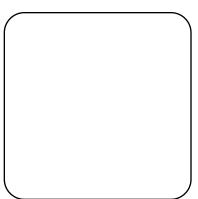
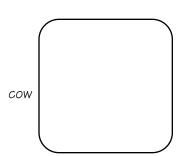
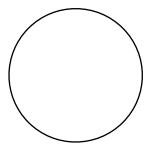
Hamburger Origins

Name: Period:

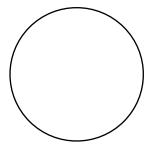




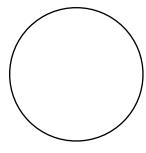




grass & grain
Work: 9 points, Assessment: 4 points



tomato plants



lettuce plants

Hamburger Origins

Name:

Period:

Follow the directions below to create the diagram described below. Use colored pencils for your drawings, and check off each box \square as you finish that part of the instructions.

For this exercise, you will be making a diagram to show where the energy in your hamburger comes from. In doing so, you will be creating a simple food web.



1.	In the circle titled "grass & grain" draw some grass \square and then some clumps of seeds (grain) \square .
	Where does the grass get its food energy from?
2.	The grass & grain is going to have 2 different things happen to it. It will be eaten by the cow, so draw an arrow that starts at the grass & grain circle, and points to the box for the cow \Box . Next, draw an other arrow that again starts at the grass & grain circle, goes around the cow box on the left side, and points to the bun on top of the hamburger \Box .
	When you eat the bun, where did that food energy come from?
3.	In the box titled "cow" draw a cow eating some grass $\hfill\Box$.
	Where does the cow get its food energy from?
4.	Draw an arrow from the cow box to the meat patty under the lettuce in the hamburger $\hfill\Box$.
	When you eat the meat patty, where did that food energy come from?
5.	In the circle titled "tomato plants" draw some tomato plants (duh) $\hfill\Box$.
	Where do the tomato plants get their food energy from?
6.	Draw an arrow from the tomato plants circle to the tomato on top of the lettuce in the hamburger \hdots .
	When you eat the sliced tomato and ketchup, where did that food energy come from?
7.	In the circle titled "lettuce plants" draw a duck. Just kidding. Draw some lettuce plants □.
	Where do the lettuce plants get their food energy from?

Н	lamburger Origins	Name: Period:	
8. Draw an arrow from the lettuce plants circle to the lettuce in the hamburger $\hfill\Box$.			
	When you eat the lettuce, where did that food energy come from?		
9.	In the large box above the hamburger, draw a picture of you eating a hamburg arrow from the hamburger to the bottom of the box that shows you eating. You complete.		
	Which part of the food web has more than one step before food energy r	eaches your meal?	
	Consider the following:		
	 The Salinas Valley produces most of the world's lettuce. 		
	 As the drought in California continues, water will become more ex 	xpensive.	

What do you think may happen to the price of hamburgers in the near future, and why?

A locust is a kind of large grasshopper. Their population is usually under control during normal weather. However, if there is a long drought (like, oh, perhaps, in California) followed by lots of rain and growth of vegetation, the locusts will reproduce like crazy. Millions of hungry locusts are born all at the same time, and they are hungry. Really hungry. They will eat any vegetation all the way down to the dirt, leaving behind land that is pretty much desert. How would a plague of locusts affect your hamburger food web?

Work: 9 points, Assessment: 4 points