Introduction
Students learn a new way to use their fingers for counting. This method is based on one used in the Kamba tribe of Kenya, Africa. A short video demonstrates the counting method. Students are asked to practice and show someone else what they have learned. A Kenyan flag is provided for coloring. A map of Kenya is provided for reference. A printable practice sheet is provided for students to complete and put in their folders. The driving investigation for this lesson is awareness of other counting methods and other cultures.

Student Outcomes
- Students will be aware of different counting methods.
- Students will be able to use the counting method presented in this lesson.
- Students will be aware of another culture.

Content Area and Grade Levels
This activity is designed for early learners, Pre-kindergarten through first grade, and is mathematical in content. However, mention of another culture is made.

Technology Usage
- Computer

Resources
Online
- Map http://www.sas.upenn.edu/African_Studies/CIA_Maps/Kenya_19849.gif
- Flag http://www.rcbowen.com/kenya/anthem.html
- Chisenbop Math http://klingon.iupucs.iupui.edu/~aharris/chis/chis.html

Off line
- Atlas
- Maps

Tips:
The Fingercounting video is available in a live streaming or downloadable format. It is recommended that you use the downloadable movie file if you are not using a LAN to connect to the Internet.

Materials:
- Map of Africa
Copies of Flag coloring sheet
Copies of practice sheet.

**Preparation:**
- Make copies of the Fingermath practice sheet.

**Tasks: (actions)**
1. Students use a map to find Africa. Class discussion of where Africa is, how far from the classroom, and how many countries are in Africa.
2. Students watch the [Fingercounting video](#). Show it several times until the students have a good grasp on the method.
3. Students watch the [Fingermath Demonstration](#). Have students follow along and try the method as it plays. Repeat as often as you feel is necessary.
4. Students work in pairs to complete the practice sheet and color the flag.

**Presentation**
Possible ways of presenting what they have learned:
- Divide the class in half and line up facing each other. One line “shows” the counting method while the other line watches. Then switch.
- Have students do counting method together in front of other class, other teachers, or parents.
- Have students practice the counting method with an older class of children. If the older students don’t know the method, your students become the ‘experpts’ in this method.

**Assessment**
- Check student practice sheets.
- Display colored maps.
- Observe students carefully during their presentation to see if they have grasped the method. Evaluate attention to process and working together on the practice sheet.

**Content Standards and Benchmarks**
Mathematics: K-4
1) Unifying concepts and processes
Students will understand and use mathematics in problem solving.
4) Unifying Concepts and Processes
Students will understand and use mathematical connections.
6) Number and Operation Concepts
Students will understand and use number systems and number theory.
What will you do?

Today you are going to learn a new way to count. Boys and girl in Kenya, Africa, use their fingers to count. These children in the Kamba tribe count differently than you do. Find out how they do it.

What do you need?

<table>
<thead>
<tr>
<th>Supplies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pencil</td>
<td>To complete your practice sheet</td>
</tr>
<tr>
<td>Crayons</td>
<td>For coloring the flag of Kenya</td>
</tr>
</tbody>
</table>

How do you learn this new method?

- Use a map to find Africa
- Watch the Fingercounting video
- Watch the Fingermath Demonstration
- Find a buddy and do your worksheets

What do these words mean?

<table>
<thead>
<tr>
<th>Africa</th>
<th>Kenya</th>
<th>Kamba</th>
</tr>
</thead>
<tbody>
<tr>
<td>tribesmen</td>
<td>tribe</td>
<td>language</td>
</tr>
<tr>
<td>count</td>
<td>language</td>
<td>practice</td>
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</table>