



# TRUE FOOD TASTE TEST!

## Moroccan Freekeh- February 2018 Math & Science Mini-Lesson

**1. PLANT PARTS:** Freekeh is harvest from durum wheat. After reading the bolded descriptions of plant parts below, fill in the picture with the correct wheat plant parts.

Parts of a Wheat Plant:

**Roots** – The part of the plant that gets nourishment from the soil and which anchors the wheat plant to the soil

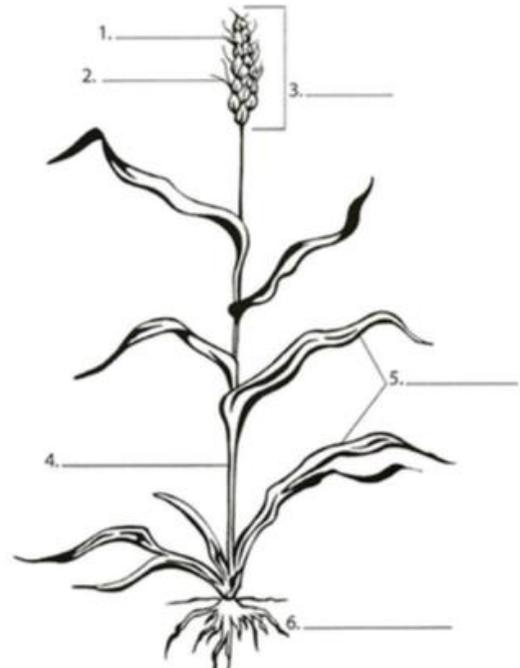
**Heat** – (called “spike” until it matures) The part of the plant that contains the kernels and the beard

**Leaves** – the parts of the wheat plant that gather light energy for photosynthesis

**Kernel** – This part provides the plant with food to grow. Each wheat head contains 50 to 75 of these, which are the only part of the wheat plant used for food. Freekeh is found in this part of the plant.

**Beard** – This part of the plant protects the kernels

**Stem** – This part of the wheat plant support the head and becomes straw at harvest



## 2. Nutrition Benefits

**Digestive Benefits** Freekeh has a lot fiber, which helps keep us regular. Each serving has 4 grams of fiber; many people only consume about ½ that amount they need. Freekeh also has *prebiotics*, which helps healthy bacteria in your body grow. Don’t worry, that’s a good thing! Healthy bacteria help your body digest and breakdown food.

**Vitamins and Minerals** Freekeh contains many vitamins and minerals that our bodies need to function and move, which is very important for growth!

**Muscular** Amino acids are the building blocks for cells and muscles. Most of them come from the foods we eat. Freekeh contains one amino acid in particular that helps muscles work better during sports and exercise.

**Activity:** Pick your favorite grain, fruit, or vegetable and research it’s nutritional benefits! What nutritional benefits does it share with Freekeh? How does it differ?



Thank you to our True Food  
Taste Test sponsors!



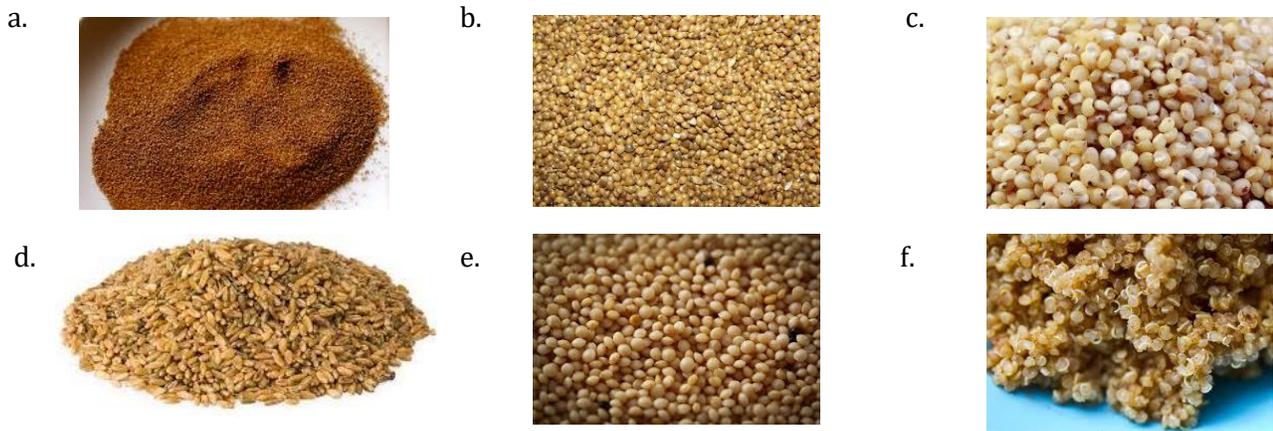


**3. ANCIENT GRAINS** This grain originates from the Mediterranean area. “Freekeh” is actually the word from how the grain is processed, “to rub”. In 2300 BC, the people fled the area due to a siege, where their village was burned. When they came back, they found their once green wheat plants roasted, and found they tasted good! Freekeh is considered an ancient grain.; these plants have remained unchanged since humans started cultivating them thousands of years ago. Common grains we now know today are hybrids with other grain varieties. For example, common wheat is a hybrid of spelt, einkorn and farro. Ancient grains include both grains and cereals. Freekeh, farro, einkorn, kamut and spelt are all grain varieties from wheat; sorghum, teff, millet, quinoa and amaranth come from other grains or cereals. Freekeh and other ancient wheat grains look very similar, while the other ancient grains vary in size, taste, shape, and nutritional properties.

**Which Ancient Grain is which?**

Write the letter of corresponding picture next to each type of grain.

<b>Freekeh</b> _____	<b>Quinoa</b> _____	<b>Teff</b> _____	<b>Sorghum</b> _____	<b>Amaranth</b> _____	<b>Millet</b> _____
<i>The grain being tasted today. Cooked in water and can be eaten by itself, like rice, or with savory or sweet dishes.</i>	<i>Cooked in water similar rice, be sure to wash before cooking. Can be eaten alone or in salads and other dishes.</i>	<i>Originates from Ethiopia. Consists of small granules typically used to make flatbread, pancakes and porridge.</i>	<i>This grain is usually ground into a meal that is made into porridge, flatbreads, and cakes. It's also used in making edible oil, starch, and paste.</i>	<i>Amaranth was the staple grain of the Aztecs. It needs to be boiled with water, 6 cups water to 1 cup amaranth. It can be popped like popcorn or used to thicken sauces and jellies.</i>	<i>Indian flat bread called roti is often made from millet flour. In Eastern Europe, it is used in porridge and a fermented beverage. In Africa it is used to make baby food, and as breakfast porridge.</i>



**4. Processed Grains:** Most grains we eat are processed into other forms of food that look very different from the unprocessed forms we see in the fields. Most of us eat wheat and other grains every day without thinking about it. Can you think of a couple grains you eat that are unprocessed? Hint – think cereal or corn. What about grains that are processed?

Answers:  
1. 1= beard, 2= kernel, 3= head, 4= stem, 5= leaves, 6= roots  
3. a = teff, b = millet, c = sorghum, d = freekeh, e = amaranth, f = quinoa



Thank you to our True Food Taste Test sponsors!

