

GMO quizzes worksheet!!

- Learn about how GMO is made through animation
(at this step, we showed kids about videos from <http://www.dnalc.org/resources/3d/index.html>,
which were really great resources)

Before start:

- Choose sides: agree / disagree
And why?

- Quiz

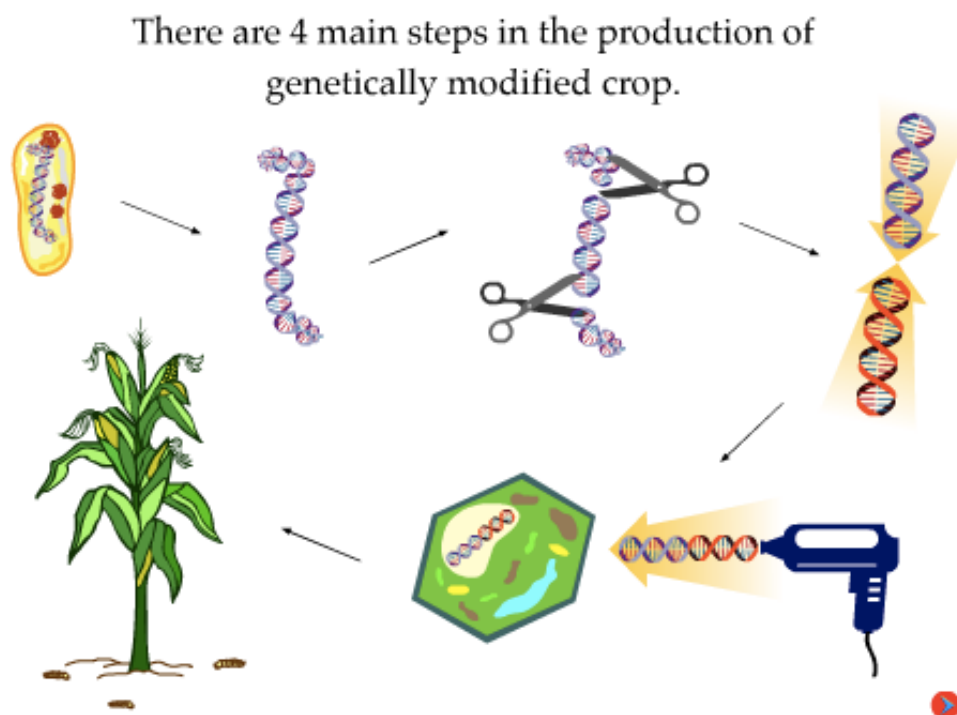
1-1) We eat DNA of **150000km** length per meal, which is equal to **1.0g** of DNA per day.

1-2) There are **millions** of number of genes in an apple.

2-1) These DNA that we eat are combined with DNA in our body (O, X)

2-2) Up until now, there were precedents in which diseases were obtained because of consuming GMO. (O, X)

3-1) It is impossible to transplant animal's gene to plants (O, X)



Picture from : i-sis.org.uk

What is GMO??

Last Quiz!

4-1) It takes about 5~11 years to create GMO crops

This fact implies enormous funds and efforts are needed in creating GM crops

4-2) Which is not a GMO?

- Apple with banana flavor
- Corns that have higher pest
- Microorganism that synthesize desired enzyme
- Synthesizing fluorescent materials
- Synthesizing pharmaceuticals
- Golden rice
- Microorganisms that synthesize plastic

All of the above are GMOs

5-1) There is worldwide food shortage because of population increase in developing countries (O, X)

5-2) GMO can solve the food shortage problem. (O, X)

6-1) Using GMO can reduce the usage of pesticides or herbicides (O, X)

These are contentious issues

7-1) GMO is being cultivated in our country (Korea). (O, X)

7-2) GMO is being imported in our country (O, X)

8-1) GMO may be included in some products that aren't marked as GMO. (O, X)

(In non-GM foods, GM products could be mixed to various degrees. The ratio of GM crop in non-GM crops is called 'impurity rate'. Europe does not import GM crops unless the impurity rate is less than 0.9%, while Korea tolerates 3%. In the States, there is no set limit on impurity rate.)

9-1) GMO can decrease the diversity of organisms (O, X)

More accurately, cultivating GM crops decreases the diversity

Bonus quiz

*) Cherry tomatoes that are sold in markets are GMO. (O, X)

(Cherry tomato is a hybrid between tomatoes that was first sold about 100yrs ago)

*) It is legally prohibited for a nonexpert individual to synthesize GMO in labs. (O, X)

(Maybe different from nation to nation, but, in Korea, there is no law regarding the issue, and in the States, there is a place named Genspace in NYC that allows nonexperts to experience genetic engineering after several training sessions. Besides, there is iGEM!)

After the quiz :

- **Choose sides: agree / disagree**
And why?