Instrument:
*Ranāt ėk*, a xylophone leader

Country:
Thailand

Flag:
The central band was originally red but was changed to blue to express solidarity with the Allies during World War I (1917). The flag’s colors date back to the 14th century. Red stands for the nation, white stands for purity, and blue stands for the monarchy.

Size and Population:
Thailand (tie-land) has an area of 198,115 square miles, over twice the size of Wyoming, with 1,635 miles of coastline. The population is estimated at 67,448,120 as of July 2013; ranked 20th in the world.

Geography and Climate:
The country of Thailand has four main regions. There are dense forests in the Northern Mountains that have fertile land because of mountain streams. The Khorat (kor-at) Plateau in the northeast makes up 30 percent of the country and is the most populated area. Irrigation from the Mekong (meh-kong), Chi (chee), and Mun (moon) Rivers provides moisture for the Plateau’s dry, sandy surface. Fertile soil on the Central Plain enables the greatest amount of rice to be grown in the country. Several rivers combine into what becomes the Chao Phraya (chow pra-yah) River, Thailand’s main transportation route. The southern peninsula consists of part of the Malay Peninsula, containing jungle, mountains, and hills. The capital city is Bangkok in the central part of country near the Gulf of Thailand.

Thailand’s climate is generally tropical, humid and rainy. The mountainous areas are cooler, with temperatures as low as 32° F. Throughout July and December large storm-like conditions called monsoons bring much rain and wind to the region.

Background and History:
The people of present-day Thailand are said to have come from southwest China some 3000 years ago. It was on the trade routes from India to China and brought in elements of Indian culture, some from the sea and some from Sri Lanka. As the Monguls invaded China refugees pushed southward. By the 1200s these areas became over-populated forcing many people to
move further south and in 1238 the first Thai nation was established. In 1350, a group of Thai people established a kingdom in central Thailand with the capital city of Ayuthaya (ah-u-tah-yah). Up until 1767 this kingdom fought many wars with surrounding countries. Originally called Siam, the name Thailand in the Thai language is Muang (mu-ang) Thai (tie), meaning “land of the free.”

The first European contact was with the Portuguese in the early 1500s followed in the next century by contacts with Spain, England, France, Japan and the Netherlands. Thailand, however, is the only Southeast Asian country never to be ruled by a Western power. In 1782, a new dynasty took control and the capital was moved to Bangkok. King Mongkut in the mid 1850s encouraged study of the Western languages and science. Thailand supported the Allies in WWI but was invaded by Japan, and joined that country against the Allies in WWII. Ties with the U.S. were strengthened after WWII and American bases were established there for the Vietnam War.

Since the 1970s, Thailand has been one of the most successful Southeast Asian countries and has also experienced an influx of millions of refugees from surrounding countries. The military took control in 1991 but it has been a democracy since and today the country is a constitutional monarchy, led by King Phumiphon (pum-e-pon). Thailand is one of Southeast Asia’s best economic performers.

**Culture:**
The majority of the country’s people are Thai, but the population also includes Chinese people and people from other countries. Most Thai people are Buddhist and live by farming in villages. All villages have a school and a wat (wot), a Buddhist temple. Men and women used to wear the traditional panung (pon-nung), tightly wrapped colorful garments. According to Buddhist custom men over 20 years old are expected to serve as monks for several months and many do. To become a monk, the person must be officially ordained before the age of 21. Most Thai people can read and write, but there are low numbers of graduates from high school. Rice is eaten with almost every meal and meals include spicy stews, salads and meat. Thai kickboxing and soccer are favorite sports. Artistic expression is influenced mainly by Buddhism and includes beautiful temples, dances and paintings. The literature includes classical dramas and epic poems or works about modern Thailand. Thai musical traditions emphasize melody and layers of rhythm.

**Music: Instruments & Rhythms**

**Instruments:** There are many types of musical instruments in Thailand. These include bowed and plucked string instruments, end-blown flutes and oboes, and a large variety of percussion instruments, from many sizes of cymbals and gongs, and frame, goblet, and barrel drums to metallophones and xylophones (xylo = wood, phone = sound). The focus of this lesson is a xylophone called the ranāt ěk (raw-not ek, and ěk means leader), the lead instrument in the pī phat (bee pot) ensemble, one of the most distinctive types of music in Thailand. This group of instruments consists of melodic and rhythmic percussion instruments, small hand-cymbals, gong, and one oboe. While this ensemble can be small, medium or large we will look at the smallest type since it includes all of the basic instruments. The pī nai (bee nye) is an oboe with two folded reeds and gives the ensemble its name.
The ranāt ēk is a high-pitched xylophone that has 21 keys suspended on a box resonator. Each key is tuned by gouging out some of the wood in the middle and adding some bee’s wax and lead shavings in a paste at each end of the bar. It is important to note that the musical tuning of the Thai scale has equal distances between notes but the European scale, which is used in America, does not. Here is how the ranāt ēk scale compares to the American xylophone scale.

<table>
<thead>
<tr>
<th>Thai ranāt ēk</th>
<th>1 2 3 4 5 6 7 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>American xylophone</td>
<td>1 2 3 4 5 6 7 1</td>
</tr>
</tbody>
</table>

You can see that the American xylophone scale has close distances between notes 3 and 4 and 7 and 1. This is why listening to Thai music sounds strange to American ears. Keep in mind that our music sounds just as strange to a person from Thailand. The ranāt ēk is very important because it plays the lead part in the pī phat ensemble and also plays the most number of notes in a rhythm (see the Resources section).

**Rhythms:** Thai traditional music is always in a two-beat pulse or meter. There are three tempos: slow, medium and fast. Each tempo has a corresponding percussion pattern played by the ching (ching), two egg-sized cupped cymbals, and their pattern indicates what musical tempo is being played. The accent of the ching falls on the last beat of a group of pulses (1, 2, 3, 4) opposite the Western way, which is to have the first beat emphasized (1 2 3 4, see Resources for ching beats).

The rhythms of Thai music are in the general category of “colotomic” rhythms, a structure also described as a stratified or layered rhythm. For example, some instruments in the ensemble are playing fast, others are playing at half of that speed, others are playing at still half of that speed and so on. The relationship, therefore, is 8, 4, 2, 1. In the pī phat ensemble, the ranāt ēk has the fastest rhythm at eight hits per two beat pulse; the klōng that (klong tat) has the slowest at one hit per pulse.

**Listen & Play Along:** *Use Roots of Rhythm CD Notes to support this section.

Note to teachers: if instruments are not readily available, consider having students make their own (a general activity for making drums can be found in the Roots of Rhythm: Introduction section, and a specific ranāt ēk-making activity is described below) or encourage them to improvise - using everyday items such as buckets, containers, phone books, desk tops, etc., as instruments. Rhythms can also be created with body percussion including hand clapping, foot tapping, finger snapping, etc.

Listen to Tracks 77-78 of the Roots of Rhythm Companion CD to hear the sound of the ranāt ēk. Now it’s time to play along. If you don’t have a ranāt ēk, see below for instructions on how to make your own ranāt ēk, or use instruments from the music classroom as substitutes: you can make a pī phat ensemble (see Resources section) using a recorder, xylophone, finger cymbals, glockenspiel (bells), conga drum, and bass drum.

Listen to Track 79-85 of the Roots of Rhythm Companion CD and play along with the rhythms. As you listen to the CD, have student groups clap the various colotomic rhythms from the fast eight count to the slow one count all at the same time. Now begin again and play it faster. Switch parts and play it slower. Which is harder, slow or fast?
Now try reading the notation in the Resources section and then playing along to the CD.

**Make Your Own Ranât ēk:** Make a ranât ēk with some wood “furring strips,” dowels, cardboard box, strapping tape, hacksaw and sandpaper. (1) Cut your 1” by 2” piece of wood into eight lengths, ¾” apart in length from 8” to 13¼”; (2) after sanding all pieces, lay them down in order of length, then tape over and under them in a large oval; (3) pinch the tape between each bar; (4) cut the box so that two opposite sides are kept high; (5) attach each end of the oval to the box as shown; (6) cut the 3/8” dowel into two 10” pieces; (7) number the bars from 1 to 8. Hit the wooden bars in the middle or on the end. Have a friend play some notes then you copy by hitting on the same notes right after they hit. This is the way Thai students learn on the ranât ēk.

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**Photograph by Terry Miller.**
Resources: The Thai Ensemble & Ranāt ēk Rhythm

Small Pī Phat Ensemble

Không wong yai (kong wong yai)

Klông that (klong tat)

Ching Patterns for 4 Counts

<table>
<thead>
<tr>
<th>Count</th>
<th>Slow</th>
<th>Medium</th>
<th>Fast</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>_ _ _ 0</td>
<td>_ 0 _ +</td>
<td>0 + 0 + 0 +</td>
<td>0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

Colotomic Rhythms from Sāthukān (sah-tu-gone) Composition

<table>
<thead>
<tr>
<th>Count</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>l</td>
<td>e</td>
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</table>

Pī nai (oboe or recorder)  
Ranāt ēk (xylophone)  
Không wong yai (orchestra bells)  
Ching (finger cymbals)  
Taphôn (conga drum)  
Klông that (bass drum)

Please note:

1. The instruments in parenthesis are classroom substitutes for the pī phat ensemble.
2. The substitute for a ranāt ēk can be a xylophone. The letters stand for notes in the C scale.
3. A substitute for the không wong yai can be a set of bells or a glockenspiel.
4. The ching 0 stands for let the instrument ring like the sound “ching,” and the + stands for hitting and holding them together to get a “chick” sound. Finger cymbals are a good substitute. This special composition, Sāthukān, has only open chings.
5. The taphôn (played with the hands) and klông that (played with sticks) can be a tom tom and bass drum, respectively.
6. Sāthukān is a special composition (Ayuthaya Period 1350-1767) for starting a state ceremony.