Genetic Disease

Chromosomal Disorders

Exercise 1: Down Syndrome

1. What is the number of chromosomes in each cell of a Down syndrome child?
   A. 21
   B. 46
   C. 47
   D. 23
   Answer: _____

2. The extra chromosome can come from a process known as non-disjunction at either the first or the second meiotic division. Fill in the predicted chromosome(s) for normal and trisomy 21 in each meiotic division of the following figure (choose either first or second meiotic division).