



Short Answer:

1. What do you call a long string of DNA?
2. Where can you find these strands? (Review question – see Lesson 22)
3. How many chromosomes do you have?
4. Chromosomes come in pairs, so how many pairs do you have? (Math ☺)
5. Copies of chromosomes that are stuck together look like what shape?
6. How is the last pair of chromosomes different in boys and girls?
7. What is a gene?
8. Who discovered genes?

Cross Puzzles:

9. If a purple flower has the genes Pp and it is crossed with another purple flower that has Pp genes, would all the plants from their seeds have purple flowers? Let's find out!

Fill in the box:

	P	p
P		
p		

_____ purple flowers

_____ white flowers

10. If a pea plant grows green peas (GG) and it is crossed with a pea plant that grows yellow peas (gg), what color peas would you get from their seeds?

Fill in the box:

	G	G
g		
g		

_____ with green peas

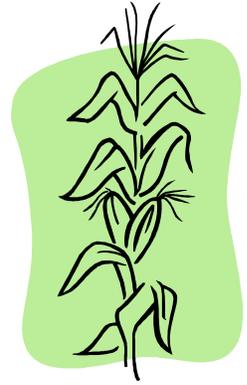
_____ with yellow peas



Enrichment 2:

Genetically Modified Organisms

Genetic engineering is a fairly new area of technology. Genetic scientists change the genetic code of one organism by inserting a piece of the genetic code of another organism into it. Now the first organism will have some of the characteristics of the second one. Read the online article from [Biology](#) by BJU Press to find out more.



1. Why did scientists take the genetic code of a soil bacteria and add it to the code of corn, soybeans and cotton?
2. What GM plants do people eat?
3. Are GM plants safe to eat?
4. What types of GM animals have been approved for human consumption?
5. Do all countries allow GM foods to be sold?
6. What is golden rice? Why was it developed? How much has been grown for consumption?
7. List any benefits from using GM plants.
8. List any possible problems from using GM plants.

Investigate!



Do you eat GM food? Probably. Most US households will have GM products in their pantries. It may be in soybean oil, corn oil or other corn products, canola oil, and cotton seed oil. Check your pantry. Write down the name of any products that might be GM. Do you have any products labeled “Non-GMO”? Write them down also.