## Brainstorm Teacher Guide

<table>
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<tr>
<th>Prompts</th>
<th>Examples</th>
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| **Activities** | • What activities are involved in getting these ingredients to our plates?  
• How are the raw ingredients transformed into something we can eat?  
• Who are the people involved at each step? |
|  | • Growing and harvesting crops  
• Breeding, feeding, housing, transporting, and slaughtering animals  
• Processing, packaging, transporting, storing, marketing, selling, preparing, eating, disposing of, and composting food |
| **Resources** | • What resources are used in each activity?  
• Consider both natural and human resources. |
|  | • Natural resources, (e.g., land, water, soil, fossil fuels)  
• Labor, knowledge, money, machinery, fertilizers, pesticides, animal feed |
| **Effects on health, society, environment** | • How could each activity affect health, society, and the environment?  
• Consider both positive and negative impacts.  
• For positive impacts, think about the reasons we process food (e.g., to preserve it), for example, or why we transport it long distances (e.g., to provide year-round variety). |
|  | • Positive impacts: feeding people, promoting health, creating jobs, strengthening communities, convenience, enjoyment, cultural expression  
• Negative impacts: chronic disease, foodborne illness, worker injuries, hunger, greenhouse gases, air and water pollution, resource depletion, biodiversity loss, animal suffering |
| **Influences** | • What are some factors that influence each activity?  
• Consider both societal and ecological factors.  
• Think about how farmers decide what crops to grow, for example, or why we eat what we eat. |
|  | • Influences on the supply chain: consumer demand, government policy, technology, worldview, climate, geology, biodiversity  
• Influences on what we eat: taste, cost, values, family, friends, culture, food availability, marketing, government policy |
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<th>Functions</th>
<th>Needs</th>
<th>Impacts</th>
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<td>Plants, tends, and/or harvests food crops</td>
<td>Helps plants grow and can contaminate water and cause health problems</td>
<td>Needs healthy food, air, water, safe working conditions, and a living wage</td>
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<td>Typically offers a smaller variety of options, at higher prices, than supermarkets</td>
<td>Transports food in vehicles that use fossil fuel and produce pollution</td>
<td>Needs healthy food, air, water, safe working conditions, and a living wage</td>
<td>Can contaminate food, soil, air, and water and cause health problems</td>
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<td>Buys and consumes food</td>
<td>Prepares and serves food in restaurants and cafeterias</td>
<td>Needs healthy food, air, water, safe working conditions, and a living wage</td>
<td>Can contaminate food, soil, air, and water and cause health problems</td>
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<td>Often provides a wider variety of healthy options, at lower prices, than smaller stores</td>
<td>Enacts policies that affect farming practices, food safety, hunger relief, minimum wage laws for food chain workers, and more</td>
<td>Needs healthy food, air, water, safe working conditions, and a living wage</td>
<td>Can contaminate food, soil, air, and water and cause health problems</td>
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<td>Takes action on food system issues by voting, organizing, and writing to government officials</td>
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### Washington Apple Supply Chain Cards

#### Growing
- **Apples grow in orchards**

#### Harvesting
- **Apples are picked by hand**
- **Wax coating helps keep apples crisp**

#### Washing, grading, waxing

#### Packaging
- **Packaging depends on how the apples are processed, if at all**
- **Some apples may be canned or made into applesauce, pie filling, etc.**

#### Processing
- **Apples are transported up to thousands of miles in refrigerated trucks**

#### Distributing
- **Apples are sold in a variety of stores**
- **Some apples are canned or made into applesauce, pie filling, etc.**

#### Retailing
- **Packaging depends on how the apples are processed, if at all**
- **Some apples and parts of apples are discarded**

#### Preparing
- **Apples can be eaten whole, added to salads, cooked in pies, etc.**

#### Consuming
- **Apples are eaten**

#### Disposing
- **Throughout the supply chain, some apples and parts of apples are discarded**

#### Composting
- **Discarded apples can be composted and used to help grow more apples or other crops**

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**Lesson A: Exploring the Food System**

[342x29]Lesson A: Exploring Our Food System

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Soy growing
Soybeans are grown for animal feed

Soy harvesting
Soybeans are harvested for animal feed

Corn growing
Corn is grown for animal feed

Corn harvesting
Corn is harvested for animal feed

Fish harvesting
Fish are harvested for animal feed

Chick hatching
Baby chickens are hatched and processed

Feed processing
Soy, corn, fish, and other ingredients are combined to make poultry feed

Producing
Over 100,000 chickens are typically raised and fed in a single facility

Processing
Chickens are slaughtered, defeathered, and sanitized

Retailing
Packaged chicken products are sold in supermarkets and other stores

Preparing
Chicken products are cooked

Consuming
Chicken products are eaten