

CHAPTER 16**HANDOUT****The Levels of Organization of Genetic Material Worksheet****BLM 16.1.4**

Fill in the blanks to complete the following questions.

Questions

1. The genetic material of a cell is referred to as _____.
2. This material is found within the _____ of a cell, which are found in the _____ of eukaryotic cells.
3. In order to fit within this small structure, the genetic material is _____ into a compact structure.
4. During the first stage of this process, the hereditary information is wound around proteins known as _____, forming bead-like structures.
5. These bead-like structures are tightly packed together to form strands of _____, which form loops that are attached to a _____.
6. This new structure folds even further during cell _____, condensing to form pairs of identical _____ that are joined at the _____.
7. Within human somatic cells, genetic material is organized into 22 pairs of _____ and two _____.