

STUDENT GUIDE

EXPLAIN LESSON 4



Part 1: Our Motivation

Record what we are now trying to explain about the module phenomenon.



Part 2: Review Initial Dairy System Model

Review our Class Consensus Model of how dairy products get to your table. Identify specific components of your model that you think are supported by the evidence we have gathered or that you think we should revise.

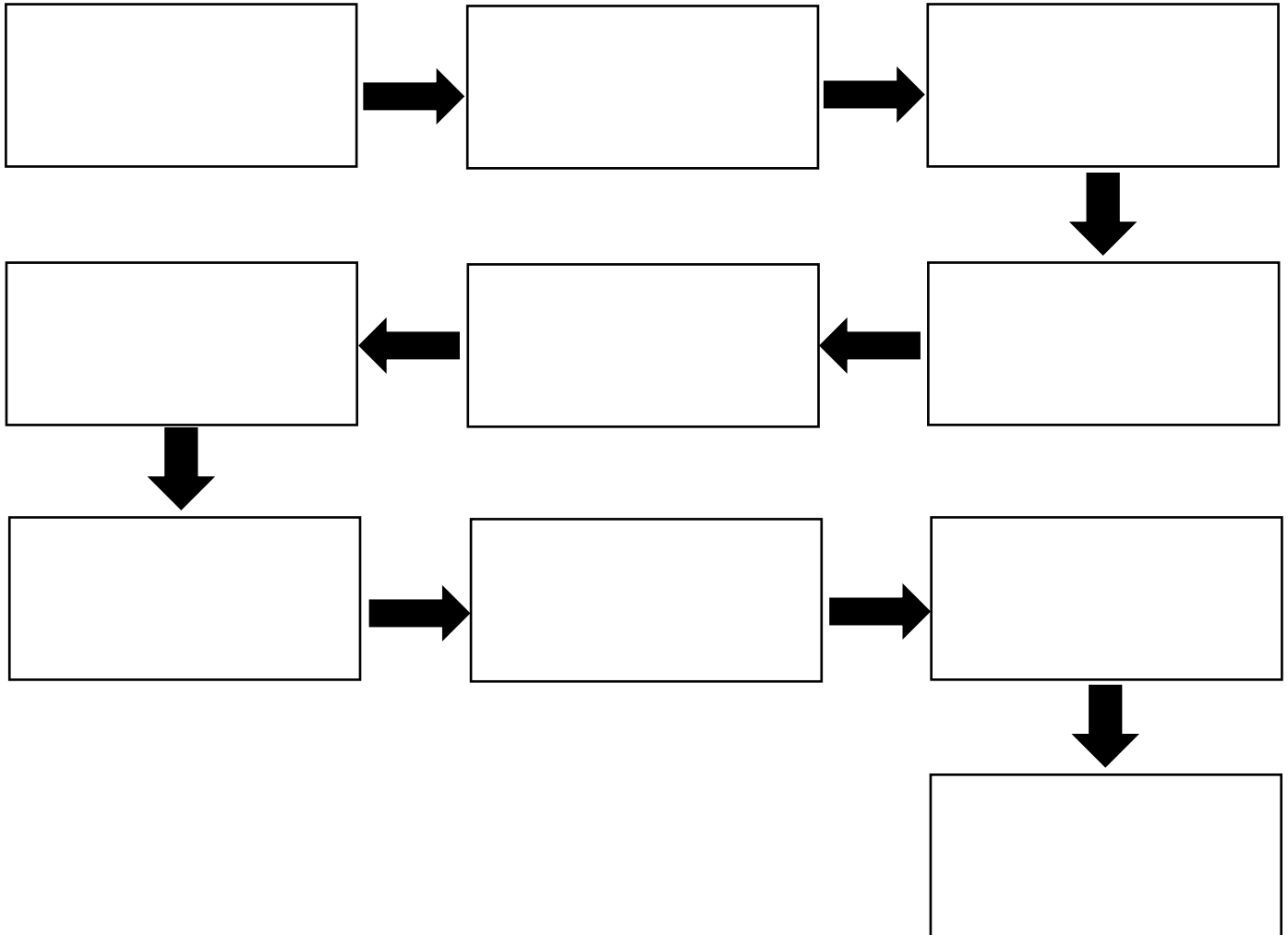
Components of the model I support	Components of the model I would like to revise





Part 3: Sequencing the Dairy System Components

With your group, take the dairy system cards you received and work together to arrange them in the order that you think represents the sequence of steps involved in creating a dairy product and transporting it to the consumer, then copy your answers below.





Part 4: Create a Class Consensus Model

Use this space to copy the Class Consensus Model built by the class.

In your model, be sure to:

- Add additional steps of the dairy product journey into your model.
- Add inputs and outputs based on the information cards you have studied.
- Define the boundaries of the overall system, including examples of other components or systems outside the boundaries.

Reflect on the overall model of the dairy system.

- What do you think the model shows is the end goal of the design of the system?
- How do the system boundaries you made help you understand how parts of the system interact with things outside of the system?



Part 5: Construct an Explanation About a Dairy Product Journey

Select one dairy product that you like or know about and construct a detailed explanation of how this product gets to your table. In your explanation, be sure to:

- Describe each of the components of the dairy system and how they contribute to making a dairy product.
- Identify the inputs and outputs associated with each component of the process.
- The boundaries of the system, including what interacting systems, objects, impacts, or processes are outside the dairy system.
- The purpose of the dairy system and how the design of the system influences its purpose.



Part 6: Asking New Questions

Record new questions you have that might help you:

- Find additional information about how the dairy system impacts the environment.
- “Fill in a gap” in your model or our class model.
- Settle an area of disagreement that we’ve identified in our models.