 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_ Score: \_\_\_\_\_\_\_\_\_

Meiosis: Where the Sex Starts (11:43)

1. By what process do our body cells clone themselves? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Mitosis replicates a cell with a complete set of \_\_\_\_\_\_\_\_\_\_\_\_ chromosomes into 2 daughter cells

 that are each \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to each other.

3. We have 23 pairs of chromosomes (46 total), one set from mom and one from dad. We call

 these homologous chromosome pairs. What does homologous mean? (2 words)

4. What are the two haploid cells? What does haploid mean?

 The two haploid cells are…

 Haploid means…

5. What is meiosis?

6. Where are the raw materials for meiosis located?

 girls –

 boys –

7. What are the 2 new things that happen during Prophase I that do not happen during mitosis?

 1.

 2.

8. What is crossover and recombination?

 crossover –

 recombination –

9. After crossover, all 4 chromatids are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10. What pair of chromosomes are the sex chromosomes? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. If you are female, what are your sex chromosomes? Male?

 female –

 male –

12. What happens in Metaphase I?

13. Who separates in Anaphase I?

14. At the end of Meiosis I, how many cells do you have AND are they haploid or diploid?

 # of cells –

 haploid or diploid –

15. At the end of the Meiosis I, are the chromosomes still duplicated? What do they still look like?

 still duplicated –

 look like –

16. Meiosis II is just like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but instead of duplicating the

 chromosomes we separate them into single stranded chromosomes.

17. From one original cell with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chromosomes we now have \_\_\_\_\_\_\_\_\_\_\_\_ new cells

 with \_\_\_\_\_\_\_\_\_\_\_\_ single chromosomes each that are each genetically different.

18. In the egg-making process, there is \_\_\_\_\_\_\_\_ egg and \_\_\_\_\_\_\_\_\_ polar bodies because the

 cytoplasm is not split equally.

19. After viewing this episode, what are five ADDITIONAL things you learned that you didn’t

 know before? Make sure they are things that I did not ask you about on this worksheet!

 (These are supposed to be real tidbits of info, not things like “Hank is better at Assassin’s

 Creed than his brother John.” Try to put your new knowledge in your own word, not Hank’s

 words. ☺)

 1.

 2.

 3.

 4.

 5.

\*NOTE: Sometimes Hank slips in his opinion into an episode. These are Hank’s opinions, NOT necessarily

 mine. We watch Crash Course for the content, not the beliefs. Just FYI…☺