Chromosomes – quick questions

Activity 1 - The nature of genes and chromosomes

Write the key biology term into the correct box

1. The difference between alleles
2. one chromosome consisting of a circular DNA molecule.
3. nuclei with one chromosome of each pair.
4. a characteristic feature of members of a species
5. the whole of the genetic information of an organism.

Matching the following five terms with their definitions

1. The Human Genome Project.
2. Eukaryote chromosomes
3. A karyogram
4. Diploid nuclei
5. Plasmids

a nuclei with one homologous pair of each chromosome.

b An image which shows the chromosomes of an organism in homologous pairs of decreasing length.

c linear DNA molecules associated with histone proteins.

d Project that sequenced the entire base sequence of human genes.

e extra rings of DNA which some prokaryotes have but eukaryotes do not.
Multiple choice questions

1. The process new alleles are formed by
   A. Alleles.
   B. A gene
   C. Plasmids
   D. Mutation

2. The various specific forms of a gene
   A. Plasmids
   B. Gene locus
   C. Alleles.
   D. A gene

3. a heritable factor that consists of a length of DNA and influences a specific characteristic.
   A. Plasmids
   B. The genome
   C. A gene
   D. Alleles.

4. chromosomes which carry the same sequence of genes but not necessarily the same alleles of those genes.
   A. Homologous chromosomes
   B. Prokaryotes chromosome
   C. The number of chromosomes
   D. Eukaryote chromosomes

5. specific position on a chromosome occupied by a gene.
   A. Mutation
   B. Alleles.
   C. Gene locus
   D. A gene