

Name: \_\_\_\_\_ Table: \_\_\_\_\_ Period: \_\_\_\_\_

## Psychology Lecture Notes: Module 3 Nature and Nurture in Psychology

### Behavior Genetics

- Studies the relative influences of \_\_\_\_\_ influences on behavior

### Genes

- The biochemical units of \_\_\_\_\_
- Many genes together make up \_\_\_\_\_

### Environment

- Any influence, other than \_\_\_\_\_, on an individual's \_\_\_\_\_
- Include:
  - The \_\_\_\_\_ someone is raised in
  - One's \_\_\_\_\_
  - \_\_\_\_\_ group

### Nature and Nurture Issue

- Nature side \_\_\_\_\_ passed from parent to child.
- Nurture side involves all \_\_\_\_\_ from prenatal development on.
- Which parts of human behavior can we attribute to nature and which can be attributed to nurture?

### Genetics in Brief

#### Chromosomes

- Threadlike structures made up of \_\_\_\_\_
- \_\_\_\_\_ pairs in each cell
- \_\_\_\_\_ received from each parent

#### Chromosomes

#### Deoxyribonucleic Acid (DNA)

- A complex \_\_\_\_\_
- Contains the genetic information of each \_\_\_\_\_

#### Nucleotides

- The four letter code to \_\_\_\_\_
- Letters A, T, C, or G are used

### The Genetic Makeup of One Cell

#### Genome

- The complete \_\_\_\_\_ for a given \_\_\_\_\_
- All the genetic material in an organism's \_\_\_\_\_

## Gene Therapy

Play “Bypass Genes” (8:09) Segment #22 from Scientific American Frontiers: Video Collection for Introductory Psychology (2<sup>nd</sup> edition) **Answer questions 1-4**

1. What is gene therapy?

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2. How was it used to treat the patient depicted in this video segment?

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3. As new technologies develop, many controversial/ethical questions emerge. For example, should prospective parents be tested to determine if they carry any potentially serious genetic abnormalities? How do you feel about this issue?

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4. List some other issues that you can think of that are raised by advances in medical technology? How do feel about these issues?

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### Mutation

- Random errors in the \_\_\_\_\_ which result in change of an individual’s genetic code
- Can be \_\_\_\_\_ changes

### Predisposition

- The possibility of something happening through the \_\_\_\_\_
- Genetics creates the \_\_\_\_\_ for something
- The \_\_\_\_\_ the predisposition

### Genetic Diseases

- Play “Huntington's Disease” (6:53) Module #12 from The Brain: Teaching Modules (2<sup>nd</sup> edition) **Write a summary of the video**

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## Psychology Lecture Notes: Module 3 Nature and Nurture in Psychology

### Nature and Similarity

#### Similarities

- Despite our differences, human beings throughout the world share a number of similarities

#### Evolutionary Psychology

- The study of evolution of \_\_\_\_\_
- Uses the principle of \_\_\_\_\_

#### Natural Selection

- Darwin's principle that those traits \_\_\_\_\_ will most likely be passed on to \_\_\_\_\_

### Nature and Individual Differences: Twin Studies

#### Identical Twins

- Twins who developed from a \_\_\_\_\_
- Are genetically \_\_\_\_\_
- Called \_\_\_\_\_ twins

#### Fraternal Twins

- Twins who developed from \_\_\_\_\_
- Genetically no different than other \_\_\_\_\_
- Called \_\_\_\_\_ twins

#### Heritability

- The proportion of an individual's characteristics that can be attributed to \_\_\_\_\_ (heredity)
- The degree to which traits are \_\_\_\_\_

#### Twin Studies

- Used to determine the \_\_\_\_\_
- Data is collected from both \_\_\_\_\_
- Compare the data between \_\_\_\_\_
- Important not to conclude that a specific behavior is \_\_\_\_\_

#### Twin Studies

- Play "The Effect of Aging on Cognitive Function: Nature/Nurture" (10:09) Segment #16 from The Mind: Psychology Teaching Modules (2<sup>nd</sup> edition)

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## Nature and Individual Differences: Adoption Studies

### Adoption Studies

- Compare adopted children's traits with those of \_\_\_\_\_: attribute the trait to heredity
- Trait similarities with the adopted parents: attribute the trait \_\_\_\_\_

### Environment Matters: Early Learning and Brain Development

#### Early Brain Development

- Early experience is critical in \_\_\_\_\_.
- In later life \_\_\_\_\_ in the brain.

### Environment Matters: Peer and Parent Influence

#### Peer Influences

- Peer influence in \_\_\_\_\_ is very powerful.
- Many studies suggest a peer group is correlated with \_\_\_\_\_.

### Environment Matters: Cultural Influences

#### Culture

- Shared \_\_\_\_\_ of a group
- Culture is communicated from \_\_\_\_\_

#### Norms

- Understood rules for \_\_\_\_\_
- Consist of the "proper behavior" \_\_\_\_\_

#### Individualism

- Giving priority to \_\_\_\_\_ over the goals of the group
- Defining one's identity in \_\_\_\_\_ rather than the group's identification
- Tend to see people as \_\_\_\_\_

#### Collectivism

- Giving priority to the goals \_\_\_\_\_ over one's \_\_\_\_\_
- Defining one's identity in terms of the \_\_\_\_\_ rather than personal attributes
- See people as \_\_\_\_\_
- Individual needs are \_\_\_\_\_ for the good of the group.