

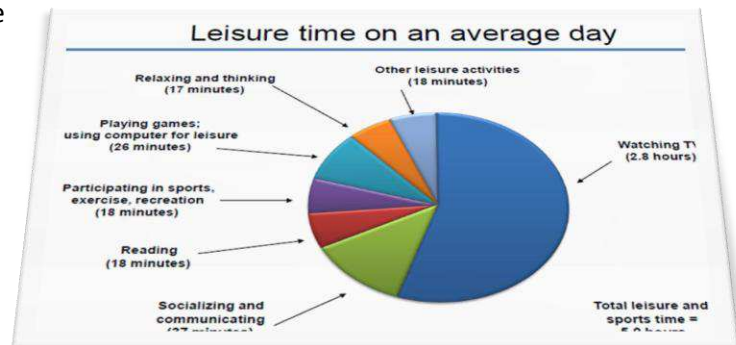
# How do you spend your time? - Pie Chart Activity

**Overview:** In this activity, students will learn about the American Time Use Survey. They will also learn how to interpret a pie chart, create a pie chart displaying how they spend their time, and be quizzed on their ability to interpret them.

**Objective:** After completing this activity, students will be able to create, read, and interpret pie charts.

**Grade Level:** 6-8

**Background:** BLS classroom activities are designed to be a resource that teachers can use to develop their own lesson plans that integrate real-world statistics into the classroom. The activities may be adapted to fit appropriate grade levels and curriculum requirements.



**Appropriate Subjects:**

- Math
- Statistics
- Social Studies

**What students will need:**

- ✓ Calculator
- ✓ Protractor
- ✓ Compass
- ✓ Pencil
- ✓ Colored Pencils, Crayons, or Markers
- ✓ Time Use Table
- ✓ *or MS Excel*

**Teacher Instructions:**

- 1) **Background Discussion:** First, ask the students if they can explain to the class what a pie chart is and why they are useful. Then, explain how charts and graphs help us to visualize what numbers represent. You can then discuss with the students how much time they spend on certain activities and tell them that you will be creating a pie chart showing how their time is spent.
- 2) **Interpreting a Pie Chart:** After the discussion about pie charts and time use, show the students the pie chart in the "Analyzing a Pie Chart" section and ask them the questions about it.
- 3) **Creating a Pie Chart:** Both print and Microsoft Excel versions of the activity are available. Hand out the print version instructions or have students download the Excel file.
- 4) **Comparing Charts:** Hang up the student's drawn or printed activities. Ask them to compare their chart to other students' and talk about why they are each different.

Additional Resources:

- Monthly Labor Review Article: “How high school students use time: a visual essay”  
<http://www.bls.gov/opub/mlr/2008/11/art4full.pdf>
- More information about the American Time Use Survey can be found online at  
<http://www.bls.gov/tus/atusfaqs.htm>.
- Subject matter experts are available to answer questions regarding these data by phone at (202) 691-6339 or by email at [atusinfo@bls.gov](mailto:atusinfo@bls.gov).
- If you would like to provide feedback on this activity, please email us at [kids@bls.gov](mailto:kids@bls.gov).

## Analyzing a Pie Chart

Take a look at the following Pie Chart: <http://www.bls.gov/tus/charts/chart9.pdf>.

- 1) What is the subject of this chart?
- 2) What does each piece of the pie represent?
- 3) What does the full chart represent?
- 4) Why are some pieces bigger than others?
- 5) What activity is the greatest amount of time spent on?
- 6) What is the total of all pieces of the pie?
- 7) What are the key elements of a pie chart?
  - Title, labels, key, source
- 8) Which activity did High School students spend the most time on?
- 9) Which activity did High School students spend the least amount of time on?
- 10) How much time was spent eating and drinking?
- 11) What percent of time was spent eating and drinking?
- 12) How many degrees does this represent?

