expected phenotypic ratio would be:
a. 1:1:1:1 b. 12:4 c. 3:1 d. 9:3:3:1
___25. When two heterozygous tall pea plants are crossed, the expected genotype ratio of the
offspring is:
a. 3:1 b. 1:2:1 c. 2:2 d. 4:0

___26. The principle of independent assortment states that _____ for different
traits can segregate independently during the formation of gametes.
a. sex cells b. characteristics c. chromosomes d. genes
___27. Where two alternatives for a trait are tall and short, and tall is dominant, the genotype of
a heterozygous individual would be expressed
a. ssS b. ss c. SS d. Ss
___28. The appearance resulting from a given gene combination is referred to as the
a. genotype b. phototype c. phenotype d. alleleotype
___29. Centromeres are
a. Knots at the center of the chromosome that seem to tie the chromatids together
b. Starting points for DNA replication
c. Molecules that bring new nucleotides to the replicating DNA strand
d. Sequences of nucleotides found at ends of chromosomes
“You’re never a loser til you quit trying.” ~ Anonymous
___30. A plant that has purple flowers is crossed with one that has white flowers. The offspring were half white and half purple. What were the genotypes of the parents?
a. Pp x pp b. Pp x Pp c. PP x pp d. PP x WW
b. of chromosomes.
___31. In this phase of mitosis, spindle fibers pull one set of chromosomes to each pole.
a. prophase c. anaphase
b. metaphase d. telophase
___32. In this phase happens the pinching of plasma membrane in animals and formation of the cell
plate in plants,
a. prophase c. anaphase
b. metaphase d. telophase
___33. Which of the following processes that occur in meiosis are the causes of variation in humans.
a. independent assortment c. synapsis
b. crossing-over d. all of these
___34. A phase in mitosis where chromosomes are pulled to center of cell or the equatorial plate.
a. prophase c. anaphase
b. metaphase d. telophase
___35. In this stage of interphase, all the enzymes necessary to aid in the cell division are produced.
a. Gap 1 c. Synthesis
b. Gap 2 d. Synapsis
___36. During this stage in the interphase, all the organelles and cytoplasmic components including the centrioles replicate.
a. Gap 1 c. Synthesis
b. Gap 2 d. Synapsis
___37. This important checkpoint ensures that all the kinetochores are attached to the spindle
fibers before it proceed to the anaphase stage.
A. G1/S checkpoint C. S checkpoint
B. G2/M checkpoint D. G1/G2 checkpoint
___38. This trait usually appears in the generation and masks the other trait.
a. dominant c. homozygous
b. recessive d. heterozygous
___39. This is the masked or hidden trait.
a. dominant c. homozygous
b. recessive d. heterozygous