

# Brainstorm Teacher Guide

	Prompts	Examples
<p><b>Activities</b></p>	<ul style="list-style-type: none"> <li>What activities are involved in getting these ingredients to our plates?</li> <li>How are the raw ingredients transformed into something we could eat?</li> <li>Who are the people involved at each step?</li> </ul>	<ul style="list-style-type: none"> <li>Growing and harvesting crops</li> <li>Breeding, feeding, housing, transporting, and slaughtering animals</li> <li>Processing, packaging, transporting, storing, marketing, selling, preparing, eating, disposing of, and composting food</li> </ul>
<p><b>Resources</b></p>	<ul style="list-style-type: none"> <li>What resources are used in each activity?</li> <li>Consider both natural and human resources.</li> </ul>	<ul style="list-style-type: none"> <li>Natural resources, (e.g., land, water, soil, fossil fuels)</li> <li>Labor, knowledge, money, machinery, fertilizers, pesticides, animal feed</li> </ul>
<p><b>Effects on health, society, environment</b></p>	<ul style="list-style-type: none"> <li>How could each activity affect health, society, and the environment?</li> <li>Consider both positive and negative impacts.</li> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Positive impacts: feeding people, promoting health, creating jobs, strengthening communities, convenience, enjoyment, cultural expression</li> <li>Negative impacts: chronic disease, foodborne illness, worker injuries, hunger, greenhouse gases, air and water pollution, resource depletion, biodiversity loss, animal suffering</li> </ul>
<p><b>Influences</b></p>	<ul style="list-style-type: none"> <li>What are some factors that influence each activity?</li> <li>Consider both societal and ecological factors.</li> <li>Think about how farmers decide what crops to grow, for example, or why we eat what we eat.</li> </ul>	<ul style="list-style-type: none"> <li>Influences on the supply chain: consumer demand, government policy, technology, worldview, climate, geology, biodiversity</li> <li>Influences on what we eat: taste, cost, values, family, friends, culture, food availability, marketing, government policy</li> </ul>



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**Food System Connection Cards (p.1 front)**



**Compost**

**Pathogen**

**Fish**

**Cow**

**Chicken**

**Crop**

**Climate**

**Soil**

**Water**

<ul style="list-style-type: none"> <li>Essential members of aquatic ecosystems</li> <li>Needs freshwater or saltwater (depending on the species) and food</li> <li>May be eaten by humans or other animals</li> </ul>	<ul style="list-style-type: none"> <li>Disease-causing microorganism</li> <li>Some strains live in the guts of animals</li> <li>May be transported via air, water, soil, or food</li> </ul>	<ul style="list-style-type: none"> <li>Made by decomposing manure, food waste, plant matter, or other organic materials</li> <li>Can be applied to soil to make it more fertile, helping plants grow</li> </ul>
<ul style="list-style-type: none"> <li>Needs sun, water, fertile soil, carbon dioxide, and oxygen</li> <li>Produces food and oxygen</li> <li>Can be composted to enrich soil</li> </ul>	<ul style="list-style-type: none"> <li>Needs food, land, air, water, and humane living conditions</li> <li>Can be raised for meat or eggs</li> <li>Produces manure</li> </ul>	<ul style="list-style-type: none"> <li>Needs food, land, air, water, and humane living conditions</li> <li>Can be raised for meat or milk</li> <li>Produces manure and methane</li> </ul>
<ul style="list-style-type: none"> <li>Needed by plants, animals, and humans</li> <li>Used for irrigating crops</li> <li>May be contaminated by animal waste, chemical fertilizers, and other pollutants</li> </ul>	<ul style="list-style-type: none"> <li>Supports plant life</li> <li>Subject to contamination and erosion</li> </ul>	<ul style="list-style-type: none"> <li>The prevailing weather conditions in an area</li> <li>Affects what kind of plants and animals can survive in a region</li> </ul>

**Food System Connection Cards (p.1 back)**



**Food System Connection Cards (p.2 front)**



**Food Citizen**

**Government**

**Supermarket**

**Corner Store**

**Food service  
worker**

**Truck Driver**

**Farm Worker**

**Chemical  
Fertilizer**

**Pesticide**

<ul style="list-style-type: none"> <li>Often provides a wider variety of healthy options, at lower prices, than smaller stores</li> </ul>	<ul style="list-style-type: none"> <li>Enacts policies that affect farming practices, food safety, hunger relief, minimum wage laws for food chain workers, and more</li> </ul>	<ul style="list-style-type: none"> <li>Buys and consumes food</li> <li>Takes action on food system issues by voting, organizing, and writing to governments</li> </ul>	
<ul style="list-style-type: none"> <li>Transports food in vehicles that use fossil fuel and produce pollution</li> <li>Needs healthy food, air, water, safe working conditions, and a living wage</li> </ul>	<ul style="list-style-type: none"> <li>Prepares and serves food in restaurants and cafeterias</li> <li>Needs healthy food, air, water, safe working conditions, and a living wage</li> </ul>	<ul style="list-style-type: none"> <li>Typically offers a smaller variety of options, at higher prices, than supermarkets</li> </ul>	
<ul style="list-style-type: none"> <li>Kills weeds, insects, fungi, or other pests that damage crops</li> <li>Can contaminate food, soil, air, and water and cause health problems</li> </ul>	<ul style="list-style-type: none"> <li>Helps plants grow</li> <li>Can contaminate water and cause health problems</li> </ul>	<ul style="list-style-type: none"> <li>Plants, tends, and/or harvests food crops</li> <li>Needs healthy food, air, water, safe working conditions, and a living wage</li> </ul>	

**Food System Connection Cards (p.2 back)**



Washington Apple Supply Chain Cards



**Growing**

Apples grow in orchards

**Harvesting**

Apples are picked by hand

**Washing, grading, waxing**

A wax coating helps keep apples crisp

**Packing**

Apples are sorted and packed into 40-pound cartons

**Distributing**

Apples are transported up to thousands of miles in refrigerated trucks

**Processing**

Some apples may be canned or made into applesauce, pie filling, etc.

**Packaging**

Packaging depends on how the apples are processed, if at all

**Retailing**

Apples are sold in a variety of stores

**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



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Broiler Chicken Supply Chain Cards



**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