

# Grade 8: Module 4: Unit 2: Lesson 4 Adding to Cascading Consequences and Stakeholders: Industrial Food Chain



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Adding to Cascading Consequences and Stakeholders:

| Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)                                                     |                              |  |  |
|------------------------------------------------------------------------------------------------------------|------------------------------|--|--|
| I can conduct short research projects to answer a question (including a self-generated question). (W.8.7)  |                              |  |  |
|                                                                                                            |                              |  |  |
| Supporting Learning Targets                                                                                | Ongoing Assessment           |  |  |
| • I can use my research to add to the Cascading Consequences chart for Michael Pollan's industrial food    | Cascading Consequences chart |  |  |
| chain.                                                                                                     | Stakeholders chart           |  |  |
| • I can determine the stakeholders affected by the consequences of Michael Pollan's industrial food chain. |                              |  |  |



Adding to Cascading Consequences and Stakeholders:

| 1. Opening • In this                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | s lesson, students create a class Cascading Consequences chart to collect as many consequences as                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <ul> <li>A. Unpacking Learning Targets (3 minutes)</li> <li>2. Work Time <ul> <li>A. Creating a Class Cascading Consequences Chart (19 minutes)</li> <li>B. Introduce Stakeholders Chart (18 minutes)</li> </ul> </li> <li>3. Closing and Assessment <ul> <li>A. Share Industrial Food Chain Stakeholders Chart (5 minutes)</li> </ul> </li> <li>4. Homework <ul> <li>A. Start the Industrial Organic Food Chain Cascading Consequences chart: <ul> <li>Numbered Heads 1 and 2 reread pages 114–126 of <i>The Omnivore's Dilemma</i> and begin a Industrial Organic Food Chain Cascading Consequences chart.</li> </ul> </li> </ul></li></ul> | ble so that students can see the big picture of the consequences of this food chain.<br>Ints are introduced to the idea of stakeholders who are affected by the consequences. They need to<br>are that the consequences and the stakeholders should play an important role in the positions they<br>is shey begin to think about how to answer the focus question: Which of Michael Pollan's four food<br>s would best feed all the people in the United States?<br>Ints will be working in teams to finish the Stakeholders chart to support each other in what to<br>d in each column, but it is important to emphasize that the final column of the Stakeholders chart<br>y much a personal choice because it is about how important the interests of the stakeholders are to<br>student. Students may want to discuss their ideas for this column with their teammates, but they<br>d answer based on their own personal ideas.<br>ware that a similar lesson format will be used for the other three food chains with gradual release to<br>students to become more independent in the process of identifying stakeholders for each food<br>. Each time students complete the Stakeholders chart, they will take more responsibility for the<br>However, in this lesson they are both heavily teacher modeled. The Stakeholders chart for the<br>trial food chain used in this lesson is partially complete to allow time for teaching how to fill it out,<br>o show students what a good model looks like.<br>Learning targets. |



Adding to Cascading Consequences and Stakeholders:

| Lesson Vocabulary         | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stakeholder, greater good | <ul> <li>Industrial Food Chain Cascading Consequences chart (students' own from Lesson 1)</li> <li>Industrial Food Chain Cascading Consequences chart (for display; from Lesson 1)</li> <li>Getting a Dog Cascading Consequences sample chart (for display; from Lesson 1)</li> <li>Stakeholders chart (blank; one for display)</li> <li>Getting a Dog Stakeholders chart (answers, for teacher reference)</li> <li>Industrial Food Chain Stakeholders chart (one per student and one to display)</li> <li>Blank 8" x 11" paper (one per student)</li> </ul> |

| Opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Meeting Students' Needs                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <ul> <li>A. Unpacking Learning Targets (3 minutes)</li> <li>Have students volunteer to read the learning targets aloud:</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | • ELLs may benefit from visual representation of new words. |
| * "I can use my research to add to the Cascading Consequences chart for Michael Pollan's industrial food chain."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                             |
| * "I can determine the stakeholders affected by the consequences of Michael Pollan's industrial food chain."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                             |
| • Underline the word <i>stakeholder</i> and point out that this might be a new term for them. Explain that the next part of the decision-making process that they are using to look at the four food chains is to determine who will be affected by a decision, and how they will be affected. Explain that anyone who will be affected is referred to as a <i>stakeholder</i> —meaning this party has a stake in how the decision turns out. Emphasize that stakeholders don't have to be people—they can be animals or things like the environment. Students will learn how to examine stakeholders in detail in the second part of the lesson. |                                                             |



Adding to Cascading Consequences and Stakeholders:

| Work Time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Meeting Students' Needs                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul> <li>A. Creating a Class Cascading Consequences Chart (19 minutes)</li> <li>Invite students to reread the focus question and the research question. Remind students that the Cascading Consequences chart will help them to answer the focus question because it gives them a greater understanding of all of the consequences of a food chain. They will need to consider this when choosing which food chain they think will best feed the United States.</li> </ul>                                                                                             | • Some students may benefit from an after school or other support session to complete their personal Cascading Consequences charts.                                                                                              |
| • Have the students take out their own <b>Industrial Food Chain Cascading Consequences charts</b> from Lesson 1. Explain that they will be sharing the new information that they added to their personal Cascading Consequences chart from their research to add to the displayed class <b>Industrial Food Chain Cascading Consequences chart</b> , where possible.                                                                                                                                                                                                    |                                                                                                                                                                                                                                  |
| • Invite volunteers to share their new consequences with the whole group and invite those students to suggest how they think their consequences should be added to the class chart based on the way they added them to their personal Cascading Consequences chart. Try to select one student for each research article to get as much information on the class chart as possible.                                                                                                                                                                                     |                                                                                                                                                                                                                                  |
| <ul> <li>B. Introduce Stakeholders Chart (18 minutes)</li> <li>Remind students that at the beginning of the lesson, they learned about the term <i>stakeholder</i>, and that the next part of the decision-making process is to look at who will be affected by a decision, and how they will be affected. Emphasize that the stakeholders are important to consider when answering the focus question of the unit: Which of Michael Pollan's four food chains would best feed all the people in the United States?</li> </ul>                                         | <ul> <li>ELLs and perhaps even other<br/>students will benefit from visual<br/>representations of the stakeholders.</li> <li>When reviewing the graphic<br/>organizers or recording forms,</li> </ul>                            |
| • Display the <b>Getting a Dog Cascading Consequences sample chart</b> . Model reading each consequence and underlining or highlighting the people, animals, or aspects of the environment that are named there. For example, starting in the top left of the Getting a Dog Cascading Consequences sample chart and going counterclockwise, stakeholders are "I" (the decider), the dog, the dog walker, the vet, "we" (the family of the decider), the cat, the mom, friends, and the sister. Invite students to suggest any stakeholders that they see on the chart. | <ul> <li>organizers of recording forms,<br/>consider using a document camera<br/>to visually display the document for<br/>students who struggle with auditory<br/>processing.</li> <li>Some students may benefit from</li> </ul> |
| <ul> <li>Point out that some of these stakeholders show up more than once on the chart.</li> <li>Display a blank Stakeholders chart. Invite students to read the column headings with you. Ask students:</li> <li>* "What do you notice?"</li> </ul>                                                                                                                                                                                                                                                                                                                   | having the Stakeholders chart even<br>more completed than others. Some<br>students may benefit from the rigor<br>of not having it filled in at all.                                                                              |



Adding to Cascading Consequences and Stakeholders:

| Work Time (continued)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Meeting Students' Needs |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| * "What do you wonder?"                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| • Select students to share their notices and wonders with the whole group.                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |
| • Focus students on the fourth column:                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |
| * "If the consequence is negative, do <i>you</i> feel it is offset by greater good elsewhere?"                                                                                                                                                                                                                                                                                                                                                                                                     |                         |
| Ask students to discuss in research teams:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |
| * "What do you think this means?"                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |
| • Select volunteers to share their responses. Listen for students to explain that it means that even if a consequence is negative, there are other good things that happen as a result.                                                                                                                                                                                                                                                                                                            |                         |
| • Model inputting two stakeholders that you have underlined on the Getting a Dog Cascading Consequences sample chart. Use the <b>Getting a Dog Stakeholders chart: (answers, for teacher reference)</b> to guide your modeling.                                                                                                                                                                                                                                                                    |                         |
| • Point out to students that if they were filling out the chart, they might describe or rate things differently than you do (as we all place different value on different consequences).                                                                                                                                                                                                                                                                                                           |                         |
| • Explain to students that they will now complete a partially completed Stakeholders chart for the industrial food chain. Give each student a copy of the <b>Industrial Food Chain Stakeholders chart</b> . Emphasize to students that the first five rows have been filled out, but they need to work in research teams to complete the rest of the rows and use the class Industrial Food Chain Cascading Consequences chart to think of two additional stakeholders that haven't been included. |                         |
| • Explain that the final column will need to be filled out individually, rather than in teams, as different people may have different ideas about how important that stakeholder is.                                                                                                                                                                                                                                                                                                               |                         |
| • Circulate to support students as they work. Ask students the questions at the top of the columns on the Industrial Food Chain Stakeholders chart to guide them in making decisions.                                                                                                                                                                                                                                                                                                              |                         |



# Adding to Cascading Consequences and Stakeholders:

| Closing and Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Meeting Students' Needs                                                                                                                 |
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| <ul> <li>A. Share Industrial Food Chain Stakeholders Chart (5 minutes)</li> <li>Invite students to pair up with someone from another team to compare their Stakeholders charts. Explain that students can revise their charts based on their learning from their new partners if they think it is necessary.</li> <li>Invite students to return to their teams and to number each team member between 1 and 4.</li> <li>Explain that for homework, numbers 1 and 2 will reread pages 114–126 of <i>The Omnivore's Dilemma</i> and make a Cascading Consequences chart for it. Numbers 3 and 4 will reread pages 127–136 and make a Cascading Consequences chart.</li> <li>Distribute blank 8" x 11" paper.</li> </ul> | • Some students may need access to<br>an audible or home-language<br>recording of their section in order to<br>complete their homework. |
| Homework                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Meeting Students' Needs                                                                                                                 |
| Start the Industrial Organic Food Chain Cascading Consequences chart:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                         |
| <ul> <li>Numbered Heads 1 and 2 reread pages 114–126 of <i>The Omnivore's Dilemma</i> and begin a Industrial Organic Food Chain<br/>Cascading Consequences chart.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                         |
| <ul> <li>Numbered Heads 3 and 4 reread pages 127–136 of <i>The Omnivore's Dilemma</i> and begin a Industrial Organic Food Chain<br/>Cascading Consequences.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                         |
| • Be prepared to share your list of consequences with your research team to create a team Industrial Organic Food Chain Cascading Consequences chart in the next lesson.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                         |



# Grade 8: Module 4: Unit 2: Lesson 4 Supporting Materials





**Stakeholders Chart** 

Name:

Date:

What is the option being considered?

| How will<br>he/she/it be<br>affected? | Is this a positive or<br>negative<br>consequence? | If the consequence<br>is negative, do <i>you</i><br>feel it is offset by<br>greater good<br>elsewhere? | How important to you are the<br>interests of this stakeholder?<br>1-very<br>2-somewhat<br>3-not so much                   |
|---------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       |                                                   |                                                                                                        |                                                                                                                           |
|                                       | he/she/it be                                      | he/she/it be negative                                                                                  | How willIs this a positive oris negative, do youhe/she/it benegativefeel it is offset byaffected?consequence?greater good |



Getting a Dog Stakeholders Chart Answers for Teacher Reference

### What is the option being considered?

Getting a dog

| Stakeholder        | How will<br>he/she/it be<br>affected?     | Is this a positive or<br>negative<br>consequence? | If the consequence is<br>negative, do <i>you</i> feel<br>it is offset by greater<br>good elsewhere? | How important to you are<br>the interests of this<br>stakeholder?<br>1-very<br>2-somewhat<br>3-not so much |
|--------------------|-------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| I (the<br>decider) | Will have to walk<br>the dog              | Sometimes positive and sometimes negative         | I will be getting exercise                                                                          | 1                                                                                                          |
| The dog            | It will go for walks<br>three times a day | Positive                                          |                                                                                                     | 1                                                                                                          |
| The dog<br>walker  | He/she will get a<br>job                  | Positive                                          |                                                                                                     | 2                                                                                                          |
|                    |                                           |                                                   |                                                                                                     |                                                                                                            |
|                    |                                           |                                                   |                                                                                                     |                                                                                                            |
|                    |                                           |                                                   |                                                                                                     |                                                                                                            |
|                    |                                           |                                                   |                                                                                                     |                                                                                                            |



# Industrial Food Chain Stakeholders Chart

#### Name:

## Date:

### What is the option being considered?

| Stakeholder             | How will<br>he/she/it be<br>affected? | Is this a positive or<br>negative<br>consequence? | If the consequence<br>is negative, do <i>you</i><br>feel it is offset by<br>greater good<br>elsewhere? | How important to you are the<br>interests of this stakeholder?<br>1-very<br>2-somewhat<br>3-not so much |
|-------------------------|---------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Farmers                 | Reduced numbers<br>of them            | Negative                                          | No                                                                                                     | 2                                                                                                       |
| Cows                    | Forced to eat corn                    | Negative                                          | No                                                                                                     | 2                                                                                                       |
| Cows                    | Raised on CAFOs<br>– get diseases     | Negative                                          | No                                                                                                     | 2                                                                                                       |
| Environment             | Toxic pollution<br>from CAFOs         | Negative                                          | No                                                                                                     | 1                                                                                                       |
| "People"<br>(customers) | Meat is cheap                         | Positive                                          |                                                                                                        | 1                                                                                                       |
| "People"<br>(customers) |                                       |                                                   |                                                                                                        |                                                                                                         |