**ABC Book of Genetics**

You are an author who has been asked to write an ABC children’s book about genetics. As you create this ABC book you must address:

• DNA technology (used in forensics, medicine, and agriculture)

• Biological resistance

• Sexual and asexual reproduction (the need for both)

• Mendelian Genetics

• DNA & RNA processes (replication, transcription, and translation)

• Chromosomes (chromosome number, homologous chromosomes, and sister chromatids)

• Mutations (gene and chromosomal)

**Requirements:**

1. All letters of the alphabet must be used.

2. Each page must have a letter and a picture. The picture may be illustrated by hand or may be found on the Internet.

3. In addition to the letter and picture, each student must provide the information about genetics that is represented by that letter and be tied into one or more of the seven themes listed above.

5. You must include an example of the following in your book: DNA technology, biological resistance, chromosome mutation, point mutation, DNA translation and transcription, Mendelian genetics, asexual reproduction, and sexual reproduction.

**Example:**

T is for twins. Identical twins have exactly the same genes and look nearly the same. Fraternal twins are no more alike than any other brothers and sisters. Each fraternal twin has his or her own unique combination of genetic information.

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**T**

TEACHER NOTE: The following differentiated instruction techniques may be used for students with special needs/disabilities. Choose the level that best fits the needs of particular students.

• Reading/research buddies

• Extended time to complete task

• Allow students to work in pairs

• Give specific terms for each letter of the alphabet for the student to research and draw.

This may include allowing the student to go to a resource room during class time to work on the project.