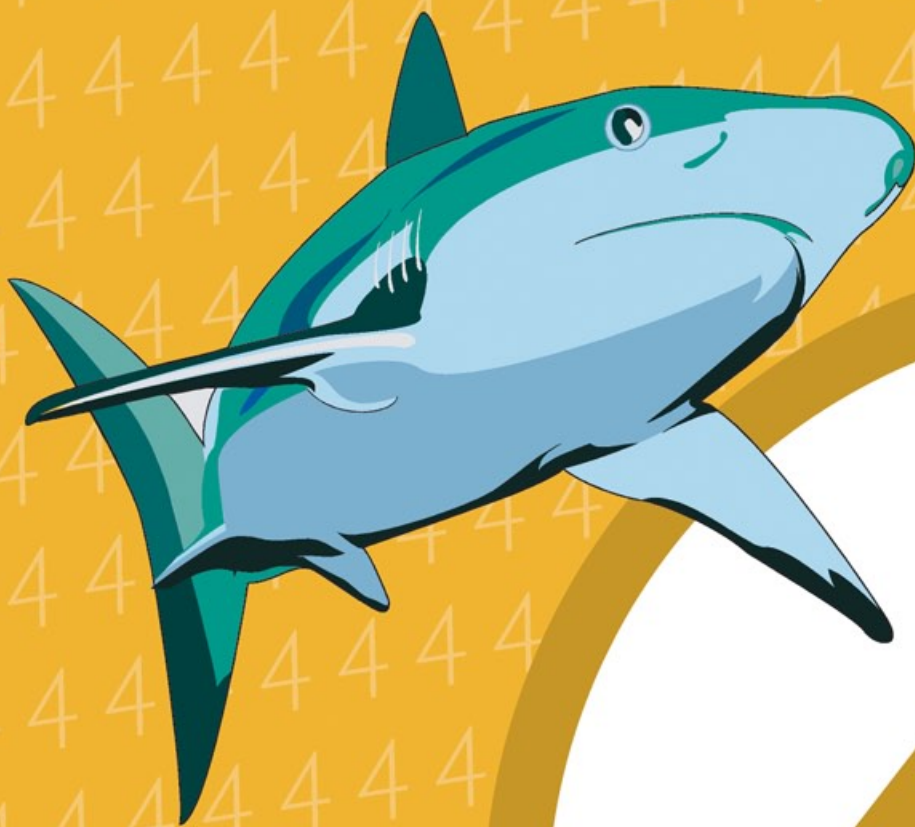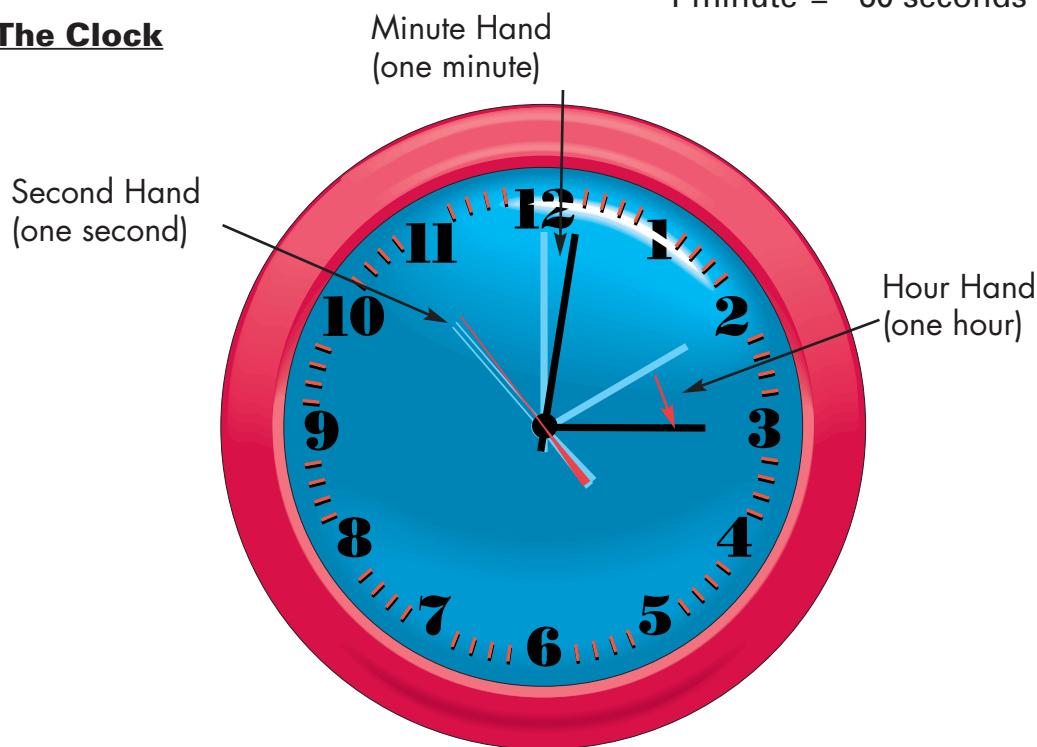# Horizons

Math

4

Telling Time

Sandra was assigned to make a class presentation on telling time. She made a poster to show how we measure time using a day and smaller units.
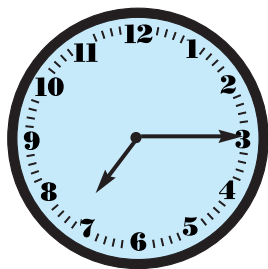
Telling Time

The Clock

Units of Time

1 day	=	24 hours
1 hour	=	60 minutes
1 minute	=	60 seconds

Second Hand
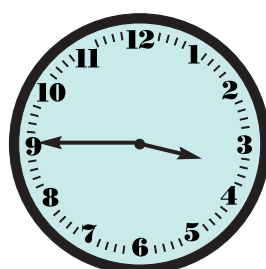(one second)

Minute Hand
(one minute)

Hour Hand
(one hour)
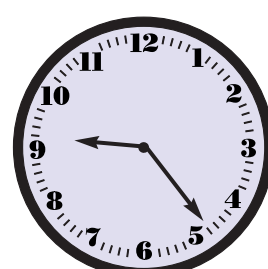
A given time may be read and stated in several different ways. The following are examples of times which may be stated different ways.

Read:
7:15
Seven fifteen or
15 minutes after 7 or
a quarter after 7

3:45
Three forty-five or
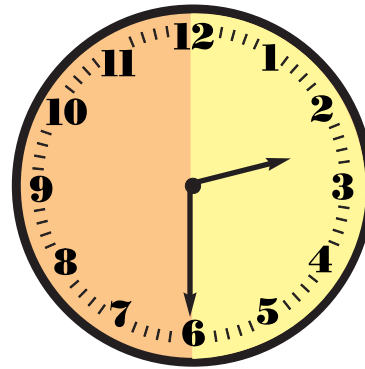45 minutes after 3 or
a quarter until 4

9:24
Nine twenty-four or
24 minutes after 9

The reason time is often stated as "a quarter after," "a quarter before," or "half after" is because the clock face is a circle and minutes may be viewed as fractions of an hour. When the clock face is viewed as a fractional representation of minutes, 15 after is a quarter of the whole clock. 30 minutes is viewed as half of the clock face; half of an hour. Look at the diagram below.
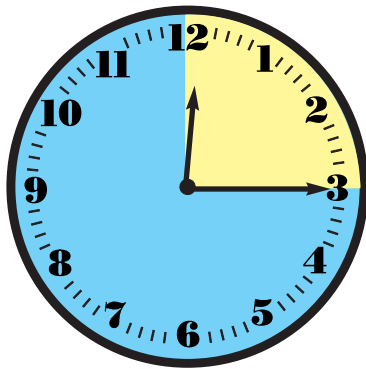
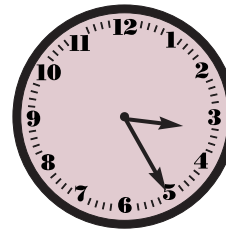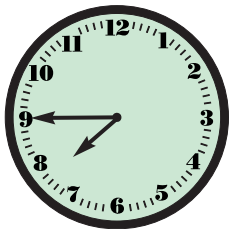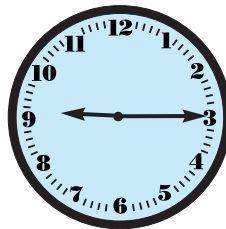12:15 or a quarter after 12   2:30 or half past 2

1   Write in the correct time.

_____   _____   _____
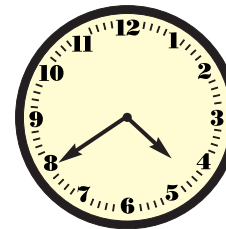
_____   _____   _____

2   Solve.

$3 + n = 5 + (2 \times 6)$ $7 + n = 8 + (3 \times 1)$ $n + 4 = 12 - (3 \times 2)$

3 Write in expanded form.

Three hundred thousand, forty-five =

Twenty-four million =

Sixty-five =

Ninety-eight hundred thousand =

Two billion =

4 Find the difference.

$92 - 5 =$ 　　　　　　　$81 - 7 =$ 　　　　　　　$36 - 4 =$

$90 - 19 =$ 　　　　　　$76 - 12 =$ 　　　　　　$27 - 22 =$

5 Multiply.

$$\begin{array}{r} 481 \\ \times\ \ 23 \\ \hline \end{array} \qquad \begin{array}{r} 763 \\ \times\ \ 15 \\ \hline \end{array} \qquad \begin{array}{r} 371 \\ \times\ \ 31 \\ \hline \end{array} \qquad \begin{array}{r} 281 \\ \times\ \ 28 \\ \hline \end{array} \qquad \begin{array}{r} 590 \\ \times\ \ 79 \\ \hline \end{array}$$

6 Fill in the blanks.

A _____ is 100 years.

_____ means Before Christ.

A _____ is 10 years.

_____ means *anno Domini* or *in the year of our Lord.*

A _____ is 1,000 years.
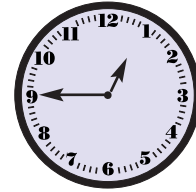
WORD BANK:

millennium

century

decade

B.C.

A.D.

Telling Time

Kimberly went to bed at 12:45 after watching the late movie. Samantha ate an enchilada and taco dinner at 12:45.

12:45 P.M.

12:45 A.M.

How do we know what time of day these events occurred? Did Kimberly go to bed at 12:45 in the afternoon? Did Samantha eat at 12:45 at night? Probably not, but how could we know for sure? It is simple. **Times from 12:00 midnight up to noon are labeled A.M. Times from 12:00 noon up to midnight are labeled P.M.**

For example, we have labeled each of the following events and times as either A.M. or P.M.

Breakfast
7:15 A.M.

Dinner
6:30 P.M.

Sunday School
9:30 A.M.

Skydiving Lessons
4:30 P.M.

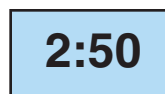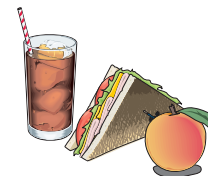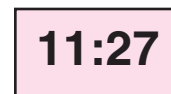1   Write the time and label A.M. or P.M.

Starting School

Going to Bed

Ending the school day

2:50

Eating an early lunch

11:27

Time: _____   Time: _____   Time: _____   Time: _____

2 Match.

10 years	before Christ
100 years	millennium
B.C.	decade
A.D.	anno Domini
1,000 years	century
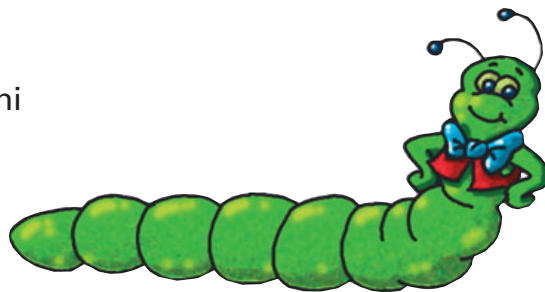
3 Order from largest to smallest.

6,729	6,808	6,333	6,395
_____	_____	_____	_____

9,867	9,291	9,365	9,567
_____	_____	_____	_____

4 Find the difference.

$$
\begin{array}{r} 7\,5\,4 \\ -\ 2\,9\,7 \end{array}
\qquad
\begin{array}{r} 2\,9\,1 \\ -\ 1\,2\,3 \end{array}
\qquad
\begin{array}{r} 1\,7\,0 \\ -\ \ 8\,9 \end{array}
\qquad
\begin{array}{r} 1\,8\,2 \\ -\ 1\,2\,5 \end{array}
\qquad
\begin{array}{r} 3\,9\,5 \\ -\ 1\,0\,6 \end{array}
\qquad
\begin{array}{r} 5\,6\,7 \\ -\ 3\,0\,7 \end{array}
$$

5 Solve.

$5 \times n = 45$ $\qquad$ $9 \times n = 36$ $\qquad$ $2 \times n = 18$ $\qquad$ $4 \times n = 32$

6 Solve.

$9\overline{)5\,6}$ $\qquad$ $7\overline{)4}$ $\qquad$ $6\overline{)9}$ $\qquad$ $3\overline{)2\,0}$ $\qquad$ $7\overline{)4\,6}$

Century

What is a century? A century is a time period of 100 years. We now live in the 21st Century. Look at the chart below. This chart shows all the dates and centuries up to the present.

0 A.D.	to	99 A.D.	-	1st century
100 A.D.	to	199 A.D.	-	2nd century
200 A.D.	to	299 A.D.	-	3rd century
300 A.D.	to	399 A.D.	-	4th century
400 A.D.	to	499 A.D.	-	5th century
500 A.D.	to	599 A.D.	-	6th century
1600 A.D.	to	1699 A.D.	-	17th century
1700 A.D.	to	1799 A.D.	-	18th century
1800 A.D.	to	1899 A.D.	-	19th century
1900 A.D.	to	1999 A.D.	-	20th century
2000 A.D.	to	2099 A.D.	-	21st century

If you look closely you will notice that the beginning digits of the year, 1996, and the beginning digits of the century, 20th century are one number off. This is an easy way to remember what century a year is in. Look at the first two digits of the year and then add one. For example: 1898 is in the 19th century, 1768 is in the 18th century, and 2012 will be in the 21st century.

1 Tell the century for each year.

1594 = _____   1437 = _____

1889 = _____   1776 = _____

2001 = _____   987 = _____