1)

Туре	Receivable
AB+	O-, O+, B-, B+, A-, A+, AB-, AB+
AB-	O-, A-, B-, AB-
A+	O-, O+, A-, A+
A-	O-, A-
B+	O-, O+, B-, B+
B-	O-, B-
O+	O+, O-
O-	O-

2) The letters refer to certain carbohydrates found on red blood cells. For example, "A" carbohydrates are found on A blood cells. The + or - refer to the RH factor.

3) The amount of adenine is equal to the amount of thymine and the amount of guanine is equal to the amount of cytosine.

4) The male.

5)

Hb	hb
Hb	hb

6) 1/2;50%

7) ½;50%

8)

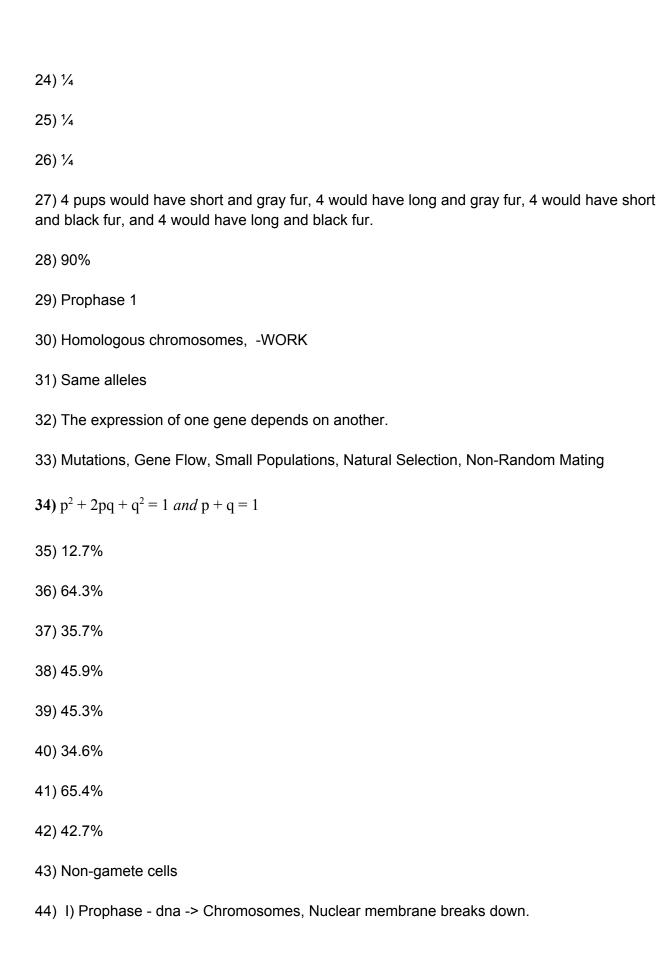
0)	
Hb	hb

- 9) ½;50%
- 10) 1/2;50%
- 11) 0%
- 12) Reginald C. Punnett, he created the Punnett square
- 13) crossing over, random fertilization, independent assortment
- 14) Nucleotides
- 15) A theory to explain inheritance. According to it, pangenes travel from each part of an organisms's body to the eggs or sperm and are passed onto the next generation.
- 16) Hippocrates
- 17) Incorrect
- 18) Gregor Mendel
- 19) He discovered the principles of genetics by crossing peas (breeding them).
- 20) The P generation
- 21) The F₁ generation

22)

HhsS	HhsS	hhsS	hhsS
Hhss	Hhss	hhss	hhss
HhsS	HhsS	hhsS	hhsS
Hhss	Hhss	hhss	hhss

23) 1/4

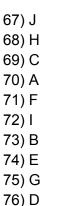


- II) Metaphase Mitotic spindle formed, chromosomes aligned on metaphase plate.
- III) Anaphase Centromeres come apart, separating chromatids. Chromosomes move to the two poles of the cell.
 - IV)Telophase Cytoplasm divides by cytokinesis.
- 45) Prophase 1 -> Metaphase 1 -> Anaphase 1 -> Telophase 1 -> Prophase II -> Metaphase II -> Anaphase II .> Telophase II
- 46) Interphase
- 47) 90%
- 48) The sex chromosome
- 49) One gene affects multiple, seemingly unrelatable, phenotypic traits. The chicken's frizzle gene
- 50) An allele, that if is homozygous, will kill the organism.
- 52) Amount of steps, amount of daughter cells produced, cells used
- 53) A cell with a complete set of chromosomes.
- 54) Female
- 55) Trisomy 13
- 56) Patau Syndrome
- 57) Male
- 58) 2 X Chromosomes 1 Y Chromosome
- 59) Klinefelter Syndrome
- 60) Female
- 61) Trisomy 21
- 62) Down Syndrome
- 63) 1/691 babies born with it, neotenization of brain and body usually

64)	2003
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65) Hemor	philia,	red-green	colorblindness,	Duchenne	Muscular D	ystrophy.	Affect males	because
males only	, need	one copy	of defective ge	ne to show	the recessiv	e trait, wh	nile females n	eed two.

66) T	The coiled up.	unused copy	v of the second 2	X chromosome ir	ı females.
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77) K

- 78) Nitrogenous Base, Phosphate Group, Ribose Sugar
- 79) The descendants of a group of "founder" organisms that colonized a new area will have decreased biodiversity.
- 80) If a large part of a population is destroyed, the remaining individuals will have lower diversity.
- 81) 1) Large population 2) no in- or out- migration 3) random mating 4)no selection 5) no beneficial mutations
- 82) Tay Sach's- Central European Jews. Cystic Fibrosis- Europeans. Sickle-cell Disease-Blacks.
- 83) Yes, because only males appear to get it. (Females are carriers)
- 84) Heterozygous Bb
- 85) 50%
- 86) 0%
- 87) Pauling worked on the shape of the DNA molecules, and discovered its formula, but incorrectly considered it to be a triple helix. He also worked identiled sickle-cell disease as a

genetic disorder.
88) Watson and Crick determined the overall structure of the DNA molecule (double helix)
89) The body cannot synthesize phenylalanine, and if phenylalanine is ingested, it leads to mental retardation. If spotted early, the child can be put on a phenylalanine free diet.
90) 12
91) Telophase
92) Inversion
93) somatic cells; gametes
94) 92
95) 50 units
96) False
97) Cancer, tumors appear that are composed of cells that divide without restraint, can lead to death if not treated.
98) It is the guardian angel of the cell because it helps prevent tumors from forming. AKA tumor suppressor gene.
99) Metastasis is when a tumor cell enters the bloodstream and moves to a different part of the body.
100) RNA
101) Ribosomes
102) A multifactorial trait is influenced by both genes and the environment. A person can be born susceptible to heart disease, but this is magnified if the person has an unhealthy diet and does not exercise.