

Third-grade differentiation

■ Reading and discussion tips:

- After using the tower cubes to show students what 30 percent looks like, reinforce the concept using other visuals. For example, have student volunteers show what 30 percent looks like using 10 pens, pencils or other classroom objects.
- Help students see the connection between the tower cubes and the circle chart. Point out that both the circle and the cube tower have 10 parts. Coloring in three parts of the circle is equivalent to stacking up three of the cubes.
- Model the circle chart activity by drawing the circle chart on the board and filling in the “housing” and “food” sections while students follow along.

■ Activity tips:

- Instead of having volunteers complete the “Housing on minimum wage” equations at the board, allow students to stay at their seats and work with you as you solve the equations on the board.
- Copy the “Our family” worksheet onto a transparency. Use an overhead projector to display it for the class as you complete a practice round of the game together.
- If students struggle with the calculations involved in the game, play the game as a whole class rather than dividing into groups. For each round, do the math on the board or on a transparency. Then have students answer the discussion questions provided.

■ Assessment tips:

- Instead of checking students’ worksheets, consider assessing students on their class participation during the discussions that follow each round.

■ Optional extension tips:

- Simplify the prompt by restating it like this: “Affordable housing is a right.” Help students understand what a “right” is.
- Require that essays be only one paragraph, not two.

Fifth-grade differentiation

■ Reading and discussion tips:

- Instead of showing students what 30 percent looks like using the tower cubes, have them show you. Challenge them to show you what other percentages (such as 10, 50 and 100 percent) look like as well.
- Have students solve equations using the information on the “Circle chart” worksheet. For example, “What percentage of a family’s income is spent on food plus transportation?” “Which three expenses add up to 65 percent of a family’s income?”
- Have students read the article “What is affordable housing?” for homework. As they read, have them write a one-sentence summary of each section of the article. Use the summaries as entry points into discussing the article.

■ Activity tips:

- After playing a few rounds, discuss how different income levels affect a family’s ability to cover their expenses.
- Have groups create new “family” cards and “unexpected expense” cards. Make sure the cards are appropriate, and then have groups trade cards and play another round of the game.
- Challenge students to choose one “unexpected expense” card and calculate its effect on each of the nine families. Have them present their findings in a chart or graph.

■ Assessment tips:

- Have students exchange worksheets with a partner and check that their calculations and answers are accurate.

■ Optional extension tips:

- Ask students to include at least three convincing details to support the main idea that affordable housing is a right, not a privilege.
- Have all students read their essays aloud to the class. Remind students of the qualities of effective public speakers.

Grade four

Objectives

Students will:

- Review percentages.
- Discover what happens when people are forced to spend more than 30 percent of their income on housing.
- Discuss the realities of affording the national average cost of housing in the United States.

National content standards

Math

- Students recognize and generate equivalent forms of commonly used fractions, decimals and percents.
- Students understand the effects of multiplying and dividing whole numbers.
- Students represent the idea of a variable as an unknown quantity using a letter or symbol.

Social studies

- Students distinguish between needs and wants.
- Students explain and demonstrate the role of money in everyday life.

Scope

- Two class periods (30 to 45 minutes each).

Materials

- One stack of 10 tower cubes.
- **Article:** "What is affordable housing?"
- **Worksheet:** "Circle chart."
- **Worksheet:** "Housing on minimum wage."
- **Worksheet:** "Our family."
- **Teacher resource:** "Family information."
- Hat or bowl.
- Crayons or markers.
- Pens or pencils.

Lesson plan

In this lesson, students will learn about the realities of affordable housing through reading an article and playing a game based on hypothetical situations.

■ Preparation:

Before beginning the lesson:

- Copy the article and worksheets for students.
- Cut out the cards on the "Family information" teacher resource page.

■ Procedure:

Day 1 Introduce the topic of affordable housing.

1. Discuss the concept of percentage.

- Use a stack of 10 tower cubes to students to review percentages. Write the fraction for 30 percent on the board: $30/100$. Have students help you simplify it to $3/10$. Explain that 30% can also be written as a decimal: 0.30 (thirty-hundredths) or 0.3 (three-tenths). Show students what 30 percent looks like using the cubes.
- Distribute the worksheet "Circle chart." Read the directions aloud. Explain that the government collects information on how people spend the money they earn. The government has found that people should spend no more than 30 percent of their income on housing. Review and discuss the other areas of spending listed in the key. Discuss the answers to the following questions:
 - On what specific things do you think the family spends its transportation money?
 - What do you think the family does for entertainment?
 - Why do they need to have money saved?
- Have students color the charts accordingly.

2. Read and discuss the article "What is affordable housing?"

In a discussion, be sure to cover the following main ideas:

- When people or families spend more than 30 percent of their income on housing, they may have to decide what needs or wants will go unmet.
- A person can work hard at a full-time job and still not have enough money to afford safe, healthy housing.
- Habitat for Humanity helps hardworking people own their own homes.

3. Complete the worksheet “Housing on minimum wage.”

- Read aloud the worksheet directions together. Have volunteers come up to the board to solve the equations.

- Answers are as follows:

$$\$7.25 \times 40 = \$290$$

$$\$290 \times 50 = \$14,500$$

$$\$14,500 \times 0.30 = \$4,350$$

The chances of finding housing are not very good.

- Point out that having a job does not guarantee that you will be able to afford housing.

unexpected costs, or costs they have not planned for, that affect their ability to afford housing. Give students a few examples of these costs, such as a lost job or a major home repair. Tell them that each group will choose one of the “unexpected cost” cards you have placed in the hat or bowl. Make sure groups return these cards to the hat or bowl after they have recorded the information on their worksheets.

- Students will then solve associated equations to see if their family’s housing cost is affordable (or if \$16,920 is no more than 30 percent of their income). You might wish to complete one round of the game together as an example for students.

3. Play the game and discuss the results.

- Play multiple rounds of the game. After each round, ask students to share whether or not their family’s housing cost was “affordable.” Ask students to think about what their family might have to cut out of their budget in order to make their housing affordable. Discuss the reality that even with two full-time workers, housing in the United States still may not be affordable.
- Finally, return to the “What is affordable housing?” article you read yesterday. Review Habitat for Humanity’s role in helping families with this issue. Have students discuss which fictional families might benefit the most from Habitat for Humanity’s help.

■ Assessment:

Collect worksheets. Check to make sure student work is complete and accurate.

■ Optional extension:

Hold an essay contest.

Ask students to write short essays in support of the following prompt: Affordable housing is a right, not a privilege.

- Help students define what “rights” and “privileges” are. Ask: What are the rights of American citizens? What are some of the privileges American citizens enjoy? Draw a T-chart on the board and list student responses.
- Have students use their knowledge from the article and the activity to write their essays. Essays should be at least two paragraphs.
- Invite other staff members to be contest judges.
- Have the winner of the essay contest read his or her essay aloud to the class.

Day 2 Play a game based on the issue of affordable housing.

1. Divide students into groups.

- Place students into nine groups. Distribute the copies of the worksheet “Our family” to students. (You should distribute enough worksheets to equal the number of rounds you will play, or have students use scratch paper for subsequent rounds.) Give one of the family information cards you cut out earlier to each group.
- Fold the “Unexpected cost” cards, and place them in a hat or bowl.

2. Explain the rules of the game.

- Tell the groups that the card they received has information about their fictional family’s jobs and income. Some families have one person who earns money, and some have two. Groups will complete the “Our family” worksheet with this income information. Explain that each family has the same housing cost, which is the national average of \$16,920. Read and discuss the expenses that make up this national average in the table on the worksheet.
- Tell students that families often are faced with

What is affordable housing?

City or country, house or apartment—everyone needs a place to live. Most adults in the United States work to pay for a place to live. Some people pay a mortgage on a home. A mortgage is a monthly payment to the bank. Some people pay rent to a landlord, or the owner of the property.

People work to pay their bills. They pay bills for electricity, natural gas and water. They work so they can buy things for their homes, like dishes and furniture. Homeowners also must pay property taxes to the city. They must pay for repairs to their property.

The U.S. Bureau of Labor Statistics collects information. The bureau finds out how much money people earn from working each year. It also collects data on how people spend their money. In 2007, the BLS surveyed more than 120,000 people. These people spent the largest percentage of their income on housing. They spent the second largest amount on transportation. Third on the list was food. People spent two times as much on housing as they did on transportation. And they spent about three times as much on housing as they did on food.

Affordable housing

Affordable housing means a place to live that you can pay for and still have money left over for the other things you need. People also need food, clothes and medical care. Affordable housing is a home that costs no more than 30 percent of a person or family's annual income.

But what if the money you earn at your job isn't enough to pay for decent housing? What happens when you can't afford a house or apartment or even a room to call your own?

When a family spends more than 30 percent of its income on housing, they have trouble paying for other things they need. They spend all their money on necessities. They are not able to save any money for vacations or college or emergencies.

Many people in the United States struggle to find affordable housing. In 2008, there were about 304 million people living in the United States. About 12 million of them spent more than 50 percent of their income on housing. How does such a thing happen? It happens because housing prices rise fast. But the amount of money people are paid for their work does not go up as quickly.

We all need safe, healthy homes

What happens when people have so little money to pay for housing? What would you do if you only had a few hundred dollars a month to pay for a place to live? Some people end up living in places that are not safe. Some people end up living in places that are dirty or run-down.

Habitat for Humanity has provided affordable housing to more than 1.75 million people around the world. Habitat builds houses with people who show they are hard workers. Habitat works with people to make sure they can pay back the loan on their new home.



Habitat for Humanity believes that safe, affordable housing helps everyone. When adults have affordable, safe, healthy housing, they contribute more to their community. When children have safe, healthy housing, they do better in school. Families with affordable housing have a chance to be healthier and happier.

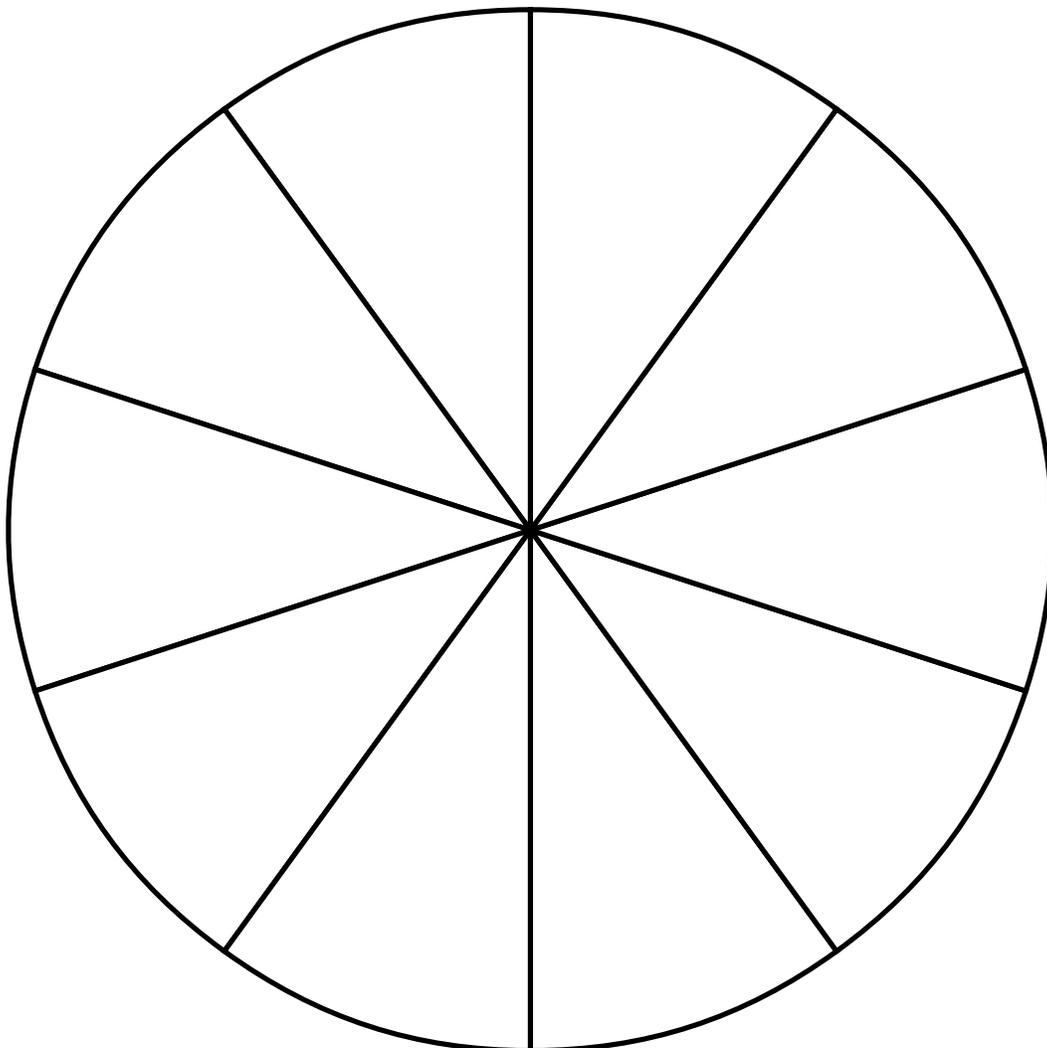


Worksheet: Circle chart

Directions: The circle represents 100% of the annual income for one American family. The circle is divided into 10 parts. Each part represents 10% of the income. Color the boxes in the key. Color the circle to show the cost for each area.

Key:

- | | | |
|---|---|--|
| <input type="checkbox"/> Housing 30% | <input type="checkbox"/> Clothing 5% | <input type="checkbox"/> Insurance and Social Security 10% |
| <input type="checkbox"/> Food 10% | <input type="checkbox"/> Health care 5% | <input type="checkbox"/> Savings 20% |
| <input type="checkbox"/> Transportation 15% | <input type="checkbox"/> Entertainment 5% | |



Worksheet: Housing on minimum wage

The United States has a *minimum wage* of \$7.25 per hour. That means that any employer has to pay employees at least \$7.25 per hour. But \$7.25 per hour does not go very far in today's world.

Imagine that you are a cashier working in a grocery store. You earn minimum wage. You work 40 hours per week. How much do you earn per week? Write a math problem to show how much you earn per week.

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

You make $\underline{\hspace{2cm}}$ per week. You work 50 weeks per year. How much money do you make in a year? Write a math problem to show how much you make in a year.

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

This is your annual income.

Now let's find out how much you can afford to pay for housing each year. Write a math problem that shows 30% of your annual income. Take your annual income and multiply it by 30% (0.30). In the equations below, p stands for 30% of your income.

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = p$$

$$p = \underline{\hspace{2cm}}$$

This is how much you can afford to pay for housing each year. It must pay for your rent or mortgage. It must also pay for your utilities and your household expenses. The average cost of utilities is \$2,894 per year. That leaves only \$1,456 for rent and housing expenses. That means you would have to find a home where the rent is less than \$121.33 per month. In 2007, the average cost of a rented property was \$755 per month. How good are your chances for finding a place to rent for less than \$121 per month?

Teacher resource: Family information

<p>Family 1 You have two earners in your family. One is an architect who makes \$75,000 a year, and one is an office manager who makes \$30,000 a year.</p>	<p>Family 2 You have two earners in your family. One is a nurse who makes \$65,000 a year, and one is a delivery person who makes \$25,000 a year.</p>	<p>Family 3 You have one earner in your family. Your earner is a carpenter who makes \$43,000 a year.</p>
<p>Family 4 You have two earners in your family. One is a mail carrier who makes \$47,000 a year, and one is a day care worker who makes \$22,000 a year.</p>	<p>Family 5 You have two earners in your family. One is a computer operator who makes \$37,000 a year, and one is a restaurant cook who makes \$23,000 a year.</p>	<p>Family 6 You have one earner in your family. Your earner is a cashier who makes \$19,000 a year.</p>
<p>Family 7 You have one earner in your family. Your earner is a farmer who makes \$50,000 a year.</p>	<p>Family 8 You have two earners in your family. Both earners are office managers who make \$30,000 a year each.</p>	<p>Family 9 You have one earner in your family. Your earner is a computer software engineer who makes \$95,000 a year.</p>

<p>Unexpected cost The highest-paid earner in your family has had to go part-time because of health problems. The salary is now half of what it used to be.</p>	<p>Unexpected cost A bad storm has damaged your roof. Add \$15,000 to your housing costs.</p>	<p>Unexpected cost Your family has had a new baby. Subtract \$7,000 from your total income for child care costs.</p>	<p>Unexpected cost The city your family just moved to has much higher property taxes. Add \$6,000 to your housing costs.</p>
<p>Unexpected cost You need a new furnace. Add \$5,000 to your housing costs.</p>	<p>Unexpected cost Your family's grandfather has moved in with you. You've had to remodel a room for him to stay in. The cost to you is \$2,500.</p>	<p>Unexpected cost Your lowest-paid or only earner has lost his or her job. This earner now takes in \$10,000 from unemployment.</p>	<p>Unexpected cost You just discovered that termites have caused major damage to your walls. Add \$4,000 to your housing costs.</p>

Worksheet: Our family

Family income	
Job	Salary
Total	

Average housing costs	
Shelter	\$10,023
Utilities	\$3,477
Household expenses (includes household operations, housekeeping supplies, household furnishings and equipment)	\$3,420
Total	\$16,920

Unexpected cost	
What is it?	Cost