

For each of the phrases on page 2 marked with numbers, write the best matching term from page 1 on the answer sheet (答案卷). Note: answers on the question sheets will not be scored

activators
alleles
attenuation
autosomes
balancer chromosome
chimeras
chi-square
chromatin
codominance
contig
cosmids
dominant
ectopic expression
enhancer trapping
episome
epistasis
F1
gametes
haplotype
heterozygote
imprinting
incomplete dominance
independent assortment
karyotype
knockout
linkage
meiosis
minisatellite
mitosis
parental ditype
PCR
phenocopy
pleiotropy
recombination
reporter gene
RFLP
segregation
sequence tagged sites
shuttle vector
SSCP
stem cell
telomeres
test cross
topoisomerases
transduction
transition
ubiquitination

transformation
transversion
YAC

(共 50 題，每題 2 分)

1. the cross of an individual of ambiguous genotype with a homozygous recessive individual
2. alleles of one gene separate into gametes randomly with respect to alleles of other genes
3. the alleles expressed in the phenotype of the heterozygote
4. alternate forms of a gene
5. reproductive cells containing only one copy of each gene
6. the separation of the two alleles of a gene into different gametes
7. an individual with two different alleles of a gene
8. offspring of the P generation
9. one gene affecting more than one phenotype
10. the alleles of one gene mask the effects of alleles of another gene
11. the heterozygote resembles neither homozygote
12. both parental phenotypes are expressed in the F1 hybrids
13. chromosomes that do not differ between the sexes
14. one diploid cell gives rise to four haploid cells
15. the array of chromosomes in a given cell
16. one diploid cell giving rise to two diploid cells
17. when two loci recombine in less than 50% of gametes
18. a statistical method for testing the fit between observed and expected results
19. an ascus containing only two nonrecombinant kinds of spores
20. formation of new genetic combinations by exchange of parts between homologs
21. structures at ends of eukaryotic chromosomes
22. enzymes involved in DNA supercoiling
23. an AT base pair in the wildtype gene is changed to a GC pair
24. an AT base pair is changed to a TA pair
25. efficient and rapid technique for amplifying the number of copies of a DNA fragment
26. an artificial chromosome containing centromere and telomeres from yeast
27. a lambda-plasmid hybrid vector able to contain large (45 kb) DNA fragments
28. variation in the length of the restriction fragment detected by a particular probe
29. DNA element composed of tandemly repeated identical short sequences
30. polymorphism in the three-dimensional conformation of a single-stranded DNA fragment
31. combination of linked alleles in a cluster of related genes
32. phenotype that has been induced by an environmental condition rather than by an inherited mutation
33. unique DNA sequences that serve as molecular markers
34. set of two or more partially overlapping cloned DNA fragments
35. complexes of DNA and protein in the eukaryotic nucleus
36. small circular DNA molecule that can integrate into the chromosome
37. transfer of naked DNA
38. transfer of DNA between bacteria via virus particles
39. gene regulation involving premature termination of transcription
40. often fused to regulatory regions of genes whose expression is being monitored
41. pattern of expression is dependent on which parent transmitted the allele
42. marks a protein for degradation
43. binds to enhancers
44. plasmid that replicates in both *E. coli* and yeast
45. making gene products in tissues where they are not normally made
46. locating regulatory regions based on patterns of expression of a reporter gene
47. contains multiple overlapping inversions
48. undifferentiated cells that serve as a source of two or more types of differentiated cells
49. derived from two or more genetically different embryonic cells
50. experimental elimination of gene function