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Before the Plate Viewing Guide

Answer the following questions as you view the documentary, Before the Plate.

Potatoes:

- 1. What does a potato "seed" look like?
 - a. A potato cut into pieces.
- 2. Gary (the farmer) discusses market prices for his potatoes. What kind of factors influence prices?
 - a. Quality, local or global markets (supply and demand), and consumers.
- 3. What is a pesticide and why would a farmer choose to use one?
 - a. A category of chemicals that kill things. (Fungicides kill fungus, herbicides kill specific plants [weeds], etc.) Farmers choose to use them to prevent crop loss.

Beef:

- 4. Cory (the rancher) and John (the chef) discuss the use of antibiotics in livestock production. While there are several uses for antibiotics, describe Cory's perspective on the *best use* of antibiotics in his beef herd.
 - a. Use antibiotics as little as possible, but use them when necessary for illness.
- 5. Beef cattle begin their life cycle on a "Cow Calf" farm. Where do they complete the growth process until harvesting?
 - a. A finishing feedlot.
- 6. Besides beef, what other by-products come from beef cattle?
 - a. Leather, fertilizers, etc.
- 7. Throughout the segment, Cory discusses many ways consumers and producers (farmers) can connect with consumers and vice versa. What are some of those ways?
 - a. Ask questions, talk to a rancher, visit a farm, etc.

Tomatoes:

- 8. Why do they grow the tomatoes in 'growing media' rather than soil?
 - a. The media holds a lot of water and allows greater control of the tomato production by giving it the nutrients they need.
- 9. What factors are helping Truly Green have the smallest environmental 'footprint' as possible?
 - a. Energy efficiency, use of byproducts such as carbon dioxide (a greenhouse gas) from the corn ethanol farm, etc.

[Subsegment] Cash Crop Farmer (corn, soybeans, and wheat) : Amanda and Grant Craven

- 10. What is the corn used for that is grown on the Craven's farm?
 - a. Ethanol

Carrots, Onions, and Celery:

- 11. What weather conditions are ideal for harvesting carrots?
 - a. Cool temperatures
- 12. Describe the process of "digging" the onions.
 - *a.* A machine digs under the onions and lifts them above the surface to begin the harvesting process.
- 13. How long does it take celery stalks to get from the field to cooler storage?
 - a. 30-60 minutes. Most of the picking, cleaning and packing takes place right in the field.

Sunflowers:

- 14. What do the sunflower plants look like when the seeds are ready to harvest?
 - a. They are dead and dry.
- 15. What factors does a farmer consider when choosing the variety of sunflowers to grow?
 - a. Yield, taste, growth efficiency, etc.
- 16. What is the ultimate product a sunflower farmer is providing?
 - a. Oil

Milk:

- 17. Why are the calves housed in individual stalls?
 - a. To monitor individual feed intake to be sure they get what they need.
- 18. How many times per day are the cows milked?

а. З

19. Why is milk pasteurized before it is sold?

- a. To kill harmful bacteria.
- 20. Besides dairy cattle, what else does the dairy farm grow?
 - a. Corn and hay to use as feed for their cattle.
- 21. Why would a farmer choose to grow a GMO crop?
 - a. To control weeds and pests.

Wheat:

22. What makes the wheat farm an "organic" farm?

a. Specific requirements for what they can and cannot use in the production of the wheat. For example, fertilizers and pesticides have specific requirements on their use.

23. Describe the steps of processing wheat into flour.

a. Wheat kernels are harvested from the field. Then it is brought to the mill, cleaned, and sifted.

24. Describe the value of having multiple styles of farming (organic and conventional).

a. Variety gives consumers choice.

Honey:

25. Approximately how many bees are in each hive?

- a. 50-60,000
- 26. Why do the bees put a wax covering on the cells?
 - a. They seal off the honey cell when it is complete.
- 27. How much honey will one bee produce in their lifetime?
 - a. $1/10^{th}$ of a teaspoon.

100 KM Foods (Food Transportation):

- 28. What benefits can be found from foods grown locally?
 - a. It can ripen on the vine, less transportation cost, fresher food, supports local industry.
- 29. What challenges are there to only eating local foods?
 - a. Depending on the climate, you are limited to the varieties of food that can be produced throughout the year.

Summary:

30. Write a reflection paragraph describing the most impactful thing you learned from this documentary.