



Name \_\_\_\_\_

### Zoo Matchmaker Data Tables-Genetic Diversity

Use the following tables to keep track of the direct relations of the tigers in each generation.

- Place a 1 in each box for tigers that are first cousins.
- Place a 2 in each box for tigers that are second cousins.
- Place an 's' in each box for tigers that are siblings.
- Place an 'h' in each box for tigers that are half-siblings.

Example: In the founding generation ( GEN 1), Tevye is a first cousin to Nadia, Tsamara, and Raisa. A "1" has been filled in to each box to indicate this relationship.

Use the same data tables to fill in breeding pairs of tigers. If you breed Katja with Tevye, place an "X" through that box or color it in to show the breeding. This will help you keep track of tigers you have bred so you can avoid inbreeding.

Finally, use the column/row marked with a "\*\*\*" to fill in the percent of genes shared with the group.

NOTE: As cubs are born, the percent of genes shared will change each time!

At the end, record the Genetic Diversity remaining for each generation.

GEN 1	**	Tevye	Robekei	Boris	Fascir	Taiga	Tundra
Katja							
Adrienne							
Marilei							
Nadia		1					
Tsamara		1					
Raisa		1					

At end of breeding round:

Total Genetic Diversity

Total Inbreeding


GEN 2	**	Khasam	Fedor	Sikhote	Rozar	Globus	Kavacha
Anastasia							
Gaia							
Kashka							
Inga							
Tatiana							
Chanda							

At end of breeding round:

Total Genetic Diversity

Total Inbreeding


GEN 3	**	Bransk	Amur	Kamchatka	Dshingis	Vanchmo	Zef
Lena							
Zara							
Misha							
Mona							
Kali							
Katarina							

At end of breeding round:

Total Genetic Diversity

Total Inbreeding


GEN 4	**	Kiev	Ivan	Sergel	Dmitri	Nicoli	Vaska
Sinda							
Helga							
Sasha							
Luna							
Natasha							
Alexis							

At end of breeding round:

Total Genetic Diversity

Total Inbreeding
