

Name _____

Period _____

Ms. Foglia

Date _____

THOMAS HUNT MORGAN & THE WHITE-EYED MUTANT

1. Why were fruit flies a convenient organism for Morgan to use for genetic experiments?

2. Why was Morgan initially skeptical of Mendel's theories of genetics?

3. Why was Morgan skeptical of Darwin's theory of evolution?

4. Luck favors a prepared mind. How was Morgan well-prepared to discover that chromosomes carry genes (traits)?

5. What is a sex-linked trait? Why did Morgan find white eyes only in males in his first crosses?

6. Can females show the white-eye trait? How? What would be the genotype of parents that produce a white-eyed female?

7. Before finding the white-eyed fly, Morgan had some strong ideas (hypotheses) about how heredity might work. The data from his first few crosses with the white-eye trait could not be explained by these earlier hypotheses. How did Morgan react to data that he could not explain?

8. How is this a good illustration of the scientific method? (The sound of scientific discovery is not "Eureka!" but "That's strange?")
