

FAST TALK

AP / IB BIOLOGY — MIXED MASTER DECK

54 cards · the 9 richest cards from each of the six topics · colour-coded by topic

HOW TO PLAY

1. Draw a card and read the CLUE side aloud — a category with many answers.
2. Flip the card to reveal the FORMAT — the twist that narrows it down.
3. Race to shout an answer that fits BOTH sides. First correct answer wins the card. Most cards at the end wins the game.

Example: “A molecule transported across a membrane” + “A 3-letter answer”
→ CO₂! Same clue with “Includes the letter E” → glucose.

HOW TO PRINT & CUT

- Print double-sided, flipping on the LONG edge (the usual default).
- Back pages are pre-mirrored so fronts and backs line up after cutting.
- Print ONE test sheet first and hold it to the light to check alignment.
- Cut along the grey guide lines — 9 cards per sheet.

HOUSE RULES & VARIATIONS

- Letter counts ignore spaces and count numbers (CO₂ = 3).
- Justify it: the winner must explain why their answer fits both sides.
- No repeats: an answer used once is dead for the rest of the game.
- Steal: a wrong answer passes the card to the other team.

MASTER DECK — ALL TOPICS MIXED

**Includes the
letter C**

**Includes the
letter E**

**Includes the
letter M**

**Includes the
letter I**

**Includes the
letter P**

**Includes the
letter R**

**A multi-word
answer**

**More than 8
letters**

A single word

**An organelle
found in a
eukaryotic cell**

**Something that
can affect
enzyme activity**

**A way to
compare
species
relatedness**

**A blood vessel
or heart
structure**

**A component of
the cell
membrane**

**A hormone in
the human body**

**An example of a
carbohydrate**

**Something
found in an
animal cell but
not a plant cell**

**A genetic
disorder**

A single word

**Includes the
letter S**

**Includes the
letter E**

**Includes the
letter E**

A single word

**More than 6
letters**

**A multi-word
answer**

**Includes the
letter O**

**Includes the
letter E**

**A component of
blood**

**A process that
moves
substances in
the body**

**A structure in
the respiratory
system**

**An example of a
protein**

**A feeding role
in an
ecosystem**

**A part of the
immune
response**

**Something a
prokaryotic cell
has**

**Something
involved in gas
exchange**

**A word from the
topic of
biodiversity**

**Starts with a
consonant**

**Starts with a
consonant**

**Includes the
letter L**

**Includes the
letter T**

**More than 8
letters**

**More than 8
letters**

**Starts with a
consonant**

**Includes the
letter I**

**Starts with a
consonant**

Something
found in a plant
cell but not an
animal cell

A word
describing an
organism's role
or fit

A type of
species
interaction

Something
involving the X
or Y
chromosome

A word from the
topic of
speciation

A sugar found
in living things

Something
visible in a
dividing cell

A word from the
topic of how
enzymes work

Something that
happens during
meiosis

**More than 10
letters**

**More than 6
letters**

**More than 6
letters**

A single word

**Includes the
letter T**

**Includes the
letter T**

**Starts with a
consonant**

**Fewer than 5
letters**

**More than 6
letters**

**A tool or
technique used
in
biotechnology**

**An adaptation
that helps an
organism
survive**

**A cause of
genetic drift**

**A nutrient cycle
or part of one**

**A way
substances
move into or
out of a cell**

**A structure in
the excretory
system**

**A pattern of
evolutionary
change**

**A ratio or
probability from
a genetic cross**

**Something a
decomposer
breaks down or
releases**

**More than 10
letters**

**Includes the
letter I**

**Includes the
letter N**

**Includes the
letter C**

**A 3-letter
answer**

**Includes the
letter T**

**Includes the
letter R**

**Exactly two
words**

**Exactly two
words**

**A property or
behaviour of
water**

**Something
Darwin
observed or
proposed**

**A type of
natural
selection**

**Something
Mendel studied
or described**

**A three-letter or
short
abbreviation
used in
genetics**

**An example of a
lipid**

**A barrier that
keeps species
separate**

**A word from the
topic of
population
growth**

**A level of
protein
structure or its
feature**

**Includes the
letter N**

**Includes the
letter S**

**More than 8
letters**

**Includes the
letter O**

**Ends in the
letter N**

**Starts with a
consonant**

A single word

**More than 6
letters**

**Includes the
letter O**

**A word from the
topic of food
webs and
energy**

**A component of
a nucleotide**

**A way
organisms
compete or
defend
resources**

**A phase or
checkpoint of
the cell cycle**

**A type of
mutation**

**A word
describing
chromosome
number
changes**

**A part of a
neuron or nerve
pathway**

**A word for
where an
organism lives
or its role**

**An organelle
surrounded by
a membrane**

ANSWER KEY

MASTER DECK — ALL TOPICS

Answer key — page 1 of 6 — answers satisfy BOTH the clue and the format

[Evolution] A way to compare species relatedness

+ Includes the letter C

→ DNA sequence, amino acid sequence, cytochrome c, cladogram, phylogenetic tree, molecular clock

[Molecular Biology & Biochemistry] Something that can affect...

+ Includes the letter E

→ temperature, substrate concentration, heavy metal, heat

[Cell Biology] An organelle found in a eukaryotic cell

+ Includes the letter M

→ mitochondrion, ribosome, lysosome, peroxisome, endoplasmic reticulum, centrosome

[Human Physiology] A hormone in the human body

+ Includes the letter I

→ insulin, adrenaline, thyroxine, melatonin, cortisol, oxytocin

[Cell Biology] A component of the cell membrane

+ Includes the letter P

→ phospholipid, glycoprotein, channel protein, carrier protein, receptor, glycolipid

[Human Physiology] A blood vessel or heart structure

+ Includes the letter R

→ artery, capillary, aorta, atrium, ventricle

[Genetics] A genetic disorder

+ A multi-word answer

→ Down syndrome, cystic fibrosis, sickle cell anemia, Huntington's disease, color blindness, Turner...

[Cell Biology] Something found in an animal cell but not a...

+ More than 8 letters

→ centriole, flagellum, cholesterol, tight junction, gap junction

[Molecular Biology & Biochemistry] An example of a carbohydrate...

+ A single word

→ glucose, fructose, sucrose, lactose, starch, cellulose, glycogen, maltose, ribose

[Human Physiology] A structure in the respiratory system

+ A single word

→ trachea, bronchus, bronchiole, alveolus, lung, diaphragm, larynx

MASTER DECK — ALL TOPICS

Answer key — page 2 of 6 — answers satisfy BOTH the clue and the format

[Human Physiology] A process that moves substances in the ...

+ Includes the letter S

→ diffusion, osmosis, active transport, reabsorption, peristalsis, gas exchange

[Human Physiology] A component of blood

+ Includes the letter E

→ red blood cell, white blood cell, platelet, hemoglobin, glucose

[Human Physiology] A part of the immune response

+ Includes the letter E

→ antigen, white blood cell, lymphocyte, phagocyte, fever, memory cell

[Ecology] A feeding role in an ecosystem

+ A single word

→ producer, consumer, decomposer, herbivore, carnivore, omnivore, detritivore, scavenger

[Molecular Biology & Biochemistry] An example of a protein

+ More than 6 letters

→ collagen, keratin, hemoglobin, insulin, antibody

[Ecology] A word from the topic of biodiversity

+ A multi-word answer

→ species richness, keystone species, endangered species, invasive species, endemic species, geneti...

[Human Physiology] Something involved in gas exchange

+ Includes the letter O

→ alveolus, oxygen, carbon dioxide, CO₂, hemoglobin, diffusion

[Cell Biology] Something a prokaryotic cell has

+ Includes the letter E

→ cell wall, cell membrane, ribosome, flagellum, nucleoid, capsule

[Ecology] A type of species interaction

+ Starts with a consonant

→ mutualism, parasitism, commensalism, predation, competition, herbivory, symbiosis

[Evolution] A word describing an organism's role or fit

+ Starts with a consonant

→ fitness, niche, specialist, generalist, selective advantage

MASTER DECK — ALL TOPICS

Answer key — page 3 of 6 — answers satisfy BOTH the clue and the format

[Cell Biology] Something found in a plant cell but not an ...

+ Includes the letter L

→ cell wall, chloroplast, large central vacuole, plasmodesma, chlorophyll

[Molecular Biology & Biochemistry] A sugar found in living...

+ Includes the letter T

→ fructose, lactose, galactose, maltose

[Evolution] A word from the topic of speciation

+ More than 8 letters

→ speciation, allopatric speciation, sympatric speciation, reproductive isolation, adaptive radiati...

[Genetics] Something involving the X or Y chromosome

+ More than 8 letters

→ sex linkage, color blindness, hemophilia, X chromosome, Y chromosome, sex determination, X-linked...

[Genetics] Something that happens during meiosis

+ Starts with a consonant

→ crossing over, segregation, nondisjunction, synapsis, recombination, reduction division

[Molecular Biology & Biochemistry] A word from the topic o...

+ Includes the letter I

→ active site, activation energy, induced fit, denaturation, specificity

[Cell Biology] Something visible in a dividing cell

+ Starts with a consonant

→ chromosome, spindle fibre, centrosome, cleavage furrow, cell plate, chromatid

[Evolution] A cause of genetic drift

+ More than 10 letters

→ bottleneck effect, founder effect, natural disaster, small population, chance event, random mating

[Evolution] An adaptation that helps an organism survive

+ More than 6 letters

→ camouflage, mimicry, thick fur, sharp claws, bright warning colours, long beak

[Genetics] A tool or technique used in biotechnology

+ More than 6 letters

→ gel electrophoresis, restriction enzyme, cloning, genetic engineering, DNA sequencing, plasmid ve...

MASTER DECK — ALL TOPICS

Answer key — page 4 of 6 — answers satisfy BOTH the clue and the format

[Human Physiology] A structure in the excretory system

+ A single word

→ kidney, nephron, bladder, ureter, urethra, glomerulus

[Cell Biology] A way substances move into or out of a cell

+ Includes the letter T

→ facilitated diffusion, active transport, endocytosis, exocytosis, phagocytosis, pinocytosis

[Ecology] A nutrient cycle or part of one

+ Includes the letter T

→ nitrogen cycle, water cycle, nitrogen fixation, decomposition, evaporation, photosynthesis

[Ecology] Something a decomposer breaks down or releases

+ Starts with a consonant

→ dead matter, detritus, nitrate, carbon dioxide, CO₂, humus, nutrients

[Genetics] A ratio or probability from a genetic cross

+ Fewer than 5 letters

→ 3:1, 9:3:3:1, 1:1, 25%, 50%, 1:2:1

[Evolution] A pattern of evolutionary change

+ More than 6 letters

→ convergent evolution, divergent evolution, coevolution, adaptive radiation, gradualism, punctuate...

[Evolution] A type of natural selection

+ More than 10 letters

→ directional selection, stabilising selection, disruptive selection, sexual selection, artificial ...

[Evolution] Something Darwin observed or proposed

+ Includes the letter I

→ natural selection, finch, descent with modification, survival of the fittest, variation

[Molecular Biology & Biochemistry] A property or behaviour...

+ Includes the letter N

→ cohesion, adhesion, surface tension, capillary action, solvent

[Molecular Biology & Biochemistry] An example of a lipid

+ Includes the letter C

→ cholesterol, triglyceride, fatty acid

MASTER DECK — ALL TOPICS

Answer key — page 5 of 6 — answers satisfy BOTH the clue and the format

[Genetics] A three-letter or short abbreviation used in ge...

+ A 3-letter answer

→ DNA, RNA, PCR, ATP, GMO

[Genetics] Something Mendel studied or described

+ Includes the letter T

→ pea plant, law of segregation, law of independent assortment, dominant trait, recessive trait, tr...

[Molecular Biology & Biochemistry] A level of protein stru...

+ Includes the letter R

→ primary structure, secondary structure, tertiary structure, quaternary structure

[Ecology] A word from the topic of population growth

+ Exactly two words

→ carrying capacity, exponential growth, logistic growth, limiting factor, birth rate, death rate, ...

[Evolution] A barrier that keeps species separate

+ Exactly two words

→ geographic barrier, behavioural isolation, temporal isolation, mechanical isolation, hybrid steri...

[Ecology] A way organisms compete or defend resources

+ Includes the letter N

→ fighting, chemical signals, interspecific competition, intraspecific competition

[Molecular Biology & Biochemistry] A component of a nucleo...

+ Includes the letter S

→ phosphate, deoxyribose, ribose, cytosine, base

[Ecology] A word from the topic of food webs and energy

+ More than 8 letters

→ trophic level, food chain, primary consumer, secondary consumer, ten percent rule, apex predator

[Genetics] A word describing chromosome number changes

+ Includes the letter O

→ nondisjunction, aneuploidy, trisomy, monosomy, polyploidy, karyotype

[Genetics] A type of mutation

+ Ends in the letter N

→ insertion, deletion, substitution, silent mutation, nonsense mutation, missense mutation, duplica...

MASTER DECK — ALL TOPICS

Answer key — page 6 of 6 — answers satisfy BOTH the clue and the format

[Cell Biology] A phase or checkpoint of the cell cycle

+ Starts with a consonant

→ mitosis, cytokinesis, S phase, G1 phase, G2 phase, G1 checkpoint, metaphase

[Cell Biology] An organelle surrounded by a membrane

+ A single word

→ nucleus, mitochondrion, chloroplast, lysosome, vacuole, peroxisome

[Ecology] A word for where an organism lives or its role

+ More than 6 letters

→ habitat, territory, microhabitat, ecosystem

[Human Physiology] A part of a neuron or nerve pathway

+ Includes the letter O

→ axon, cell body, neurotransmitter, receptor, node of Ranvier