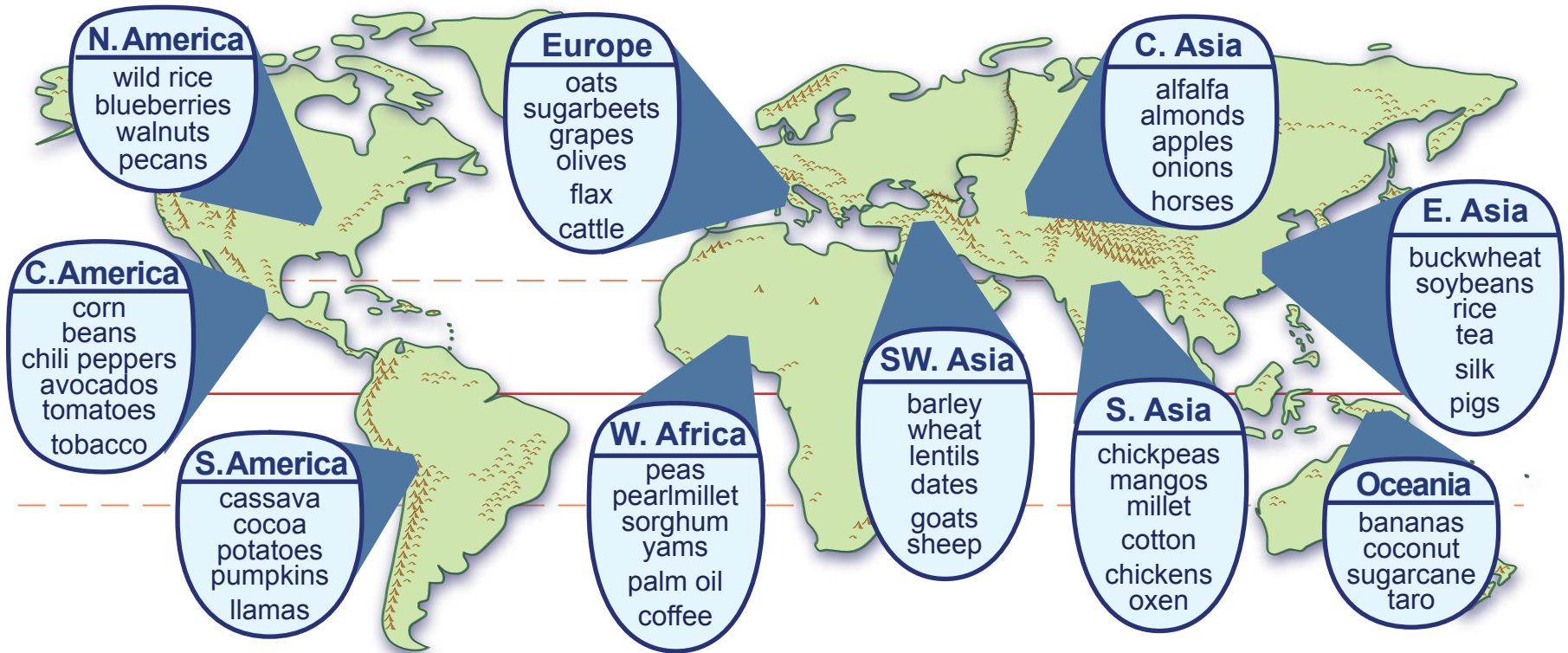


Origins of Food Plants and Animals



Problem # 1

Choose a typical meal. List each food item and identify the region it came from.

_____ came from _____

_____ came from _____

_____ came from _____

_____ came from _____

_____ came from _____

_____ came from _____

Problem # 2

Pick a world region. Try to plan a meal that uses only foods from that region.

Appetizer _____

Soup _____

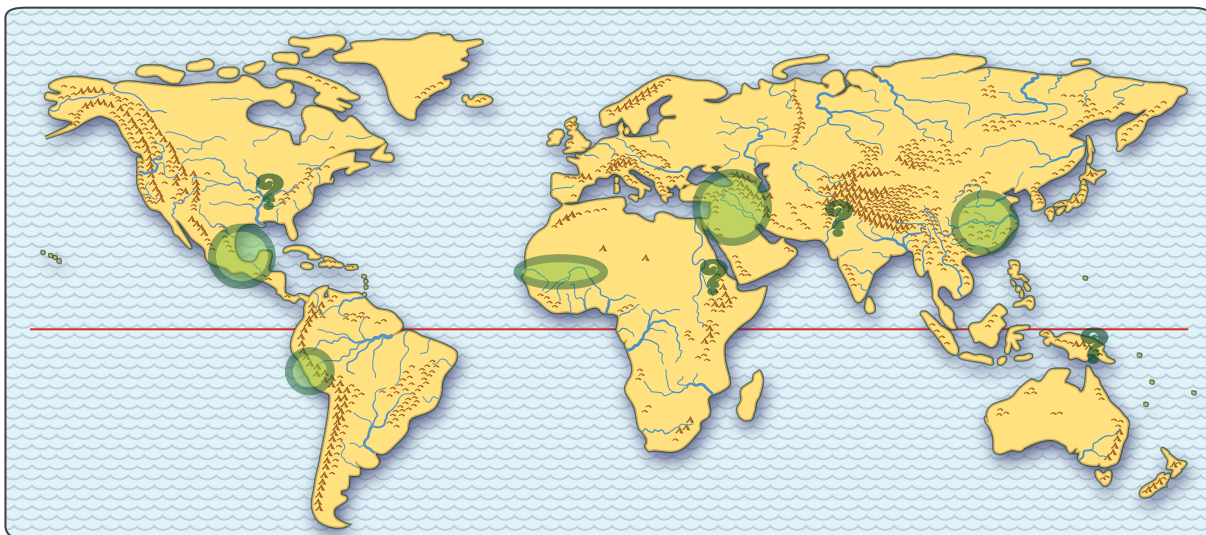
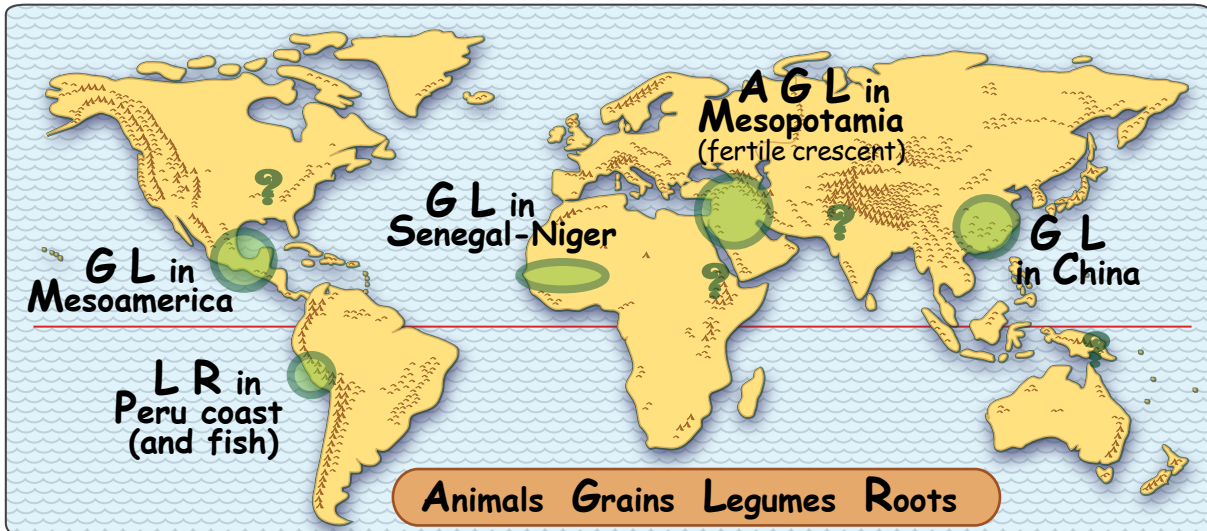
Salad _____

Main course _____

Dessert _____

Early Centers of Plant and Animal Domestication

Definition: to **domesticate** a plant or animal is to tame, plant, or change it to grow or live near humans (as food, power, protection, etc.)



In your own words, describe the geographic pattern of the early centers of plant and animal domestication.

Why would the "Fertile Crescent" in Southwest Asia have had a head start over other parts of the world as a place for urban civilizations to begin?

Teacher's Guide: **Domestication of Plants and Animals**

Overview: Students investigate where in the world some familiar food and fiber plants and animals were first domesticated.

- Activity 1 – trace the origins of the items in a typical meal:
- Activity 2 – try to construct a menu from the foods that were available in a particular region.

Grade: 6-8

Related Discipline: Earth Sci.

GLCEs: 6G414, 511, 7W121

Time: 10-30 minutes

Setup: Domestication is a complex subject, with a surprisingly large number of implications for modern life. Pick a setup idea that might work with your students:

- Think of French fries, pizza, or tortillas. Imagine that no one in Europe had heard of potatoes, tomatoes, or corn until after Columbus made his voyage across the Atlantic.
- Out of millions of species of plants and animals, people get most of their food from just a dozen. Is this a problem? What if a pest or disease hits one (like the potato famine in Ireland)? Some people are going back to the original “hearth regions” to find “heritage” varieties of foods, in order to broaden the genetic base of human food production.
- Things that were food in one region have sometimes been taken to another region and become pests – like rabbits in Australia, sunflowers in part of the Great Plains, or corn relatives like Sudangrass or Johnsongrass. To assess this threat, we need to know about domestication.
- Some researchers are studying other plants that might be domesticated to produce food in places that are too cold or dry for farming today.
- Trade in foods is a multi-billion-dollar enterprise that provides millions of jobs. To understand who wins and loses from this trade, we need to know where some common food plants and animals were domesticated.
- One big difference between world regions is the kind of animals that were available to be domesticated. For example, China had to import horses from Central Asia, and people in the Americas or Australia had no animal like a camel, horse, or ox that could be harnessed to carry a lot of cargo or to pull a plow. (In some cases, they hunted suitable animals to extinction! See the activity on Ancient Megafauna.)

Procedure: Hand out the worksheet. Pick one of the two activities (or make up one of your own). The goal is to get students to look more carefully at the map, so that they remember the source regions of some common foods.

Answers: Any reasonable interpretation is acceptable. Students should realize that some world regions of the world had a more limited range of foods or work animals than others.

Debrief: After individual students have researched their meals, have them share in groups or with the class. Discussion should include three important conclusions:

1. Our modern suite of food plants and animals came from many places around the world.
2. Despite the variety of foods, it remains true that more than 90% of calorie intake comes from fewer than a dozen plant and animal species. This narrow genetic diversity is worrisome for some researchers. “Ancient grains” and “heritage foods” also provide jobs for many people!
3. The development of civilization in some regions was at least influenced, if not hindered, by the range of local animals suitable for domestication as draft or work animals.

Vocabulary: crop cultigen diet domestication draft animal weed

Extension: Investigate specific kinds of domesticated plants or animals which have large roles in human history – examples include camels, horses, dogs, sugar, tea, or cotton.