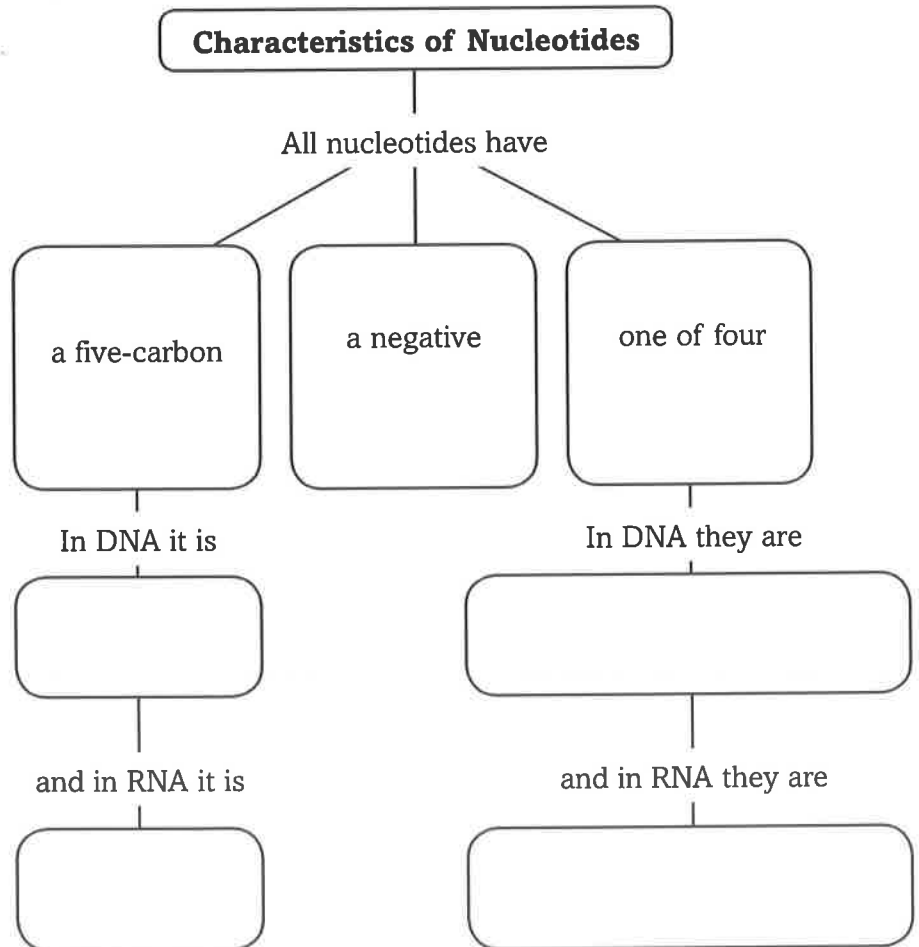
Complete the table below about geneticists and their discoveries.

Scientist	Discovery	Year
Fredrick Griffith		
Oswald Avery		
Alfred Hershey and Martha Chase		
James Watson and Francis Crick		

DNA Structure

I found this information on page _____

Organize the characteristics of nucleotides by filling in the graphic organizer below.



Section 12.1 DNA: The Genetic Material (continued)

Main Idea _____

I found this information on page _____.

Details _____

Create a memory device to help you remember how the nitrogenous bases are always paired.

Analyze the DNA molecule by explaining how each word applies to the molecule. Use a sketch to back up your explanation in each case.

Word and What It Means	Sketch of Effect
complementary:	
helix:	
double (as in "double helix"):	

Chromosome Structure

I found this information on page _____.

Synthesize and rephrase how a DNA strand that is 200 million bases long can fit inside a cell.

SUMMARIZE

State how Watson and Crick's DNA structure supported Chargaff's rules.
