



Vocabulary

- No specific vocabulary, but familiarity with geography will be necessary.

Main Concept: The vanilla bean is the fruit of Orchids and has been an important food flavoring extract for centuries.

Age/Grade level: Elementary school students

Learning Goals:

- Students will be able to identify what a vanilla bean looks like, describe the first use of vanilla beans, identify where vanilla beans are grown, and describe how vanilla extract is made.

What you'll need:

- 1 picture of Orchid *Vanilla planifolia* Andrews
- 1 geographical map showing Central America
- 1 picture showing hand pollination of vanilla beans
- Images of an orchids being used for decoration.
- 1 bottle of Vanilla extract*
- vanilla bean pod*

*Starred items are not included in the activity packet.



Activity:

- **Have you eaten an orchid today?**

Everyone has probably eaten an orchid today because the vanilla beans are the fruit of orchids and are used to make vanilla extract. Vanilla extract is used to flavor cookies, cakes, beverages, and candies. Can you list all of the times you've eaten an orchid this past week? Does the bottle of Vanilla extract look familiar? Have you ever used it to make cookies or cakes? What does it smell like?

- **Did you know that there are two species of Orchids that are used commercially to make vanilla extract?**

The two species of Orchids that can be used to make vanilla extract are *Vanilla planifolia* Andrews and *Vanilla tahitensis* Moore. Take a look at the pictures of Orchids species *Vanilla planifolia* Andrews. Do you have any flowers at home that look similar to this?

- **Do you know where vanilla beans were originally grown?**

Vanilla planifolia Andrews is native to Central American and Mexico. Examine and explore the map of Mexico and Central America. Have you ever been to any of these countries? How far are these countries from your home town?

- **Do you know what the Aztecs made with vanilla beans?**

The Aztecs made a drink called "Xocolatl" from cocoa and vanilla beans. Cortez learned about the Aztec drink and vanilla beans were taken back to Spain from where its use soon spread to other parts of Europe.

- **Do you know where vanilla beans are being produced today?**

Vanilla beans are now being produced mainly in Malagasy Republic (Madagascar) and the neighboring island of Reunion and Comoros. Examine and explore the map. Do Madagascar, Reunion, and Comoros look close to where you live?

- **Do you know how vanilla beans are produced?**

The flower of the Orchid plant is hand pollinated and becomes a long slender pod that is full of tiny seeds. The pod is picked while it is still green. The vanilla pod then undergoes fermenting, curing, and drying to develop the aroma and vanilla flavor. Did you realize that every time you eat a cookie or other food containing vanilla someone had to hand pollinate, ferment, cure, and dry the vanilla from the orchid before you could eat it? Take a close look at the Vanilla bean pod. What does it smell like? What does it feel like? What does it look like?

- **Do you know anything that orchids are used for other than vanilla?**

Orchids are often used for decoration. Take a look at the images of orchids being used as decorations. Can you think of any other ways that orchids are currently used or could be used?

- **The next time you eat something containing vanilla remember that you are eating an orchid!**

Vanilla planifolia Andrews



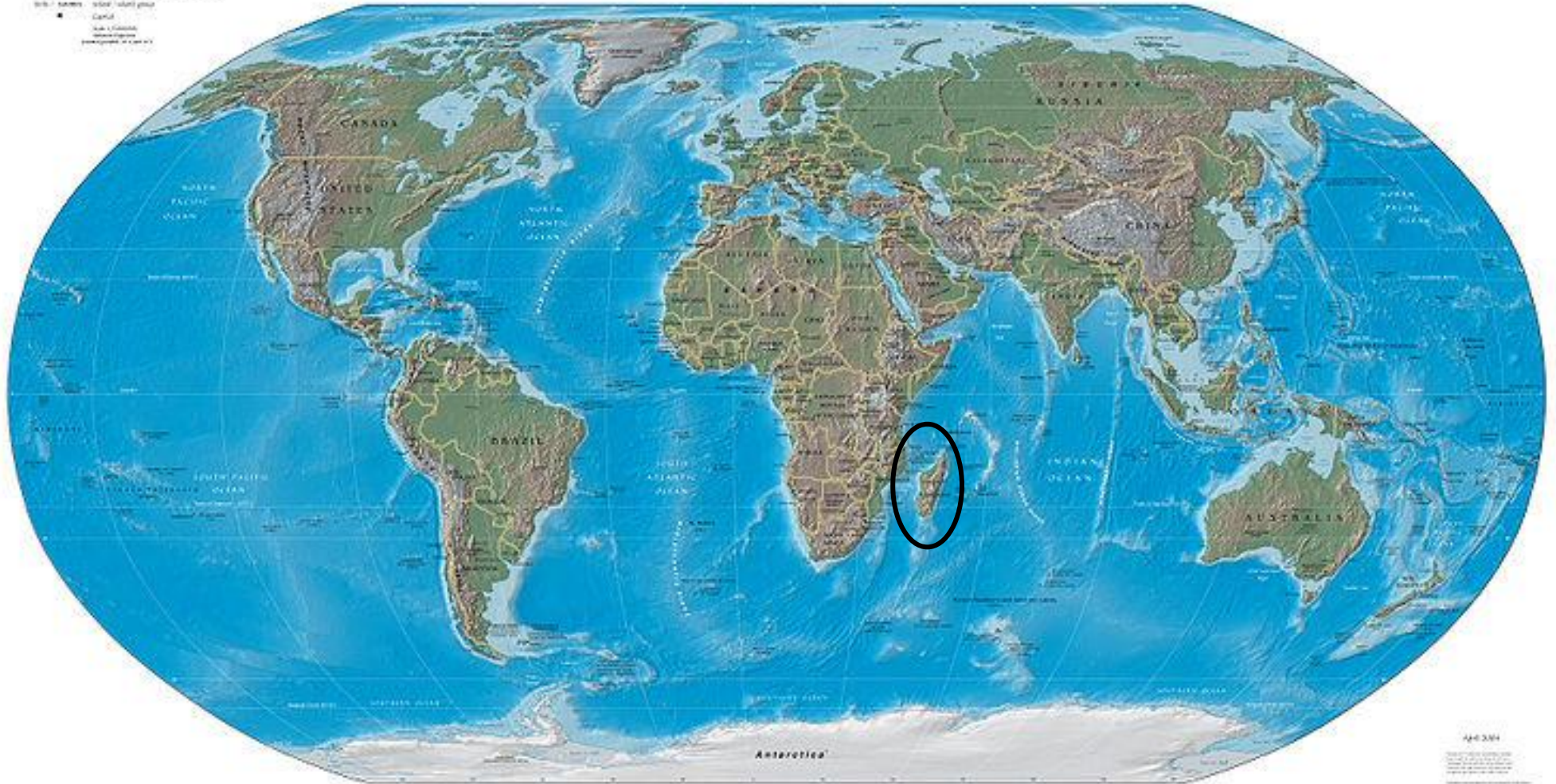
CENTRAL AMERICA AND THE CARIBBEAN



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Physical Map of the World, April 2004

ADDITIONAL INFORMATION
• Independence year
• Distribution or area of natural occurrence
• Major cities
• Capital
• Sea level elevation
• Population in millions



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An orchid being used to decorate a cake

An orchid being used in a decorative table display



A decorative orchid brooch that could be worn on clothing

