

Name\_\_\_\_\_Date\_\_\_\_\_

### Genetic Facts and Fallacies

The purpose of this questionnaire is not to test you on what you know about genetics, but rather to point out what you don't know and hopefully trigger your interest in finding out some of the "truths" in genetics. It will be interesting to come back to this questionnaire after we have studied genetics and see how your new answers compare to those you made before our studies. At that time, you should be able to explain why each of the incorrect statements is not true.

Below are 20 statements that relate to various genetic principles, some of which are true and some of which are false. Mark your answers with a "T" or an "F."

1. Certain acquired characteristics, such as mechanical or mathematical skill, may be inherited.
2. Identical twins are always of the same gender.
3. Fraternal twins are more closely related to each other than to other children in the family.
4. The father determines the gender of the child.
5. Each parent contributes half of a child's genetic makeup.
6. Certain thoughts or experiences a mother has may mark or alter an unborn child.
7. Color blindness is more common in males than in females.
8. Parents may transmit to offspring characteristics that the parents themselves do not show.
9. Certain hereditary characteristics are influenced by the blood.
10. Identical twins are more closely related than fraternal twins.
11. Certain inherited traits may be altered by the stars, moon or planets early in development.
12. Males are biologically stronger than females.
13. The tendency to produce twins may run in families.
14. A craving for food, such as strawberries, may cause a birthmark on an unborn child.
15. Many of a person's inherited traits are not apparent.

16. The parent with the stronger will contributes more to a child's inheritance than the other parent.
17. If a person loses a limb in an accident, it is likely that he or she will have a child with a missing limb.
18. The attitude of parents towards each other influences the emotional makeup of an unborn child.
19. Children born to older parents usually lack the vitality of those born to younger parents.
20. The total number of male births exceeds female births each year