

Names: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_ Due Date: \_\_\_\_\_

### Wexler's Search for the Huntington's Gene

The year was 1979, and Congress had just issued you the funding to study Huntington's disease- a disorder afflicting more than 50,000 Americans. Very little was known about the inheritance of Huntington's, but Dr. Nancy Wexler (whose mother died of it) knew about the incredibly high rate of the disease around a place called Lake Maracaibo, Venezuela. Here, you'll be a part of a team sent to Lake Maracaibo to study a large family (of more than 5,000 members), and report your findings!

The family spans five generations. It is your job (as it was hers) to pedigree the family and see what's going on here!

Below is a fax that has arrived from Lake Maracaibo...

To: Dr. Gray and colleagues, Pella University, Pella, Iowa from: Huntington's research team, Lake Maracaibo

Dear scientists,

What follows are the results of our interviews with 38 members of the Gonzales family. See what you can make of it (**draw your pedigree chart on the back**).

Sincerely,

The team

#### Generation V:

Luis, son of Zelda and Ramon. AFFLICTED

#### Generation IV:

Ramon, son of Ricardo and Lydia. AFFLICTED

Zelda, married to Ramon. HEALTHY

Felipe, brother of Ramon. AFFLICTED

Juan, son of Miguel and Letty. AFFLICTED

Cira, daughter of Miguel and Letty. HEALTHY

Roberto, son of Miguel and Letty. HEALTHY

Nora, daughter of Jesus and Margarita. AFFLICTED

Alejandro, son of Pedro and Beatriz. AFFLICTED

Delia, daughter of Dano and Andrea. AFFLICTED

Tio, son of Dano and Andrea. AFFLICTED

Maria, daughter of David and Guadalupe. AFFLICTED

Nariza, daughter of David and Guadalupe. AFFLICTED

#### Generation III:

Lydia, daughter of Carlos and Imelda. AFFLICTED

Ricardo, married to Lydia. HEALTHY

Helga, daughter of Carlos and Imelda. HEALTHY

Letty, daughter of Carlos and Imelda. AFFLICTED

Miguel, married to Letty. HEALTHY

Margarita, daughter of Carlos and Imelda. AFFLICTED

Jesus, married to Margarita. HEALTHY

Beatriz, daughter of Carlos and Imelda. AFFLICTED

Pedro, married to Beatriz. HEALTHY

Juanita, daughter Javier and Bonita. AFFLICTED

Benito, son of Javier and Bonita. HEALTHY

Dano, son of Chito and Chelita. AFFLICTED

Andrea, wife of Dano. HEALTHY

David, son of Chito and Chelita. AFFLICTED

Guadalupe, wife of David. HEALTHY

Horatio, son of Chito and Chelita. HEALTHY

Lucio, son of Chito and Chelita. HEALTHY

#### Generation II:

Imelda, daughter of Rigo and Esmerelda. AFFLICTED

Carlos, married to Imelda. HEALTHY

Javier, son of Rigo and Esmerelda. AFFLICTED

Bonita, married to Javier. HEALTHY

Chito, son of Rigo and Esmerelda. AFFLICTED

Chelita, married to Chito. HEALTHY

#### Generation I:

Rigo. AFFLICTED

Esmerelda. HEALTHY