

Nature or Nurture?

Your brother scored five goals at his last soccer game while you tripped over your feet in gym class. You love big crowds but your best friend likes quiet time at home. You and your mom both love chocolate ice cream. What makes people the same? What makes them different? Are you born with certain traits or do you learn them? These questions are part of the nature versus nurture debate.

Nature versus nurture questions how people develop certain traits or characteristics. Some traits, like blood type, are inherited. These traits are determined by genes that you receive from your biological parents.

Some traits, like what language you speak, are environmental. They are determined by where and how you grow up. If you are born in France to French speaking parents, you will also speak French.

Most characteristics arise from some combination of nature and nurture. You might have amazing soccer playing genes but never have the chance to kick a ball. On the other hand, you might have only so-so soccer genes, but with lots of practice you can be a great player. The best players most likely have both strong soccer genes and opportunities to train.

Nature versus nurture is often explored through twin studies. If genetically identical twins are raised in different environments, which traits



will they share and which traits will differ? Some studies compare identical twins to fraternal twins to try to understand the inherited level of traits. Identical twins have the exact same genes but fraternal twins do not. Inherited characteristics will be more similar for identical twins than for fraternal.

Many modern scientists think that the nature versus nurture debate is outdated. They recognize that both nature and nurture affect the development of most characteristics. Also, there are many components of nurture to consider such as parenting, education, community, and more. Scientists feel that it is simplistic to reduce the debate to an "either/or" answer. As Professor Victor Katch puts it, "We now know that genes do not act independently of their contexts. Instead, genes do what they do *because* of their contexts."



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NAME: DATE:

- 1. Which trait is completely determined by genes?
 - a. Singing ability
 - b. Language spoken
 - c. Soccer ability
 - d. Blood type
- 2. Which type of twins have the exact same genes?
 - a. All twins
 - b. Fraternal twins
 - c. Identical twins
 - d. No twins
- 3. What is another way to describe an "either/or" answer?
 - a. Gray
 - b. Black and white
 - c. Multifaceted
 - d. Complex
- 4. What does Victor Katch think of the nature vs. nurture debate?
 - a. It is relevant
 - b. It is outdated
 - c. It is exciting
 - d. It is completely wrong



Instructions for teachers:

These questions can be used to assess understanding of the reading passage.

The item in bold is the correct answer for each question.

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