

ACROSS

1. A genotype consisting of two identical alleles of a gene for a particular trait.

3. Referring to an organism that lacks a true nucleus.

6. Centromeres of a duplicated chromosomes line up across the center of the cell

7. An error in meiosis that occurs when homologous chromosomes fail to separate

10. The movement devoted to improving the human species by controlling heredity.

14. Acroynm; four phases of cell division

16. The process of cell division leading to the production of daughter nuclei with half the genetic complement of the parent cell.

17. The cell that results from sexual reproduction.

19. The inheritance pattern in which two different alleles for a trait are expressed unblended in the phenotype of heterozygous individuals.

21. Shows the presence or absence of a trait according to the relationships between parents, siblings, and offspring. A family tree.

22. The observable or detectable characteristics of an individual organism; the detectable expression of a genotype.

23. A unit of inheritance usually occurring at a specific location on a chromosome.

24. have one X chromosome and one Y chromosome

27. The production of genetically identical offspring from a single parent

28. Have two copies of the X chromosome

30. An alternate form of the same gene.

31. The general term for an allele that masks the presence of another allele in the phenotype.

32. The genetic makeup of an individual for a trait or for all of his/her inherited traits—not the observable or detectable characteristics.

33. He acquired his understanding of genetics mostly through pea plant breeding experiments.

34. An inheritance pattern in which a gene has more than two alleles.

35. Genetic information bundled into packages of DNA

Down

1. The term for a genotype in which there are two recessive alleles.

2. Cell xeroxing.

3. A trait that is determined by the combined effect of more than one gene.

4. The occurrence of genes close together on the same chromosome so that they tend to be inherited together and not independently.

5. Mendel's principle of genetic inheritance stating that different pairs of genes are passed to offspring independently so that new combinations of genes, present in neither parent, are possible.

8. Mendel's principle of genetic inheritance stating that, for any particular trait, the pair of genes of each parent separate and only one gene from each parent passes on to an offspring.

9. The succession of descendants of a homozygous individual that are identical to each other and continue to breed true.

11. Completes the process of cell division—it splits one cell into two.

- 12. A 'family photo' of an organism's chromosomes
- 13. A genotype consisting of two different alleles of a gene for a particular trait.
- 15. A type of female-only cat that has three colours
- 18. Paired chromosomes that play no part in sex determination.
- 20. The general term for an allele that is masked in the phenotype by the presence of another allele.

25. A cell or organism containing only one representative from each of the pairs of homologous chromosomes found in the normal diploid cell.

26. The name given to male or female reproductive or sex cells.

29. Cells having a kernal nucleus