Title:	The Food Chain	
Grade(s):	5th grade	
Subject(s):	Science	
Author:	Shepard, Stracener, Taylor, Washington	
Overview:	The students will analyze a food chain presentation and explain how energy is obtained from the sun by producers and is transferred from producers to 1st, 2nd and 3rd level consumers.	
Content Standards:	SC (5)	9. Describe the relationship of populations within a habitat to various communities and ecosystems by describing the relationship between food chains and food webs.
	ELA (5)	4. Use a wide range of strategies and skills, including using text features to gain meaning, summarizing passages, and drawing conclusions, to comprehend fifth-grade informational and functional reading materials.
	TC (3-5)	2. Use various technology applications, including word processing and multimedia software.
Local/National Standards:	NSES Standard C	Describe the relationship of populations within a habitat to various communities and ecosystems by describing the relationship between food chains and food webs.
Primary Learning Objectives:	The students will analyze a food chain presentation and explain how energy is obtained from the sun by producers and is transferred from producers to 1st, 2nd and 3rd level consumers.	
Approximate Duration of Lesson:	Two-60 minute sessions	
Materials and Equipment:	Scratch presentation, Computers with Internet Access, Text Book, Art Supplies	
Technology Resources Needed:	Computers, Internet connection, Promethean Board	
Background/ Preparation:	Students should have a basic understanding of the food chain and a basic knowledge of computer use.	
Procedures/Activities:	Step 1	Engage: The students will view a scratch presentation demonstrating a food chain showing how energy is transferred from producers to consumers. Students will make generalizations about how energy was transferred.
	Step 2	Explore: Students will work in small groups and brainstorm their own examples of plants and animal food webs.
	Step 3	Explain: Teacher will explain the process of photosynthesis and how producers use this process to make their own food using energy from the sun and how energy is transferred from producers (plants) to

consumers (animals) in a food chain.

Step 4 Extend: Students will make their own food chain using various software models previously taught. (Scratch, Glogster, British Council Comics etc.) Students will also be given the option to produce a poster or collage to show an example of a food chain.

Step 5 Evaluation: Student groups use the RAFT strategy for differentiated instruction, choosing from:

- Role-- writer, artist, scientist, or reporter
- Audience-- peer group, self, judge, or parents
- Format—4 technology project formats: Glogster, Scratch, Edublog, British Council Comics; Two non-technology formats: song lyric or poem
- Topic—Energy transfer in a food chain

Attachments: None

Assessment Strategies: The students will be given an opportunity to view the scratch presentation again without sound. They will write an analysis explaining how energy was transferred in the demonstration.
The students will complete group projects.

Extension: The students will research the fifth link of the food chain decomposition and complete a scratch project explaining how the hawk transfers energy back to the ecosystem.
Software Presentation Rubric (Attachment)

Remediation: Peer tutoring, On-level texts, Labeled diagrams.

RAFT Assignment

Demonstrate what you have learned by creating a product from a particular point of view for a specific audience. You will need to decide what role you will assume during your presentation. Then, decide to whom you will be writing (audience) and how you will present your knowledge (format). ALL PRESENTATIONS MUST RELATE TO THE FOOD CHAIN AND ENERGY TRANSFER.

Role	Audience	Format	Topic
• Scientist • Artist • Character in nature • Reporter • Blogger • Alien	• Peer group • Government • Animals • World leaders • Parents	• Journal • Blog • Song/lyrics • Article/brochure • Comic strip • Visual presentation	The Food Chain