Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

Genetic Disorders

|  |  |
| --- | --- |
| **Huntington’s Disease** *What is it?*  | *How do people get it?* *What are some symptoms?*  |
| **Down Syndrome** *What is it?* | *How do people get it?* *What are some symptoms?* |
| **Williams Syndrome** *What is it?* | *How do people get it?* *What are some symptoms?* |
| **Turner Syndrome** *What is it?*  | *How do people get it?* *What are some symptoms?* |
| **Sickle-cell Anemia**  *What is it?*  | *How do people get it?* *What are some symptoms?* |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

Genetic Disorders—Answer Key

|  |  |
| --- | --- |
| **Huntington’s Disease** *What is it?* A brain disorder that affects a person’s ability to think, talk, and move. | *How do people get it?* Everyone who inherits the faulty gene will eventually get the disease.*What are some symptoms?* Poor memory, depression, and or mood swings, lack of coordination, twitching, or other uncontrolled movements, and difficulty walking, speaking and swallowing.  |
| **Down Syndrome** *What is it?* Developmental disorder caused by an extra copy of chromosome 21 | *How do people get it?* If a pair of number 21 chromosomes fail to separate during the formation of an egg or sperm. When the egg unites with a normal sperm to form an embryo, it ends up with three copies, instead of the normal two. *What are some symptoms?* Flat face, small broad nose, abnormally shaped ears, a large tongue, upward slanting eyes |
| **Williams Syndrome** *What is it?* Rare genetic disorder that affects a child’s growth, physical appearance, and cognitive development | *How do people get it?* A deletion is caused by a break in the DNA molecule that makes up a chromosome. In most cases, the chromosome break occurs while the sperm or egg cell is developing. *What are some symptoms?* Mental retardation, heart defects, and unusual facial features (small upturned nose, wide mouth, full lips, small chin, widely spaced teeth.) |
| **Turner Syndrome** *What is it?* Caused by a missing, or incomplete X chromosome.  | *How do people get it?* Normally, females inherit one X chromosome from their mother and one X chromosome from their father. Females with Turner Syndrome are missing one chromosome. *What are some symptoms?* Stocky appearance, arms that turn out slightly at the elbow, a receding lower jaw, a short webbed neck, and low hairline at the back of the neck. |
| **Sickle-cell Disease**  *What is it?* A disorder that affects the red blood cells, which use a protein called hemoglobin to transport oxygen from the lungs to the rest of the body. | *How do people get it?* It is inherited in an autosomal recessive pattern. This means that the child will not inherit the disease unless both parents pass down a defective copy of the gene.*What are some symptoms?* Delayed growth, jaundice, strokes |