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Chapter 1

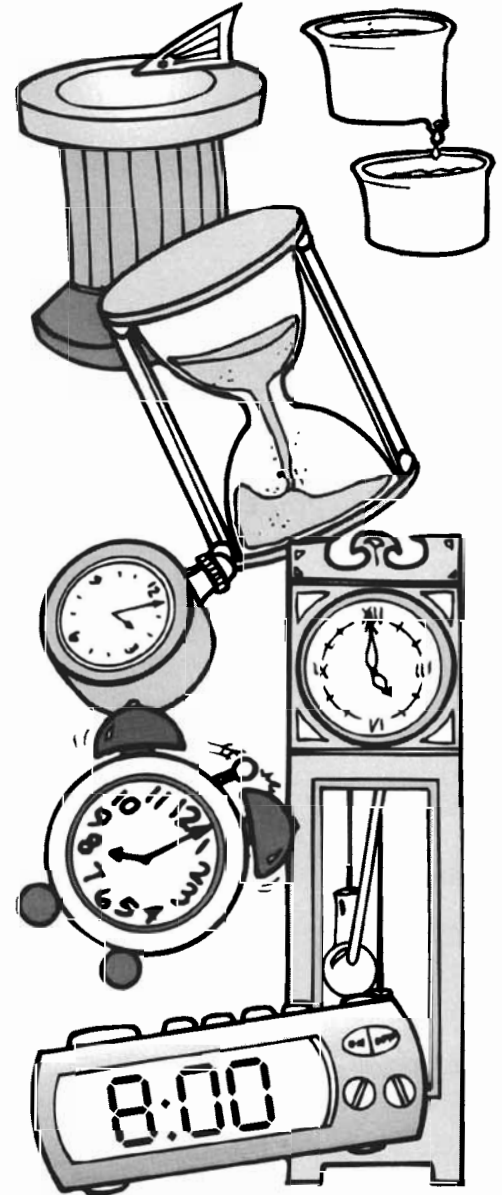
What Is Time?

You've probably heard the question "What time is *it*?" often enough, but have you ever been asked "What is time?" That is a much more difficult concept for children to comprehend. Children can't touch time, look at pictures of it or watch it move from place to place as it passes.

Throughout the primary school years children seem to develop a natural sense of time just from being alive. In grades 1-4 children begin to recognize the important role time plays in our society. They are aware that there is a system to measure hours and minutes and days and years. They are often familiar with the time terms *year, month, week, day, hour* . . . right down to the millisecond. Generally by about the age of nine a child has developed a good awareness of and sense of time.

So, what is time? We know that time is in constant motion, flowing like a river from the past to the present in an established forward direction at a rate of 24 hours per day.

We know a lot about time, but it could be said that there is no true answer to the question "What is time?" Throughout history and around the world cultures in different eras have viewed time in diverse ways. Although we cannot precisely define *time*, we can help children to develop a much better understanding of time by discussing it, exploring and experiencing it, by thinking about it and finding out what is known about time. This book will help children come to understand the measurement of time from centuries to seconds and help them to comprehend the more elusive qualities of the passage of time.



Time Terms

Interval: The length of time between the start and finish of something.

Epoch: A specific location in time where an event will or has occurred.

Fast Fact: Chronos, the ancient god of time, was often referred to as the "soul" of the universe.

Fast Fact: The great thinkers of ancient times believed that time was the ultimate judge who would discover and avenge injustices.

Talk About Time

Guided Discussion

The best way to start talking about time is to . . . well, talk about it! We experience time every living moment and each of us has our own unique understanding of it. Find out how much the children already know and understand about time and take it from there.

Use the following questions as guidelines to find out what children think and know about time. Children of all grade levels can brainstorm, discuss, think about and answer the following questions in age-appropriate terms. You may be surprised to discover the extent of abstract thought children are capable of.



- *What do you know about time? Is it important in your life?*
- *Can we measure time?*
- *What do you use in your life to help you to keep track of and measure time?*
- *What do we use to keep track of the days? The weeks? The months? The years?*
- *What do we use to measure hours and minutes and seconds? How long is an hour? How long is a minute? How short is a second?*
- *Have people always measured time the way we do today? What do you think was the first thing people used to help them tell time?*
- *Does it sometimes feel like time has slowed down? Is time really going slowly? Why do you think it feels that way?*
- *Does time sometimes pass very quickly? What are you doing when it feels like time is passing quickly? Is time really passing more quickly? Why do you think it feels that way?*
- *How much time has passed since you were born?*
- *What is a long time? What is a short time?*
- *Can we move forward through time? Can you control the speed or direction of your trip through time? Can we speed it up or slow it down if we want to? Can you stop moving through time if you want to? Can we go backwards through time? Can we travel to other times?*
- *What do you want to know about time?*



The River of Time

2-4 • Language/Science • Listening/Comprehension/Understanding of Time Concepts • 30 min

Time is often described as “flowing” and can be visualized as a stream that never ends. Time does flow on and on in one direction and carries us along with the current. We can conceptualize the passage of time throughout our lifetime as a journey along the river of time. From birth to death we are swept up by the current of time and moved along at a steady rate through time. We can’t go back in time to where we have been—we just move forward with the flow of time to the next bend in the river—around which we cannot see. We know what happened upstream where we already were, but we don’t know what is going to happen downstream—where we’re headed.

Materials

reproducible on page 12

pencil for each child

What to Do

- 1 Hand out a pencil and “The River of Time” reproducible (page 12) to each participant.
- 2 Direct children to listen carefully to the following instructions.

Pay attention to the following instructions. I will repeat each instruction twice so please listen carefully.

1. Put your pencil on the empty circle in the upper right-hand corner of your page.
2. Print the number one in this circle.
3. Move your pencil to the next empty circle traveling downward and to the left. Print the number two in that circle.
4. Write numbers in the circles in this way—moving down and across your page until you have numbered the circles all the way to number 10. Fill the last circles with the numbers 25 and 50.
5. These numbers represent years in your life. Find the spot on the river that represents your current age. If you are 8, draw a boat near the circle numbered 8—if you are $8\frac{1}{2}$, draw a boat between 8 and 9.
6. Draw yourself in the boat as you are now.
7. From your position in the boat you can see upstream with your memories to places and events in your past. Try to recall what you saw and did and felt as you flowed down the stream of life.
8. You can’t see ahead to places you have not yet passed, but you try to imagine what might lie downstream for you. Think about what you might be doing or hope to be doing at the ages beyond where your boat now lies. Fill the river with predictions and hopes and dreams for these future years. Then color your picture if you wish.

