

Interpreting for Pediatric Genetics
Pre/Posttest Questions

1. What is "genetics?"
 - a. The study of genes.
 - b. The study of inheritance.
 - c. **The study of the biological basis for heredity.**
 - d. The study of birth defects, cancer and autism.
2. What is the difference between a chromosome and gene?
 - a. Humans have many more chromosomes than genes.
 - b. **A gene is a section on the chromosome that codes for a particular trait or function.**
 - c. Chromosomes and genes are different names for the same thing.
 - d. Genes are made up of chromosomes.
3. How many chromosomes do humans typically have?
 - a. 2
 - b. 23
 - c. **46**
 - d. 92
4. What is a gene variant?
 - a. **A change in the gene coding from what is considered typical.**
 - b. A chromosome abnormality.
 - c. A benign variation in genetic coding.
 - d. A clinically significant finding.
5. What is a "secondary finding?"
 - a. Information about a genetic change that is not as important as the primary finding.
 - b. Information about a non-genetic health problem that was found upon exam.
 - c. Information about is learned in a second round of genetic testing.
 - d. **Information about a genetic change that the geneticist was not specifically looking for.**
6. Which five allied health professionals are most likely to be found on a pediatric genetics team?
 - a. Geneticist, genetic counselor, psychiatrist, chaplain, laboratory technician
 - b. **Geneticist, genetic counselor, nurse, social worker, nutritionist**
 - c. Genetic counselor, nurse, social worker, pharmacist, physical therapist
 - d. Geneticist, nurse, social worker, nutritionist, occupational therapist
7. Why does the genetic team measures things such as head circumference, arm span and the space between the eyes during a physical exam at a first visit?
 - a. Certain atypical measurements, taken together, are signs of particular genetic conditions.
 - b. The team wants to make sure the child is growing appropriately.
 - c. Genetic teams need these measurements to make braces and other special needs appliances for the patient.
 - d. **All of the above.**

8. Match the order of the genetic tests to the corresponding order of the scope of the test:
- Single site testing
 - Individual gene testing
 - Exome sequencing
 - Gene panel testing
 - Genome sequencing
 - Microarray
- a. One location on a single gene, all of a single gene, all the genes (but only the part that does the encoding), two or more specific genes, all genetic material, chromosomes
- b. All of a single gene, all the genes (but only the part that does the encoding), one location on a single gene, two or more specific genes, all genetic material, chromosomes
- c. Chromosomes, two or more specific genes, one location on a single gene, all of a single gene, all the genes (but only the part that does the encoding), all genetic material
- d. Two or more specific genes, one location on a single gene, all the genes (but only the part that does the encoding), all genetic material, chromosomes, all of a single gene
9. John had a genetic test done, and the geneticist found a gene variant on the X chromosome that is associated with Fragile X syndrome. This is considered:
- a. A positive finding because now John's parents are happy to finally know what is causing his symptoms.
 - b. A negative finding because Fragile X syndrome is a very serious condition.
 - c. A positive finding because the geneticist found a clinically significant variant.
 - d. A negative finding because the variant was only at the gene level, not at the chromosome level.
10. What sort of support can a pediatric genetics team offer to patients and their families? (Mark all that apply.)
- a. Help the family make a plan that includes medical management, developmental therapies, and psychosocial support for the whole family.
 - b. Referrals to patient advocacy groups related to the child's condition.
 - c. Referrals to medical specialists.
 - d. Guidance as to who else in the family should get genetic testing.
 - e. Assistance procuring orthopedic appliances.
 - f. Help in getting the child into special education.
 - g. Guidance around setting up guardianship for the child as the parents age.