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Basic Introduction to Foundation of Life: Genes, Genetics, and Genetic Diseases

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The unit is designed to teach ninth and tenth grade students at the high school level. Every effort is made to motivate students by attracting them to the many marvels of genetics, demonstrations and models of applied genetics, genetic engineering, genetic disorders, detecting genetic diseases, thereby invoking their natural curiosity. Junior high school teachers can also use these plans directly or modify according to the students' levels and needs.

The main aim in this unit is to attract students from the beginning of the class, hold their attention throughout until the end, stimulating many thought-provoking questions about disease problems and sex. Present-day freshmen and sophomores get attentive when sex is introduced in class. Contrary to their idea of sex, if the teacher poses a problem involving sex-linked disorders (color blindness, hemophilia), sex-influenced disorder (baldness) the students are attracted learn what genetics and sex are all about. In a similar manner other diseases which are genetically linked; Non-Dys junction (Down's Syndrome, Turner's Syndrome, Klinefelter's Syndrome), Genetic Disorders (PKU, Sickle-cell Anemia), Detection of Genetic Diseases (Amniocentesis), are interesting topics for many teenagers who see or are involved with many classmates who get involved with many unwanted teenage pregnancies.

Key Words

DNA Genetics Biology General

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