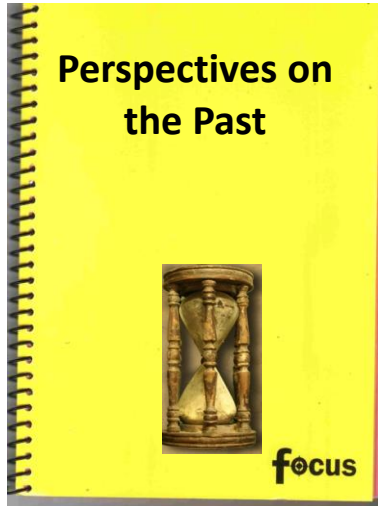


Unit 1 – Lesson 8



**Tools to Organize and
Analyze the Past –**

Time



If you had to write a history of your family, where and when would you begin?



If you had to write a history of the United States, where and when would you begin?

DISCUSSION

- **How might the story of the U.S. be different if you started before 1492 (when Columbus traveled to the Americas) or after 1500?**
- **How might different starting points affect what one sees as significant to the story?**
- **How might someone's ideas of significance affect their starting point?**

Historian Tools

How and why do historians organize their accounts by time?

Significance



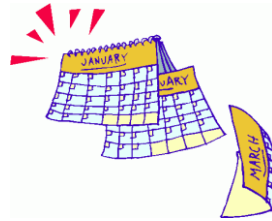
Being worthy of a historian's attention

Social Institutions



Education
Religion
Government
Family
Economy
Language

**Time
(Temporal Frame)**



When something happened

**Space
(Spatial Scale)**



Where something happened

What year is it?

It's actually 1464 according to the Armenian calendar.

It's actually 2559 according to the Buddhist calendar.

It's actually 2965 according to the Berber calendar.

It's actually 7523 according to the Byzantine calendar.

41
solar calendar

A calendar system based on the earth's rotation around the sun.

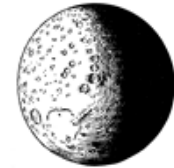


Example: The Egyptian year had 365 days and was based on a solar calendar.

(SS070108)

42
lunar calendar

a calendar system based on the moon's rotation around the earth



Example: The most widely used lunar calendar is the Islamic calendar.

(SS070108)

ACTIVITY

Calendar Systems

Calendar System	Or <input type="checkbox"/>	Calendar Systems						Other
		Calendar System	Origin Story	Current Year	Lunar or Solar	How many days/months per year	Is it used today?	
Gregorian	<input type="checkbox"/>	Gregorian						
	<input type="checkbox"/>	Muslim						
	<input type="checkbox"/>	Hebrew						
Muslim	<input type="checkbox"/>	Chinese						
	<input type="checkbox"/>	Mayan						

ACTIVITY

Calendar Systems

Calendar System	Origin	Lunar or Solar	Days/ months per year	Is it used today?	Other
Gregorian	<ul style="list-style-type: none">• Created by Pope Gregory in the 1500s• Based on Roman Calendar• Begins with birth of Jesus				

ACTIVITY

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ACTIVITY

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ACTIVITY

Calendar Systems

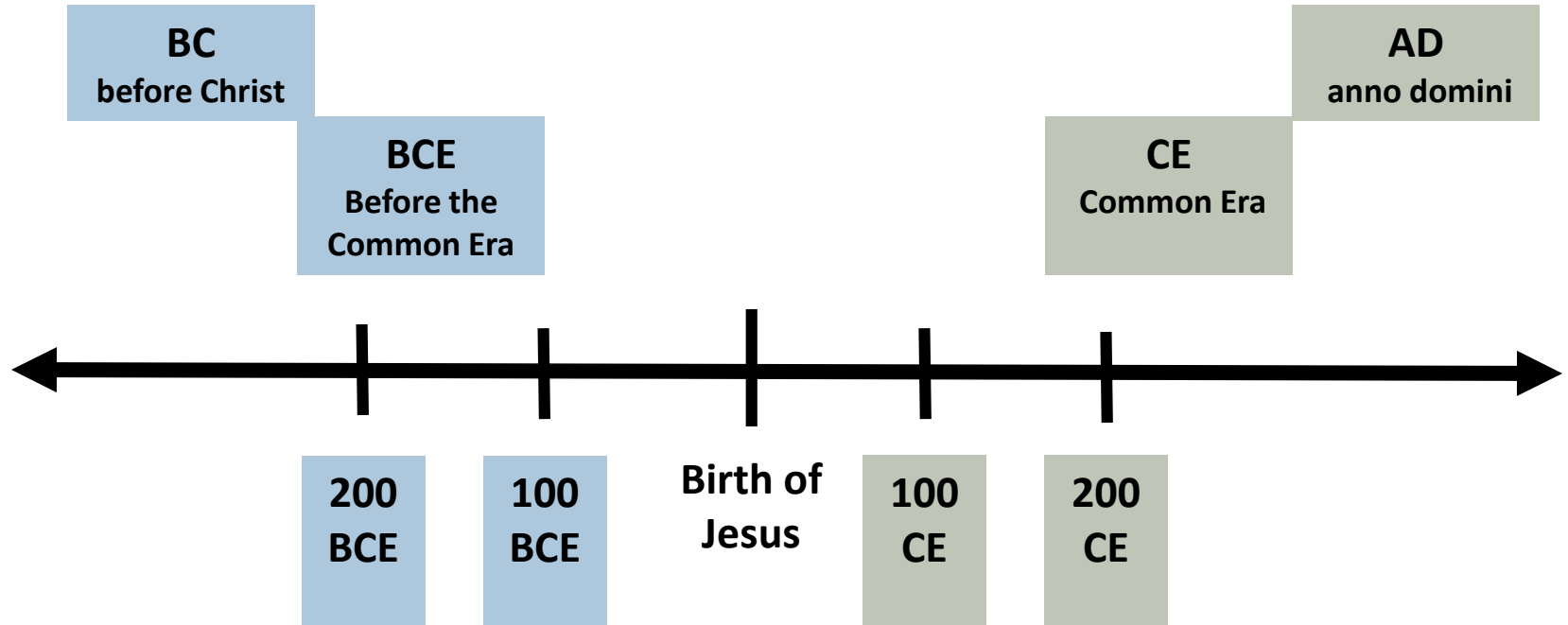
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ACTIVITY

Calendar Systems

Calendar System	Origin	Lunar or Solar	Days/ months per year	Is it used today?	Other
Gregorian	<ul style="list-style-type: none">• Created by Pope Gregory in the 1500s• Based on Roman Calendar• Begins with birth of Jesus	solar	<ul style="list-style-type: none">• 365 days in a year• Leap year 366 days• 12 months per year	Adopted globally	Uses BC to denote years before the birth of Jesus, and AD to denote years after.

Gregorian Calendar



ACTIVITY

The Hebrew or Jewish Calendar

The Jewish calendar is very different from the Gregorian calendar. The Jewish calendar is based on the movements of Earth's Moon. It also has many more years in it than the Gregorian calendar.

Because the Jewish calendar is based on lunar movements, it has fewer than 365 days in it. In fact, the Jewish calendar is 11 days shorter than the Gregorian (western) calendar every single year. This explains why the major holidays like Rosh Hashanah and Purim are not on the same day every "year." It depends on which calendar you're looking at. In most western countries, the Gregorian calendar is used, so because the dates don't match up, Jewish holidays seem to move around. (The same thing can be said of Easter, a Christian holiday that is based on lunar movements and is in either March or April every year.)

Confusion reigned in ancient times as the Israelites struggled to come to terms with their lunar calendar. Eventually, they decided to go to 19-year cycles, adding a month every 3rd, 6th, 8th, 11th, 14th, 17th and 19th years of the cycle. It is also the way in which the number of days in each month was stabilized. Now, each month has either 29 or 30 days in it.

Jews also do not use Christian terms when referring to the Gregorian calendar. The Gregorian, or Christian, calendar has B.C. or A.D. after a year in some cases. Since the Gregorian calendar is centered on the birth of Jesus, Christianity's central figure, B.C. means "Before Christ" and A.D. means Anno Domini, which is Latin for "In the year of our Lord." Jewish people, on the other hand, use the terms B.C.E. (Before the Common Era) and C.E. (Common Era).

The Jewish calendar has many more years in it than the Gregorian calendar does. For instance, the year 2011 on the Gregorian calendar is 5771 or 5772 on the Jewish calendar, depending on the time of year for both. The larger number was determined when scholars added up the years lived by all of the people mentioned in the Torah. Setting aside the obviously longer-than-written-about "seven days" that it took Yahweh to create the world in Jewish tradition, the world was created in 3761 B.C.E. on the Gregorian Calendar. The Hebrew Calendar today is used primarily for religious purposes.

You will be assigned to investigate one of these calendars.

The Muslim or Islamic Calendar

The Islamic calendar has 12 months but, unlike the Gregorian calendar, has only 354 days. This is because the Islamic calendar (or Hijri Calendar) follows the movements of earth's moon.

Like much of Islam, the calendar is based on the Quran and on personal reflections on the relationship between Muslims and Allah. Each month of the Islamic calendar officially begins when the lunar crescent is first seen after a new moon. This is not always an exact time, especially if the skies are cloudy or overcast. In a sense, the start of each month can be different for everyone. Many people, however, prefer to rely on an official announcement by Muslim authorities as to when each month begins.

The importance of the lunar crescent is also partly the explanation for why many countries with predominantly Muslim populations have a crescent shape on their flags.

The calendar is properly called the Hijri calendar because it began with the Hijra, or hejira, Muhammad's flight from Medina to Mecca, which took place in 622 on the Gregorian calendar. The hejira took place, on July 16 of the Gregorian calendar.

The Gregorian (western/Christian) calendar measures time beginning with the year 1 A.D. On the Christian calendar, A.D. stands for Anno Domini, which means "In the year of our Lord." The Hijri Calendar has years marked by A.H., which stands for Anno Hegirae, "In the Year of the Hijra." The hejira took place in A.H. 1.

So, the year 2011 on the Christian calendar is A.H. 1432 on the Hijri calendar. Remember that the Hijri calendar is consistently 11 days shorter than the Christian calendar.

The Hijri calendar is the official calendar in many predominantly Muslim countries, most notably Saudi Arabia. In other countries, Muslims refer to the Gregorian (western/Christian) calendar for most dates and consult the Hijri calendar only for religious purposes.

The Hijri calendar was introduced by Umar ibn Al-Khattab, a follower of Muhammad, in 638 according to the Gregorian calendar.]

The Chinese Calendar

This calendar is not exclusive to China, but followed by many other Asian cultures. It is often referred to as the Chinese calendar because it was first perfected by the Chinese around 500 BCE. In most of East Asia today, the Gregorian calendar is used for day-to-day activities, but the Chinese calendar is still used for marking traditional East Asian holidays such as the Chinese New Year.

The Chinese calendar is actually one "lunisolar" calendar. The months are lunar months, but since 12 lunar months are shorter than a solar year. As a result, an extra month must be added periodically. This extra month is called an "intercalary" month. When to insert an intercalary month is decided according to the solar terms.

A lunar month always begins on the day of a dark moon. The beginning of the Chinese calendar (Chinese New Year) always begins sometime between January 20th and February 20th on the Gregorian calendar.

The Chinese calendar uses cycles of sixty years. A year within a cycle is designated by a combination of one of five element names (e.g., "Water") and 12 animal names (e.g. "Rabbit"). A Chinese year is called by an element name, an animal name and a cycle number, e.g. the Water-Dragon year in the 21st cycle.

If the year ends in 0 or 1 it is Metal.

If the year ends in 2 or 3 it is Water.

If the year ends in 4 or 5 it is Wood.

If the year ends in 6 or 7 it is Fire.

If the year ends in 8 or 9 it is Earth.

The 12 animals are as follows:

Fig	Rat	Ox	Tiger	Rabbit	Dragon	Snake	Horse	Sheep	Monkey	Rooster	Dog
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

Historians disagree on when the Chinese calendar started. The first year in the first cycle was either 2977 BC or 2637 BC on the Gregorian calendar, making 2011 either in the 79th or 79th cycle.

Traditionally associated with the Gregorian Calendar is a cycle of 7 days called "the week". There is no such cycle in the Chinese Calendar; instead there are cycles of 60 days, 60 months, and 60 years.

The Mayan Calendar

The Maya recorded their history and their calendar in many documents made of the flattened inner bark of a fig tree, whitened with chalk. The Spanish invaders believed the calendars to be instruments of the devil and burnt great quantities of them. Only four Mayan books survive in the libraries of Europe. Our knowledge of Mayan writing in general and their calendar in particular, is based on these surviving documents, from a large number of inscriptions remaining in the ruins of their cities, and from a partial record of their writing made by a Spanish priest in 1664.

The earliest record of a calendar survives from about 500 BC. This calendar uses a 260 day-cycle which was commonly used by several societies—Zapotec, Olmec, Toltec, Aztec, Mayan, and more—and is still in use among present-day inhabitants of the region.

Days could be lucky or unlucky, or have other qualities, Mayans used the calendar partly to anticipate important days to wage wars and other activities. The calendar was also used to record on stone pillars, or stelae, important events in the lives of their kings. The Maya had knowledge of the behavior of the sun, moon, Venus and Jupiter. The behavior of the planets was important and used to determine the date of important events.

The Maya had two different cycles to measure time. The first was the 260 day cycle in which days were numbered 1 – 13 and 1 – 20 (called vintiena). This meant that any day had two numbers. The Maya also measured a longer solar year of 360 days. This year was divided in 18 months of 20 days each.

When the Maya had to locate a date in a much longer time span they used another system called the 'long count,' which was essentially a total of days since the start of an era, called the great cycle. Most scholars now agree that the current great cycle started on Wednesday, 8 September 3114 BC on the Gregorian Calendar. |

Calendar Systems

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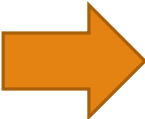
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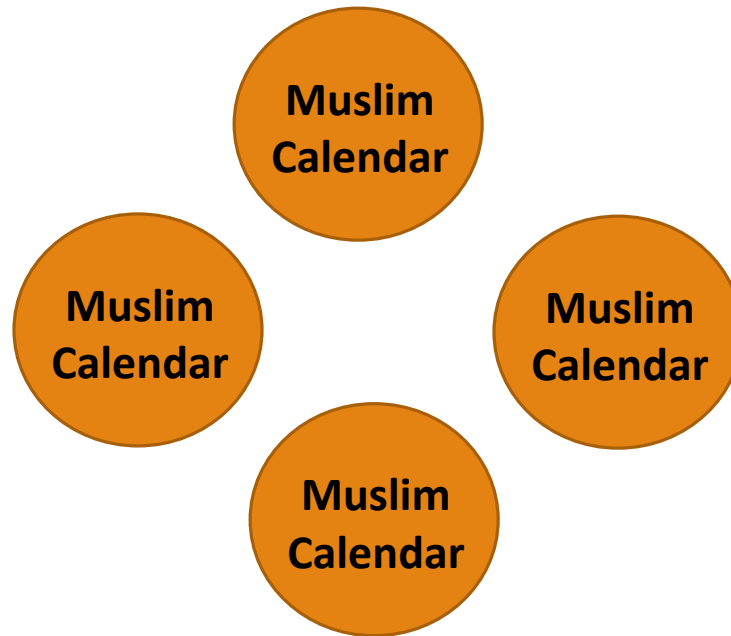
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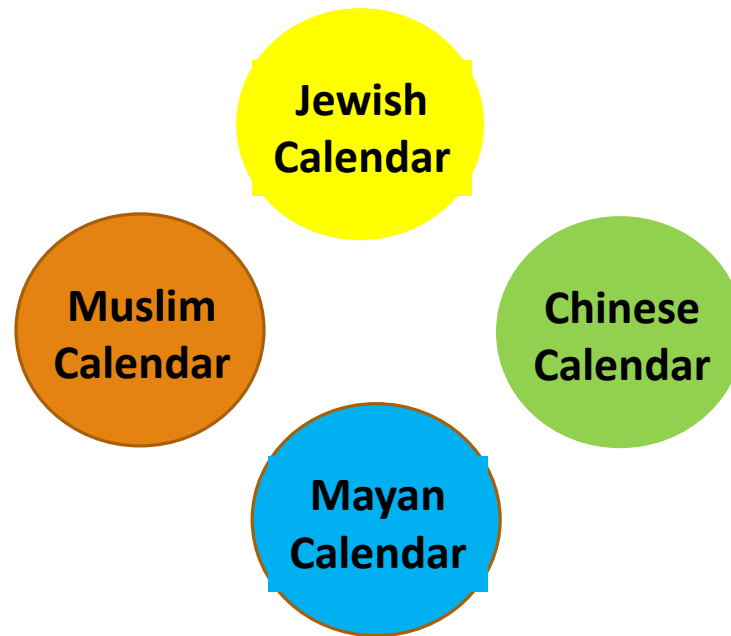


Calendar System	Origin	Lunar or Solar	Days/ months per year	Is it used today?	Other
Gregorian					
Muslim					

Meet with 3 other people who investigated the same calendar as you. Share your charts.



**Form a group with one person from each calendar.
Share what you have learned so that everyone can
complete their chart.**



38
era



a big chunk, or period,
of time characterized by an individual,
human activity, or culture;

Example: In our era, people have more
access to information than ever before.

(SS070108)

The Eras of Ancient History

**ERA I:
BEGINNINGS TO 4000 BCE**

**ERA II:
EARLY CIVILIZATIONS AND PASTORAL PEOPLES
4000 BCE TO 1000 BCE**

**ERA III:
CLASSICAL TRADITIONS AND EMPIRES
1000 BCE TO 500 CE**

ACTIVITY

<p>ERA I: BEGINNINGS TO 4,000 BCE</p>
<p>ERA II: EARLY CIVILIZATIONS AND PASTORAL PEOPLES 4000BCE TO 1000BCE</p>
<p>ERA III: CLASSICAL TRADITIONS AND EMPIRES 1000BCE TO 500 CE</p>
<p>LATER ERAS</p>

<p>Language Used for Communication</p> <p>Perhaps 52,000 years ago (About 50,000 BCE)</p>	<p>Roman Empire</p> <p>Starting around 2,200 years ago (Around 264 – 241 BCE)</p>
<p>Development of agriculture</p> <p>Southwest Asia</p> <p>About 11,000 years ago (About 9,000 BCE)</p>	<p>Long distance trade (The Silk Road)</p> <p>About 2,200 years ago (About 200 BCE)</p>
<p>Large cities and societies appear</p> <p>Southwest Asia</p> <p>About 6,000 years ago (About 4,000 BCE)</p>	<p>Printing with movable ceramic type</p> <p>Eastern Asia</p> <p>About 1,000 years ago</p>
<p>Civilizations: Mesoamerica (Olmec)</p> <p>About 3,500 years ago (About 1500 BCE – 400 BCE)</p>	<p>The Crusades</p> <p>Europe & Southwest Asia</p> <p>About 900-700 years ago (About 1100 CE – 1300 CE)</p>
<p>World War II</p> <p>Afroeurasia & Oceania</p> <p>Starting about 75 years ago (1937-1946 CE)</p>	<p>First use of petroleum for fuel</p> <p>North America</p> <p>About 150 years ago (1859 CE)</p>
<p>First nuclear power station</p> <p>North America</p> <p>About 63 years ago (1951 CE)</p>	<p>World population tops 6 billion</p> <p>About 12 years ago (2000 CE)</p>

Our Place in Time

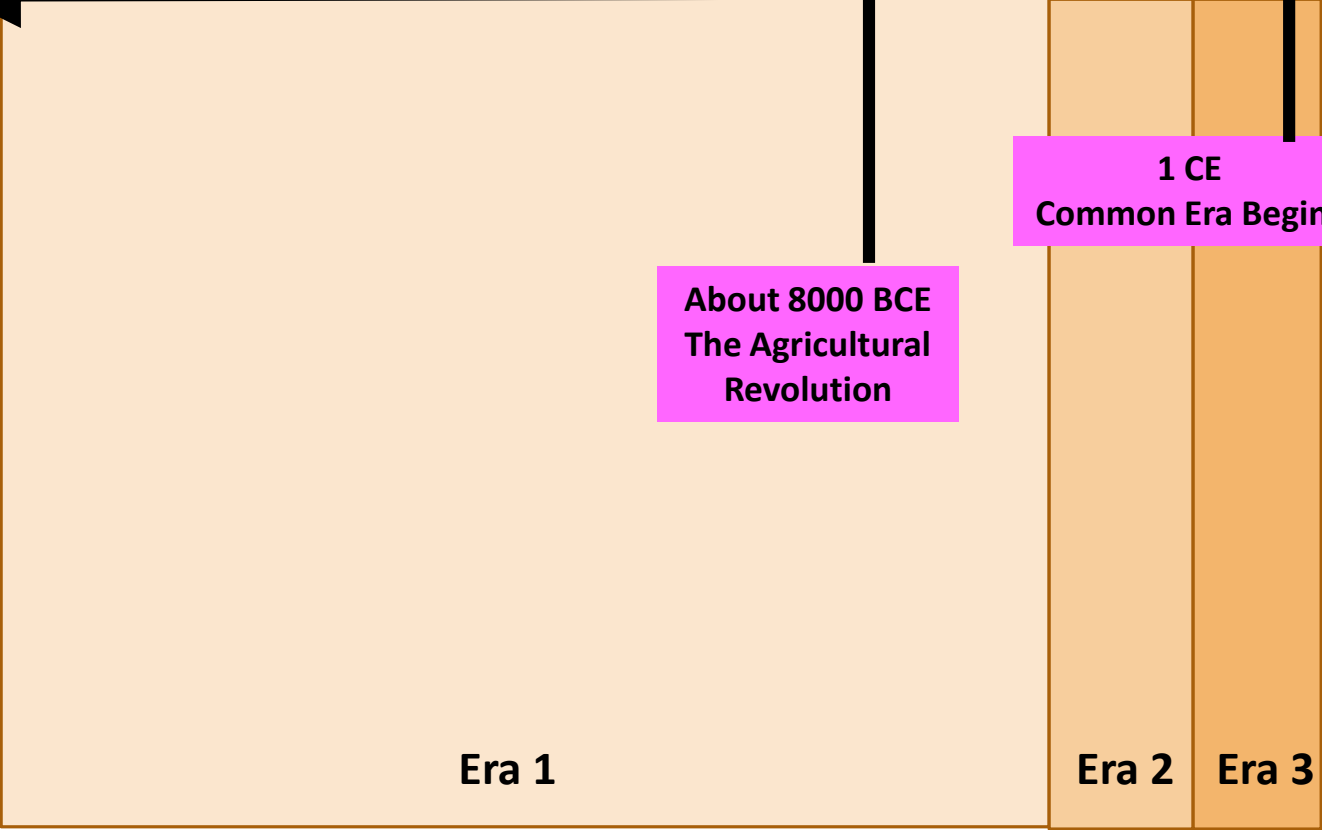
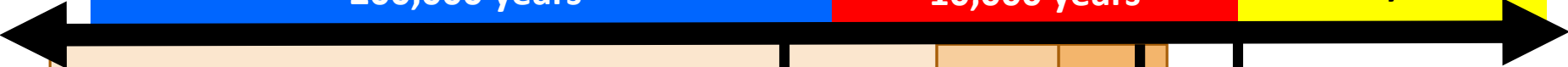
Hunter-Gatherers

Agriculture or Farming

The Era of Foragers
200,000 years

The Agrarian Era
10,000 years

The Industrial Era
250 years



About 8000 BCE
The Agricultural
Revolution

1 CE
Common Era Begins

1750 CE
The Industrial
Revolution

Era 1

Era 2

Era 3

Lesson Summary

- **Four tools that historians use to organize information include significance, social institutions, time, and space.**
- **Historians use time to organize the past.**
- **Historians categorize time into different scales in order to study human activity over large periods of time.**
- **All societies need to account for time in some way. Different cultures created different calendar systems that suited their needs.**