

TIMING IN MINUTES AND SECONDS

Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

5

Overview

This lesson plan covers teaching content for;

1. Conversion of unit of time
2. Measuring the passage of time.

Objectives

Students should be able to;

1. Use the four operations to convert units of time.
2. Measure the passage of time, using seconds and minutes.

Activity Starter/Instruction

1. Units of time measure how long something lasts. For example, how many seconds can you hold your breath, or how many minutes long is your favorite movie?
2. A **second** is a short amount of time. It takes about 1 second to turn on a light or open the refrigerator door.
3. A **minute** is equal to 60 seconds. It takes about 1 minute to brush your teeth.
4. Converting larger units to smaller units
1 minute = 60 seconds
1 hour = 60 minutes
5. To convert larger units to smaller units, we multiply the number of larger units by 60.
6. Example: Converting hours to minutes
1 hour = 60 minutes
6 hours = $6 \times 60 = 360$ minute
7. Converting smaller units to larger units
8. To convert smaller units to larger units we divide the number of smaller units by 60.

Teacher Guide

Day 1/ Lesson 1: 20mins

1. Provide examples of activities that only take seconds or minutes to complete when you start introducing these units of time. You can start by counting out the seconds for shorter activities, and then you can watch the clock together for activities that take minutes.
2. Challenge them to complete activities within a certain time frame. For example, you could say, "How many times can you run around the swing set in one minute?" Activities like these help pupils get a sense of how long seconds and minutes last.
3. Make clock faces with pupils. By making their own clock, pupils will be more comfortable with the components of the clock face, such as the second and minute markers, and thus may be able to read them easier on a real clock.
4. Create a clock face by drawing the numbers and time units on a paper plate with a marker. Cut out the hour, minute and second hands from construction paper, and attach them to the center of the plate with a pin or glue. Mark off second or minute intervals on your paper clock for practice.
5. Ask them to time activities with a stopwatch. Get a stopwatch that has a digital display similar to an analog clock.
6. The stop watch simulates a second hand moving around the face of a clock.

Materials Required

- Paper plates
- Scissors
- Markers
- Mini clock
- Glue / Pins
- Cardboard
- White Board

Additional Resources

- <http://ainsleelabs.com/avoid-the-biggest-mistake-teachers-make-when-teaching-time/>
- <https://www.busythings.co.uk/blog/teaching-children-how-to-tell-the-time-hints-and-tips/>
- <https://busyteacher.org/3639-how-to-teach-telling-time.html>
- https://www.educationworld.com/a_lesson/03/lp31204.shtml

Additional Notes

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- 1 second = $\frac{1}{60}$ minute
 - 1 minute = $\frac{1}{60}$ hour
 - 9. Example: Converting seconds to minutes
 - 1 second = $\frac{1}{60}$ minute
 - 10. 30 seconds = $\frac{30}{60} = \frac{1}{2}$ minute

Guided Practice

Day 2/ Lesson 2: 20Mins

1. Give students a chart showing the different units of time and conversions. (60 sec. = 1 min, 60 min = 1 hour, etc.)
2. Distribute clocks with movable hands. (These can be made easily using cardboard or paper plates) Allow time for students to build their paper plate clocks if necessary.
3. Review each unit of time with students: seconds, minutes, hours, days.
4. Using the clocks, show students the passage of time in seconds, minutes and hours. Give students examples of the passage of time: How many minutes/hours have passed between 10:00 and 10:50, 12:45 to 1:55, etc.? How many minutes' old are they?
5. Use as many examples as necessary based on students' needs.
6. Tell students they will now create ten problems, which will be solved by another student.
7. Tell students to mix up the questions and to use real life events. (For

7. Ask pupils to use the stopwatch to time short activities, such as how long it takes you to pour a drink or to make a sandwich.
8. Give them an analog watch with a second hand. Tell them to tie you completing activities to get them comfortable reading the clock face.

Guided Practice

Day 3/ Lesson 3: 20mins

1. Pass out the individual mini clocks to students.
2. On your clock, show 6:44.
3. Ask students what your first step should be to find the time.
4. If students are having trouble, point out that the best way to start would be to count by fives and then to subtract (or add) for each mark.
5. Walk students through finding the time to the nearest minute.
6. Write the time on the board as 6:44.
7. Create another example, but this time, give students a time and have them display it on their own clock. Students may work with a partner to show the correct time.
8. Ask your students how they know the time on their clock is correct.
9. Ask a student to sum up how to tell time to the nearest minute to review.

	<p>example, how much time passes during the school day from 8:30 AM to 3:15 PM, days in a school year, etc. How many seconds long is break time?)</p> <p>8. Give students time to complete their problems. Tell them to create an Answer Key.</p> <p>9. Once finished, distribute the problems randomly to other students. Give students time to answer each problem.</p> <p>10. Once completed, they will exchange the problems to be checked by the original writer.</p>	
Summary <ol style="list-style-type: none"> 1. Remind students that being able to read time is an important skill, as it will ensure that they arrive on time for school, work, or meetings. 2. Let students pair-and-share how to find time to the nearest minute. 	Assessment Activity <ol style="list-style-type: none"> 1. Create a quiz or test with time problems. 2. Collect student-created problems to be assessed. 	Assessment Activity <p>Assess if students can;</p> <ol style="list-style-type: none"> 1.Tell time 2.Convert unit of time correctly