

Name: _____

Genetic Engineering Simulation

Go to the following webpage <http://www.pbs.org/wgbh/harvest/> Complete each activity and answer questions as you go.

Engineering a Crop

Complete the Transgenic Manipulation simulation and answer the questions as you complete the activity.

3. What is the purpose of the activity "Transgenic Manipulation?" _____

4. What does *Bt* stand for? Why would someone want this gene in a crop plant? _____

5. What is a vector? _____

6. Why was the vector inserted into the bacterium? _____
7. How does an *Agrobacterium* cell "grow?" What is the purpose of this growth? _____

8. Why were small pieces of the tomato plant leaf added to the *Agrobacterium* cells? _____

9. What happens to the plant cells once they are placed in the growth medium? _____

10. Why were the plant cells sprayed with herbicide? _____

12. How would you know if you had actually successfully produced the desired trait? _____

Guess What's Coming For Dinner:

Complete the Simulation: Click on each item and learn how each is being genetically engineered and why they are being genetically engineered

13. Bananas: _____
14. Pizza: _____
15. Coffee: _____
16. Sushi: (rice) _____
(salmon) _____
17. Corn: _____
18. Fruit: _____
19. French fries (potatoes): _____
20. Petunias: _____

Transgenic Organisms Examples

Search for examples of transgenic organisms and write about 5 that you found.

1.

2.

3.

4.

5.