Herdity Introduction Khan Academy Video Title: *Heredity*

This sheet will serve as your notes for this section of content. Keep it in your binder so you can use this information as a reference for worksheets and to study from. <u>DO NOT throw it away</u>! <u>https://www.khanacademy.org/science/biology/crash-course-bio-ecology/crash-course-biology-science/v/crash-course-biology-109</u>

- 1. Heredity is the passing on of genetic traits from **parents** to **offspring**.
- 2. Aristotle suggested that we were a **<u>mixure</u>** of our parents' traits.
- 3. This idea meant that our parents' traits were **<u>blended</u>** together in us.
- 4. The first person to really think about heredity was an Austrian <u>monk</u> named Gregor <u>Mendel</u>.
- 5. Humans have <u>23</u> pairs of chromosomes.
- 6. Any cell not an egg or sperm is called a somatic cell and is diploid (has 2 sets of chromosomes).
- 7. You get 1 earwax allele from \underline{mom} and 1 from \underline{dad} .
- 8. Gametes are <u>haploid</u>, meaning they contain 1 set of chromosomes.
- 9. The <u>dominant</u> allele will mask the expression of another allele.
- 10. The allele for wet earwax in this example is **<u>dominant</u>**.
- 11. The allele for dry earwax in this example is **recessive**.
- 12. Genotype is the **genetic** makeup.
- 13. Hank and John's mother had a genotype of \underline{Ww} ; while their father had a genotype of \underline{ww} .
- 14. Set up & complete the Punnett Square below like the one in the video:



15. What percentage of offspring would have wet earwax? 50% Dry? 50%

16. The 23^{rd} pair of human chromosomes are the <u>sex</u>-chromosomes.

- 17.Females will have <u>XX</u>
- 18.Males will have <u>XY</u>