

## Transcript for Video Clip 8.4

Teacher/video ID:	Tricia Torres, 8.4_stella_FW_torres_L5_c4
Content area:	Food webs
STeLLA strategies:	Make explicit links between science ideas and activities (SCSL strategy F). Link science ideas to other science ideas (SCSL strategy G). Highlight key science ideas and focus question throughout (SCSL strategy H).
Context:	Video clip 4a appears at the beginning of a lesson on food webs, and clips 4b and 4c appear at the end of the lesson. At the very beginning of this lesson, the teacher had students draw and label food chains to show what they've learned so far about what happens to matter in a food chain. In clip 4a, two students share and describe their food-chain diagrams. Between clips 4a and 4b, the teacher introduces the focus question for the lesson: <i>What happens to the matter that makes up wastes and dead organisms?</i> After this, students observe and discuss jars of fresh and rotting strawberries and then read about and discuss decomposers. In clip 4b, near the end of the lesson, the teacher challenges students to go back to the food-chain diagrams they drew at the beginning of class. In clip 4c, we see how the teacher ends the lesson.

### Video Clip 4a

Time Code	Speaker	Discussion
0:00:02.1	T	Chris is going to show his diagram to show some of his thinking. And I'm going to look for some other people who would like to add thoughts.
0:00:09.7	T	Do you want to explain what you have so far, Chris?
0:00:12.6	SN	OK.
0:00:15.9	S	The bush gets its ...
0:00:21.0	S	energy from the Sun and the carbon-dioxide mass and the water's matter—
0:00:28.7	T	Can you speak up a little bit, Chris?
0:00:30.7	S	The bush gets its energy from the Sun and the carbon-dioxide mass and the water's matter, and it passes it on to the rabbit.
0:00:43.2	S	So the rabbit gets it from the bush's energy and matter. And then it's passed on to the fox, and the fox gets it from the rabbit's energy and matter.
0:00:55.2	T	OK. So you're saying that the bush gets carbon dioxide and water?
0:01:02.3	T	And then what does it do with it? With the help of energy from the Sun?
0:01:07.6	S	Makes sugar?
0:01:09.5	T	OK. And then that matter gets passed on to the ...
0:01:15.0	S	Rabbit.
0:01:16.1	T	And that rabbit's matter gets passed on to the ...
0:01:19.9	S	Fox.
0:01:20.8	T	Fox. So you're saying matter gets passed on?
0:01:23.5	S	Yeah.
0:01:23.8	T	Is there anything else that happens to the matter as it goes? Anybody want to show on their diagram? Russell, go ahead.

0:01:37.8	T	Good job, Chris, thanks.
0:01:41.4	SN	Well, the bush provide[s], well, makes the food from CO <sub>2</sub> , which is carbon dioxide, and water and the Sun.
0:01:50.2	S	It makes sugar out of those things. Sugar is ... equals food. And it ... the bush is a producer. The bush provides food for the rabbit, and the rabbit's a consumer.
0:02:03.3	S	And it uses ... and the rabbit uses it ... the energy for ... uses food ... the food for the energy and waste and to grow.
0:02:14.6	T	OK.
0:02:15.0	S	And then it provides food for the fox, which uses it for energy, waste, and to grow. And it eats the rabbit for food, and the fox is a consumer.
0:02:27.7	T	OK. Do you want to ... do you want to ask him a question?
0:02:31.6	SN	Yes, well, I think that the rabbit is a herbivore, not a consumer.
0:02:36.9	SN	Well, a herbivore is a consumer. It's a kind of a consumer. It's just not a carnivore.
0:02:43.9	T	Good job.

#### Video Clip 4b

Time Code	Speaker	Discussion
0:02:47.8	T	OK. I want you to go back to your diagram.
0:02:51.7	SN	Diagram? What—
0:02:52.4	T	Your diagram you did at the very beginning of class.
0:02:56.5	SN	Wait—
0:02:57.1	SN	Oh, that.
0:02:57.5	T	OK? What do you think we should add to our diagram?
0:03:02.5	SN	Uh ...
0:03:03.1	SN	That—
0:03:03.6	SN	Probably mold.
0:03:04.7	SN	Mold.
0:03:05.4	T	What is mold?
0:03:06.6	SN	Uh ...
0:03:06.8	SS	A decomposer.
0:03:08.4	T	Decomposers. Where do you think you might add that?
0:03:11.6	SN	To the berries.
0:03:12.8	T	To the berries?
0:03:13.6	SN	Yeah. I think that you would add—
0:03:16.1	T	Why do you think all of them?
0:03:17.5	SN	Because it says that it decomposes— At the end, it says that it decomposes anything that dies.
0:03:25.6	T	Anything that dies. Does everything die, Jared?
0:03:27.9	SN	Yes. But ... yes.

0:03:31.0	T	OK. So if everything dies, do decomposers have a relationship with everything at some point?
0:03:37.9	SS	Yes.
0:03:38.3	SN	[Inaudible]
0:03:39.1	T	OK.
0:03:39.2	SN	Well, not everything dies.
0:03:40.6	T	Well, anything that's alive ... That then dies. OK, so can we add decomposers to our diagram?
0:03:47.9	SS	Yes.
0:03:48.4	SN	No.
0:03:49.4	SN	Decomposers—
0:03:50.3	T	And you can draw it how you want. But there's a ...
0:03:58.1	T	Right here would be a little example of what it could look like under a microscope. They're really small; decomposers are hard to see.
0:04:08.9	T	We can ...

#### Video Clip 4c

Time Code	Speaker	Discussion
0:04:12.3	T	... but what do you think is the big idea that we're getting about matter?
0:04:17.7	SN	It's ... you can touch it.
0:04:20.6	T	You could touch it.
0:04:22.1	SN	Yay.
0:04:22.8	SN	You could feel it.
0:04:24.1	T	You can feel it.
0:04:25.5	SN	You can contain it?
0:04:26.0	T	What happens to matter?
0:04:28.4	SN	It ...
0:04:30.1	SN	It can rot.
0:04:31.1	SN	It ...
0:04:32.6	T	What happens to matter?
0:04:33.1	SN	It stays the same.
0:04:34.4	T	It stays the same. If we look at that, we look as ... at decomposers as recyclers.
0:04:43.4	T	They're going to keep the matter going, so that it can be used again.
0:04:49.7	T	And if we look at this last slide, the decomposers provide ma ... provide matter, minerals, carbon dioxide, and water, that then is going to be used by what?
0:05:03.7	SN	The producer.
0:05:05.1	T	The producer. So now we're back to a cycle. We're back to the circle. So yes ...