

Name _____

Period _____

Ms. Foglia

Date _____

THE HISTORY OF MEN

Secrets of the Y chromosome

1. Why is the Y chromosome particularly useful for tracing human genetic history?

2. What does Y chromosome data show about major human migrations?

a. out of Africa theory _____

b. origin of Western European populations _____

c. origin of Native Americans _____

3. Why is Genghis Khan possibly important in the genetics of Central Asian populations?

4. What is the genetic evidence to support the Genghis Khan hypothesis?

5. Why is it important to collect DNA samples from isolated human populations now?

6. Why have some social activists opposed the collection of DNA samples from genetically isolated populations of people who belong to traditional cultures?

EXTRA EXTRA CREDIT ~ ~ ~ ~ ~

You MUST get approval from your teacher before embarking on either part of this extra credit.

7. Mitochondrial DNA has been used as an “evolutionary clock” to measure changes over time in the human population. I wonder if the Y chromosome offers better or more or different information than mitochondrial DNA. Find out how to contact Spencer Wells (the scientist in the article) by e-mail; politely and professionally ask him to speak on this issue.

8. Listen to the NPR news report on the loss of the Y chromosome at:
<http://www.npr.org/templates/story/story.php?storyId=4225769>
Find out how to contact Spencer Wells (the scientist in the article) by e-mail; politely and professionally ask him to speak on this issue. Does he agree with this hypothesis?