Inheritance

IGCSE Biology · Vocabulary in context

Word	Example
chromosomes /ˈkrəʊməsəʊmz/	Humans have 46 **chromosomes** in each body cell. 46
genes /dʒiːnz/	**Genes** control your eye colour.
codes /kəʊdz/	A gene **codes** for one protein.
proteins /ˈprəʊtiːnz/	Meat, eggs and beans are rich in **proteins**, which are made from amino acids. 、
allele /əˈliːl/	The gene for eye colour has a brown **allele** and a blue allele.
sex chromosomes /seks ˈkrəʊməsəʊmz/	X and Y are the **sex chromosomes**. X Y
ratio /ˈreɪʃiəʊ/	The **ratio** of tall to short plants is 3:1. 3:1
base sequence /beɪs ˈsiːkwəns/	The **base sequence** of DNA is the genetic code. DNA
bases /ˈbeɪsɪz/	DNA has four **bases**: A, T, C and G. DNA A、T、C G
amino acids /əˈmiːnəʊ ˈæsɪdz/	Proteins are made of **amino acids**.
enzymes /ˈenzaɪmz/	**Enzymes** speed up reactions in the body.
receptor proteins /rɪˈseptə ˈprəʊtiːnz/	The neurotransmitter fits into **receptor proteins** on the next cell.
neurotransmitters /ˈnjuːrətrænsmɪtəz/	**Neurotransmitters** carry messages between nerve cells.

exercises.lol exercises.com.cn

Word	Example
expresses /ekˈspresɪz/	A muscle cell **expresses** the genes for muscle proteins.
nucleus /ˈnjuːklɪəs/	The **nucleus** holds the cell's DNA. DNA
cytoplasm /ˈsaɪtəplæzəm/	Chemical reactions happen in the **cytoplasm**.
messenger /ˈmesɪndʒə/	**Messenger** RNA carries the code to the ribosome. RNA
ribosome /ˈriːbəʊsəʊm/	The **ribosome** builds the protein.
diploid /ˈdɪplɔɪd/	Body cells are **diploid**: they have two sets of chromosomes.
haploid /ˈhæplɔɪd/	Sperm and egg cells are **haploid**: they have one set of chromosomes.
division /dɪˈvɪʒn/	Cell **division** makes two new cells from one.
mitosis /maɪˈtəʊsɪs/	**Mitosis** makes two identical cells.
replication /ˌreplɪˈkeɪʃn/	DNA **replication** happens before the cell divides. DNA
daughter cell /ˈdɔːtə sel/	Each **daughter cell** gets a full set of chromosomes.
asexual reproduction /eɪˈsekʃuːəl rɪprəˈdʌkʃn/	Strawberry plants can make new plants by **asexual reproduction**.
stem cells /stem selz/	**Stem cells** can become many kinds of cell.
meiosis /meɪˈəʊsɪs/	**Meiosis** makes sperm and egg cells.
gametes /ˈgæmiːts/	Sperm and egg cells are **gametes**.

Word	Example
inheritance /ɪn'herɪtəns/	**Inheritance** passes genes from parents to children.
genotype /'dʒenətaɪp/	Bb is a **genotype**. Bb
phenotype /'fenətaɪp/	Brown eyes are a **phenotype**.
dominant /'dɒmɪnənt/	The brown-eye allele is **dominant**.
recessive /rɪ'sesɪv/	The blue-eye allele is **recessive**.
homozygous /ˌhɒmə'zɪgəs/	BB is **homozygous**: both alleles are the same. BB
pure-breeding /pjʊə 'bri:dɪŋ/	**Pure-breeding** tall plants always have tall offspring.
heterozygous /ˌhetrə'zɪgəs/	Bb is **heterozygous**: the alleles are different. Bb
cross /krɒs/	A **cross** between two tall plants gave some short plants.
Punnett square /'pʌnɪt skweə/	Use a **Punnett square** to predict the offspring.
pedigree diagram /'pedɪgri: 'daɪəgræm/	A **pedigree diagram** shows a family's inheritance.
test cross /test krɒs/	A **test cross** uses a homozygous recessive parent.
codominance /'kəʊdəmɪnəns/	In **codominance**, both alleles show, as in red and white spots.
blood groups /blʌd gru:ps/	A, B, AB and O are **blood groups**. A、B、AB　O
sex-linked /seks lɪŋkt/	Colour blindness is **sex-linked**.

exercises.lol exercises.com.cn

Word	Example
colour blindness /'kʌlə 'blaɪndnəs/	People with **colour blindness** may not tell red from green.
carrier /'kærɪə/	A **carrier** has the allele but not the condition.