

## Kitchen Lesson K7-8

# Middle Eastern Meze Platter

### *Communication*

Students work in small teams to complete components of a larger meal, they coordinate timing and divide responsibility for whole group tasks like setting the table.

### *Sustainability*

Landscapes and weather patterns determine agricultural practices and regional diets. An example of a climate-dependent crop is the date palm, which nomadic people of the Arabian Peninsula used to feed, clothe and shelter themselves.

### *Life Skills*

Students learn how to safely operate and clean an immersion blender, and how to prepare crudité's, a simple appetizer of raw sliced vegetables.

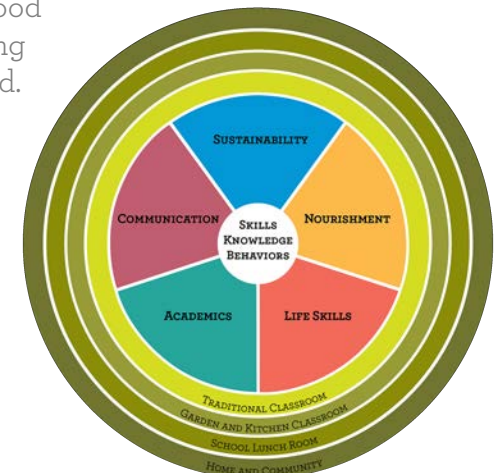


### *Nourishment*

Students prepare hummus, a popular healthy snack food that many eat at home but have never made themselves, and bake whole wheat pita bread with flour ground by students in Edible Schoolyard garden classes.

### *Academics*

This lesson fulfills History and Social Science Standards for discussing the exchanges of plants, animals, technology, culture, and ideas among Europe, Africa, Asia, and the Americas in the fifteenth and sixteenth centuries; Common Core State Standards for collaborative discussion; integrating information in different formats; speaking and listening; Health Standards for making healthy food choices; safe food handling; and preparing nutritious food.



### Middle Eastern Meze Platter Abstract

#### Summary

In this 7th grade humanities lesson, students prepare a Middle Eastern meze platter using ingredients that represent the four climatic regions of the **Arabian Peninsula**.

#### Objectives

After this lesson, students will be able to:

- Identify the four climatic regions of the **Arabian Peninsula** and the crops native to each region
- Understand how the climate of each region influenced the lifestyles and diets of people native to that region
- Refine knife skills and practice different cuts and sizes
- Use and care for an immersion blender or food processor

#### Assessments

During this lesson, students will:

- Answer questions about the climatic regions and foods of the **Arabian Peninsula**
- Describe the four climatic regions of the **Arabian Peninsula** and discuss their effects lifestyles and diets of people native to each region
- Cut vegetables into sizes appropriate for dipping
- Blend hummus

**Communication** is strengthened by working in small teams to complete a multi-dish meal, coordinating timing and dividing responsibility for whole group tasks like setting the table. **Sustainability** is highlighted by learning how landscapes and weather patterns determine agricultural practices and regional diets. An example of a climate-dependent crop is the date palm, which nomadic people of the **Arabian Peninsula** used to feed, clothe and shelter themselves. **Nourishment** is acquired by preparing hummus, a popular healthy snack food that many eat at home but have never made themselves, and baking whole wheat pita bread with flour ground by students in Edible Schoolyard garden classes. **Life Skills** are sharpened by learning how to safely operate and clean an immersion blender, and how to prepare **crudités**, a simple appetizer of raw sliced vegetables.

**Academics** fulfill History and Social Science Standards for discussing the exchanges of plants, animals, technology, culture, and

ideas among Europe, Africa, Asia, and the Americas in the fifteenth and sixteenth centuries; Common Core State Standards for collaborative discussion; integrating information in different formats; speaking and listening; Health Standards for making healthy food choices; safe food handling and preparing nutritious food. See **Connections to *Academic Standards*** below for details.

*Edible Schoolyard* curriculum emphasizes developing community and personal stewardship, along with skills that will help students navigate different situations throughout their lives; using and caring for **tools** and equipment at the ESY Cooking Station; selecting correct **knives** from the ESY Toolbox; and **making** connections between the diets of **historic cultures** and the foods we eat today. See **Connections to *Edible Schoolyard Standards*** below for details.

This lesson follows the BEETLES Project's *Learning Cycle* (Invitation-> Exploration -> Concept Invention -> Application -> Reflection) and uses their *Discussion Routines* (Think-Pair-Share, Whip-Around). All are highlighted in *Green\** with an asterisk for easy identification. See the documents BEETLES\_Discussion\_Routines.pdf and BEETLES\_Learning\_Cycle.pdf included in **Resources** below for more information. Games and activities from other sources are also identified in *Green*, without an asterisk.

### **Connections to *Academic Standards***

History–Social Science Content Standards for California Public Schools, Grade 7

- **7.2** Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Islam in the Middle Ages.
  - 7.2.1 Identify the physical features and describe the climate of the **Arabian peninsula**, its relationship to surrounding bodies of land and water, and nomadic and sedentary ways of life.

Common Core State Standards, English Language Arts and Literacy, Grade 7

- RH.6-8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
- SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 7 topics, texts, and issues*, building on others' ideas and expressing their own clearly.
  - SL.7.1.b Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.

- SL.7.1.c Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
- SL.7.1.d Acknowledge new information expressed by others and, when warranted, modify their own views.
- SL.7.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
- SL.7.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards 1 and 3 on page 53 for specific expectations.)
- L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
  - L.7.1.a Explain the function of phrases and clauses in general and their function in specific sentences.
  - L.7.1.b Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.
  - L.7.1.c Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.
- L.7.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.
  - L.7.3.a Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.
- L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Health Education Content Standards for California Public Schools, Grades 7&8,

- 1.4.N Describe how to keep food safe through proper food purchasing, preparation, and storage practices.
- 1.8.N Identify ways to prepare food that are consistent with current research-based guidelines for a nutritionally balanced diet.
- 7.1.N Make healthy food choices in a variety of settings.
- 7.2.N Explain proper food handling safety when preparing meals and snacks.

### Connections to *Edible Schoolyard* Standards

Edible Schoolyard 3.0

In the Edible Schoolyard Program

- 1.0: Students work with each other and teachers to develop community and personal stewardship, along with skills that will help them navigate different situations throughout their lives.
- 1.1.1 - 1.3.12: This lesson fulfills all Edible Schoolyard Program standards, numbers 1.1.1 through 1.3.12. See *The Edible Schoolyard Berkeley Standards* for details.

In the Kitchen Classroom, 7<sup>th</sup> grade

- Tools 2.1.1: Use and care for **tools** and equipment at the ESY Cooking Station, and begin to choose the right tool for each.
- Tools **2.1.3**: Select correct **knives** from the ESY Toolbox. Refine knife skills by using different cuts and sizes while demonstrating knife safety and care.
- Concepts 2.3.11: Make connections between the diets of **historic cultures** and foods we eat today.

## Middle Eastern Meze Platter Lesson

### Materials

#### For the Chef Meeting

- K7-8 Visual Aid
- K7-8 Meze Platter Notes
- Pita recipe
- Hummus recipe
- Yogurt Sauce recipe
- Recipe ingredients and tools for demonstration

### Ingredients

- Seasonal vegetables for **crudités**
- Dates
- Almonds
- Pomegranate

### For the Pita

- All-purpose flour
- Whole wheat flour
- Yeast
- Sugar
- Salt
- Olive oil
- Eggs

### For the Hummus

- Garbanzo beans
- Garlic
- Tahini

- Lemons
- Flat leaf parsley
- Salt
- Pepper

#### **For the Yogurt Sauce**

- Yogurt
- Radish, carrot, or cucumber
- Garlic
- Mint
- Salt

#### **Tools**

- Mixing bowls
- Reamer or juicer
- Grater
- Garlic peeler
- Mortar and pestle
- Wooden spoons
- Chefs' knives
- Paring knives
- Cutting boards
- Measuring beaker
- Measuring cups
- Measuring spoons

#### **Equipment**

- Immersion blender or food processor
- Oven

#### **Timeline Overview**

Total Duration: 90 minutes

## Welcome:

1. *Invitation\** (5 minutes)
2. *Concept Invention\** (15 minutes)
3. *Application\** (60 minutes)
4. *Reflection\** (10 minutes)

## Before you Begin

- Create the Visual Aid
- Copy the Pita recipe to hand out
- Copy the Hummus recipe to hand out
- Copy the Yogurt Sauce recipe to hand out
- Review K7-8 Mezze Platter Notes
- Collect all the tools and ingredients, then distribute them to the tables
- Gather supplies for the Chef Meeting

## Procedures

### Welcome

1. *Invitation\**: (5 minutes)
  - a. Welcome students and ask if they have heard of a meze platter.

### At the Chef Meeting

2. *Concept Invention\**: (15 minutes)

Students learn how about foods of the **Arabian Peninsula**.

- a. Explain that a meze platter is an assortment of appetizers and introduce the Pita, Hummus and Yogurt Sauce recipes.
- b. Locate the **Arabian Peninsula** on the Visual Aid and discuss its significance as a crossroads for trade between civilizations.
- c. Ask students to identify the four climatic regions of the **Arabian Peninsula**:
  - i. Desert
  - ii. Oases
  - iii. Coastal plains
  - iv. Mountains.



- d. Review how climate and geography influence lifestyle and impact diet.
  - i. Factors such as temperature, precipitation, and soil type determine what people are able to grow to eat, what materials are available build homes with, etc.
- e. Identify ingredients representative of each region of the **Arabian Peninsula**, incorporate information from K7-8 Mezze Platter Notes.
  - i. **Date Palm (Oases)**: regarded as the “tree of life”- every part of the tree was used: the fruit was eaten, the sap was drunk, palm wood was used to build houses, the leaves were used for roofs, the fibers were woven into rope, hollowed out trunks were used as irrigation pipes, and date pits fed to camels.
  - ii. **Wheat (Coastal Plains)**: originated in the Middle East and was first domesticated by the Mesopotamians
  - iii. **Pomegranate (Mountains)**: From Persia; are an important symbol in many religions and culture, often as a symbol of fertility; believed to be the “tree of knowledge”; the modern day word for hand-grenade originates from the French word for pomegranate, *grenade*.
  - iv. **Yogurt (Desert)**: The nomadic peoples of the **desert** relied on their herd for everything from food to shelter.
  - v. **Garbanzos**: Originated in Southern Turkey but very important in India, Pakistan, Latin America, and Europe; also known as chickpea, Indian pea, ceci bean, Bengal gram.
- f. Explain that foods native to the **Arabian Peninsula** traveled via trade routes to become staple foods in other cultures.
- g. Ask students to wash their hands and join their table group.

### At the Table

#### 3. *Application*\* (60 minutes)

Students prepare a Middle Eastern Mezze Platter and eat it.

- a. Meet with the table groups and review the recipes.
- b. Demonstrate how to cut vegetables into a crudit .
- c. Demonstrate how to use and care for the immersion blender or food processor.
- d. Assign cooking jobs.
- e. Prepare the recipes.
- f. Set the table; eat; clean up.

### At the Closing Circle

#### 4. *Reflection*\*: (10 minutes)

Students reflect on today’s class time.

- a. Ask each student to name one ingredient and its climatic region of origin.

**Vocabulary**

Crudités

Arabian Peninsula

Desert

Oasis

Coastal plains

Mountains

**Contributors**

All lessons at the Edible Schoolyard Berkeley are developed in collaboration with the teachers and staff of the Edible Schoolyard and Martin Luther King Jr. Middle School.

Learning Cycle and Think-Pair-Share discussion routine © The Regents of the University of California. All materials created by BEETLESTM at The Lawrence Hall of Science.

**Resources**

K7-8 Visual\_Aid.pdf

K7-8 Mezze\_Platter\_Notes.pdf

Pita\_Recipe.pdf

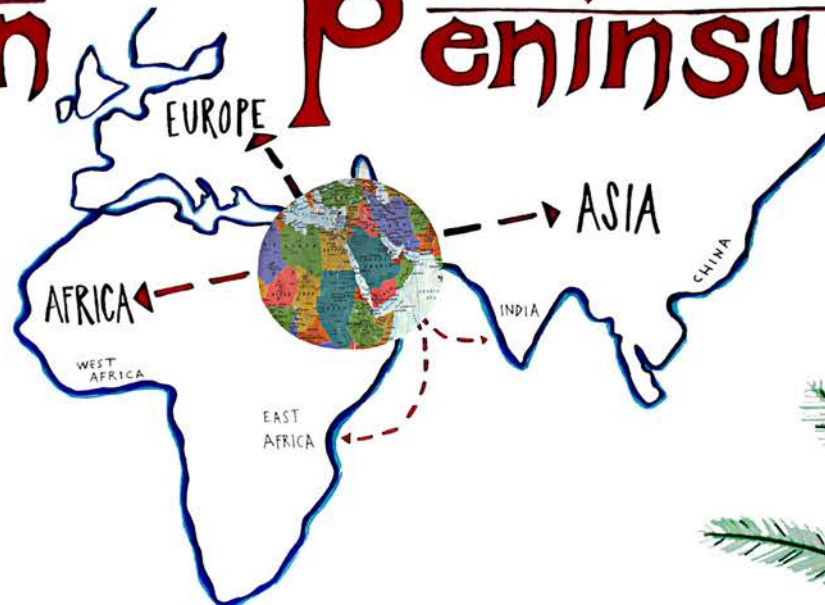
Hummus\_Recipe.pdf

Yogurt\_Sauce\_Recipe.pdf

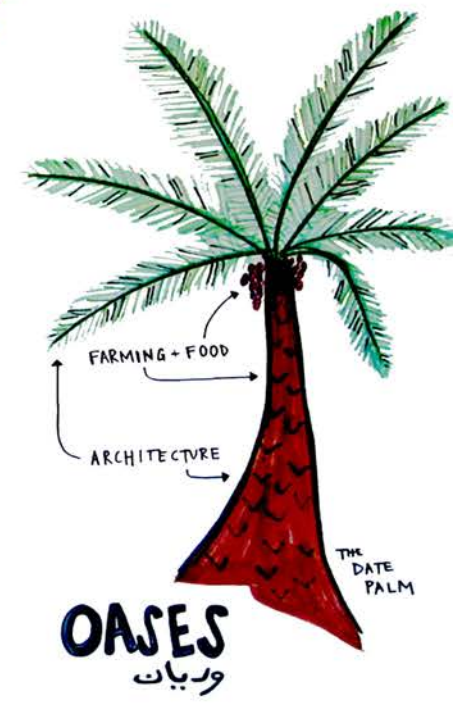
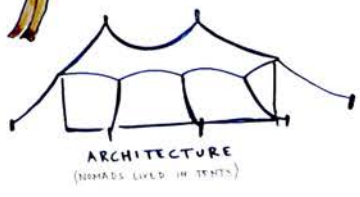
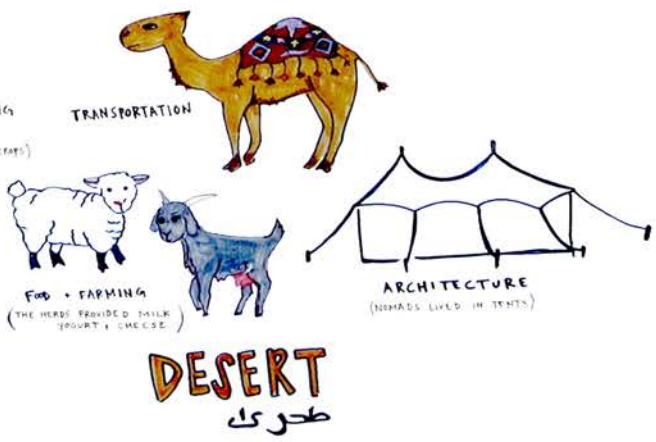
BEETLES\_Learning\_Cycle.pdf (See lesson G6-0)

# The Arabian Peninsula

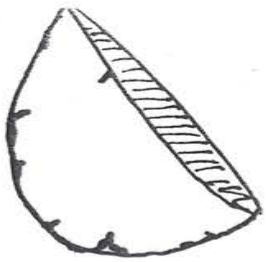
THE  
4  
CLIMATIC  
REGIONS



- DESERT
- OASES
- COASTAL PLAINS
- MOUNTAINS



# PITA BREAD



- 1/2 cups all-purpose flour
- 1 cup whole wheat flour
- 1 tsp yeast (about 1/2 package)
- 1 TBS sugar
- 1 tsp salt
- 2 TBS olive oil
- 1 egg
- 1 cup water

Combine ingredients in a mixing bowl and knead until well mixed. Place in a mixing bowl and let stand one hour.

Heat oven to 550° or broil.

Divide dough into equal size balls. Press or roll each ball into a very flat disk.

Place on a cookie sheet and bake for 4-5 minutes until lightly toasted.



# Hummus



2 cups cooked garbanzo beans

1 clove garlic

2 tablespoons tahini

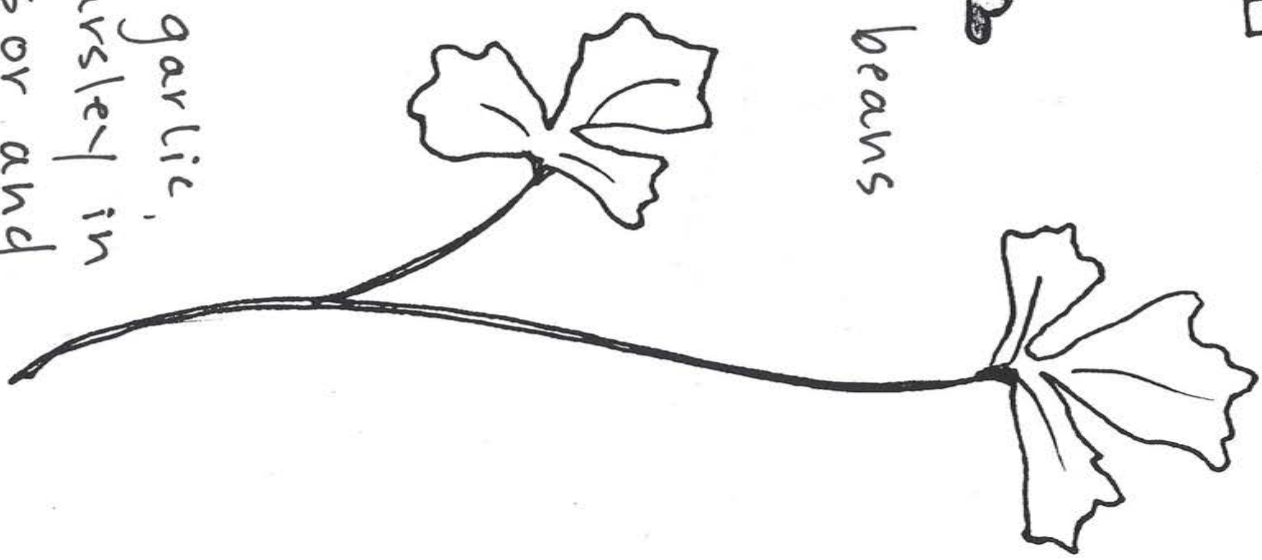
2 tablespoons lemon juice

2 tablespoons parsley

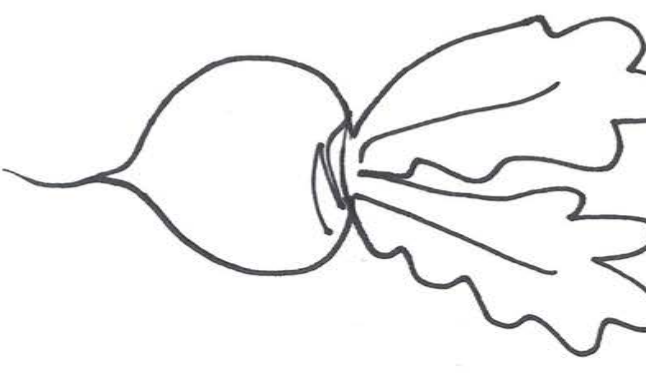
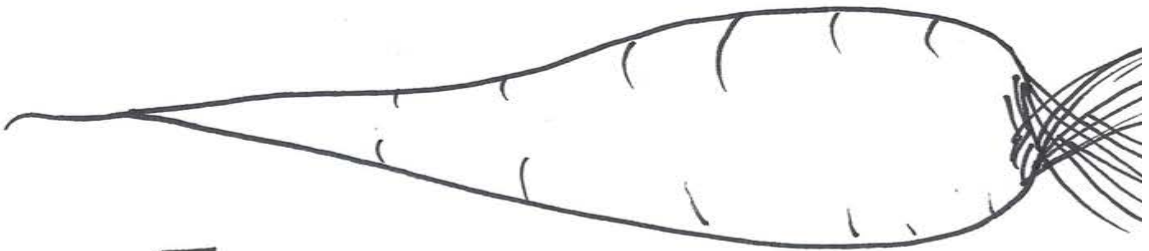
Salt and pepper

Combine garbanzo beans, garlic, tahini, lemon juice and parsley in a blender or food processor and blend until smooth. Add salt and pepper to taste and add water to thin as needed.

Serve with pita, crackers, or fresh vegetables.



# Yogurt Sauce



$\frac{3}{4}$  cup plain yogurt

$\frac{1}{2}$  cup radish, carrot, or cucumber, grated

1-2 cloves of garlic, pounded to paste in mortar & pestle

5 sprigs of mint leaves, chopped

Salt - to taste

Pour yogurt in medium mixing bowl. Add grated radish, carrot, or cucumber to yogurt. Add pounded garlic and chopped mint leaves to yogurt sauce. Salt to taste.

## Meze Platter Notes

### Dates

- The date palm was domesticated in the Middle East by 4000 BC. It is one of the earliest cultivated fruits (another is pomegranate), which makes determining the plant's exact place of origin difficult. Archeologists, scientists and historians agree that date palms are probably native to an area of the Fertile Crescent located in what is now Iraq.
- The Date Palm thrives in oases because its roots need constant access to water and its fruit requires a hot, dry climate. An Arabian proverb says that the date palm must have “its feet in running water and its head in the fire of the sky”.
- Dates were popular with ancient people of the Arabian Peninsula because the fruit kept well for long periods of time, due to its high sugar and low moisture content. Date palms were very important; every part of the tree was used. They ate the fruit and fed the pits to their camels, drank the sap, used the trunks and leaves to build homes, wove the tree fibers into rope, hollowed out the trunks for irrigation and grew other food in the shade of these trees.
- We eat the ripe fruit of the date palm, the seed is the pit inside the fruit.
- Plants grow fruit to reproduce: they entice animals to sow their seeds.
- Dates are high in sugar and a good source of minerals. They are consumed as a staple food in parts of the Middle East, North Africa and Western Asia. Dates are eaten as sweets, used in jams, curries and stews.
- The fruit's English name comes from the Greek word for finger, *daktylos*. Here it is in Greek: δακτύλος.
- Today both wild and cultivated date palms are found in desert regions of North Africa, the Arabian Peninsula and Asia. They are also cultivated in Mexico and California.

### Wheat

- Wheat was one of the first crops to be domesticated, around 7000 BCE. This occurred in the Fertile Crescent, in what is now Turkey.
- Wheat grows in places where the winter is wet and the summer is dry. It has adapted to grow all over the world.
- Wheat was popular with ancient people because it stores well and is versatile: it can be ground and made into a variety of different foods. Wheat grain can be ground and used to make many things: flat bread, leavened bread, pasta, noodles, couscous, breakfast cereal, cookies and cakes.
- Wheat is a cereal (along with rice and corn), which means it is a grass. We eat the grains, which are small, dry, single seeded fruit. There are two distinct types of wheat. Bread wheat has a lot of gluten, which allows bread to rise when yeast is added. Durum wheat has less gluten and is used for pasta, couscous and bulgur.

- Whole wheat grains are good sources of energy (carbohydrates), vitamins, minerals, protein and fiber. Processing strips the bran and the germ from the wheat (this prevents spoilage), which removes most of the vitamins, minerals, protein and fiber. Sometimes flour is “enriched” by having vitamins and minerals added back in after processing.
- The word *cereal* comes from the name of the Roman goddess Ceres, who was the protector of agriculture.
- Today, durum wheat is grown commercially in all temperate parts of the world. Almost every culture in the world eats wheat regularly: bulgur in Mediterranean countries and Turkey, couscous in Algeria, Morocco and Tunisia, noodles in Asian countries, pasta in Italy, the US and many other countries.

### **Pomegranates**

- The pomegranate was first cultivated in the Middle East around 3000 BCE. The plant may have originated in the Fertile Crescent and is probably native to Iran.
- Pomegranates grow well in the rocky soil and warm climate of the Arabian Peninsula’s mountain region.
- The tree’s large, jewel-like fruits have been a popular food and meaningful symbol in many cultures. The prophet Mohammad connected the pomegranate with paradise, the tree of knowledge visited by Eve in the biblical story of the Garden of Eden is thought to have actually been a pomegranate, and Spaniards loved the fruit so much that they named the city of Granada after it.
- Juice from the aril that surrounds each of the fruit’s many seeds, and the seeds themselves, are eaten fresh and cooked. Pomegranate is most often found in Middle Eastern and Mediterranean food.
- Pomegranates have lots of phosphorus and potassium and few calories. They are known for their antioxidant properties and have had medicinal uses since ancient times.
- The English word for hand-grenade originates from the French word for pomegranate, *grenade*.
- Today pomegranates are grown throughout warm climates around the world, including the Middle East, Egypt, India, China, the Mediterranean, Africa, Mexico and California.

### **Chickpeas**

- Chickpeas were one of the earliest foods to be domesticated, first cultivated in the Fertile Crescent around 3500 BCE. The plant is native to Turkey.
- Chickpeas require a warm climate, fertile soil and are able to tolerate relatively drier conditions than other food plants.
- Dried chickpeas store well, and the plant is suited to the climate of the Mediterranean, Arabian Peninsula, and South Asia, where they have been used in soups, sauces, stews, and salads for thousands of years.



- Chickpeas belong to the botanical family of legumes, or pulses, and are commonly called “peas” or “beans”. The fruit of the plant is the pod, and the seed is the part people eat. They are eaten boiled, roasted and fried.
- Like most pulses, chickpeas are high in protein. They are particularly high in lysine, which is an essential amino acid. “Essential” means that this is something the human body needs but cannot make itself. Chickpeas are also high in fiber, folic acid and other important minerals.
- Garbanzo bean, ceci bean, chana, Indian pea, sanagalu Indian pea, and Bengal gram are alternate names for the chickpea. In Arabic, the word for chickpea is hummus: *حُمص*.
- Chickpeas are still a very important food today in India, Pakistan, Middle Eastern and Mediterranean countries. They have even become popular in the United States: as Hummus, falafel and in salad bars. In addition to being delicious, chickpeas are used as a meat substitute, and there is evidence that they can help reduce cholesterol and regulate blood sugar.

## **Lentils**

- Lentils are another of the first foods to be domesticated. They are believed to have originated in the Fertile Crescent between 7000 and 5000 BCE.
- Lentils are able to grow in difficult agricultural environments, and can tolerate relatively drier conditions than other food plants.
- Dried lentils store well, and the plant is suited to the climate of the Mediterranean, Arabian Peninsula, South Asia and parts of Africa, where they have been eaten for thousands of years.
- Lentils belong to the botanical family of legumes, or pulses. The fruit of the plant is the pod, and the seed is the part people eat.
- Lentils are exceptionally high in protein, and are also a good source of iron, fiber, folic acid, B vitamins and other important minerals. The only plants that contain more protein per pound than lentils are soybeans and hemp seeds.
- The name *lentil* comes from the word lens, because of the shape of the seeds of the plant.
- Today lentils are an essential source of inexpensive and vegetarian protein in many parts of the world, especially South Asia and West Africa. They are widely eaten in soups throughout Europe and the US.

