

Jeopardy!

Choose a category.

You will be given the answer.

You must give the correct

question.

[Click to begin.](#)

Choose a point value.

Choose a point value.

[Click here for
Final Jeopardy](#)

The shape of a
strand of DNA.

What is a double
helix?

A circular piece of extra-chromosomal DNA.

What is a
plasmid?

These are the
“rungs” of the
DNA double helix.

What are
nucleotide base
pairs?

This is the
reaction that
creates copies of
DNA.

What is
Polymerase
Chain Reaction
(PCR)?

Orientation of the
complementary strands of
DNA.

What is anti-
parallel?

A common term for
this class of enzyme is
“molecular scissors.”

What is a restriction
enzyme?

This enzyme is used to
“glue” pieces of DNA
together.

What is DNA
ligase?

This protein creates
a complementary
strand of DNA from
a parent strand.

What is DNA
polymerase?

This protein “unwinds”
the DNA helix during
DNA replication.

What is DNA
helicase?

This is a small
segment of
complementary bases
(usually RNA) used in
sequencing and
amplifying a gene.

What is a primer?

This bacterium can be found within the digestive tract of some animals.

What is *E. coli*?

This was the first
identified
organism that
creates an
antibiotic that is
used by humans.

What is
Penicillium?

These microbes can be used to create bio-fuels and diesel fuel.

What are algae?

A type of
photosynthetic
bacteria.

What are
cyanobacteria?

An insecticidal protein from this bacterium is used in pest-resistant crops. OR, this is the toxin produced by this microbe

What is *Bacillus thuringiensis*?
OR What is Bt
toxin?

This condition is
caused by a mosquito
parasite.

What is malaria?

This is the use of
biological systems to
clean-up
contaminated
environments.

What is
bioremediation?

This company
provides the
technology in 90% of
the genetically
engineered seeds used
in the US market.

What is the
Monsanto
Corporation?

Sensors can be
used to detect
adequate amounts
of this in
agriculture.

What is fertilizer?

These organisms
can be used to
treat human
conditions with a
“good infection.”

What are viruses?

This microbially-
produced
compound is
used by
diabetics.

What is insulin?

These chemicals can be
synthesized by
microbes to be used as
an energy source.

What are
biofuels?

This protein from a jellyfish is used in many microbial sensors.

What is green
fluorescence
protein?

Precursor to Vitamin A
that is produced by
Golden Rice and Vita-
Yeast.

What is beta
carotene?

The first genetically
modified compound
approved for use as
an additive in the US.

What is recombinant
bovine growth
hormone (rBGH)?

This is a situation
where someone
intentionally released
genetically modified
organisms into the
environment.

What is a lone
operator?

This transfer of genes occurs across species, which often involves resistance plasmids.

What is
horizontal gene
transfer?

These mechanisms are
built-in to many
transgenic organisms
to reduce their
persistence if released
into an environment.

What are kill-
switches?

One of the regulatory agencies for GMOs in the US.

What is the
FDA/EPA/USDA?

This is the material of a once-living organism that can interfere with natural environments/populations.

What is a biofact?

Final Jeopardy

Category:
iGEM

Make your wager

This is what the
acronym iGEM
stands for.

What is the
International
Genetically
Engineered Machines
team?