



Habitat Middle School Lessons:

Poverty and substandard housing today



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Interviewing a housing expert

In this lesson students read about the shortage of affordable housing for low-income families and about one family's experience in trying to find affordable housing. Students then interview an expert on housing and use this information to write an expository article.

Objectives:

Students will:

- Study the problem of housing affordability.
- Plan for and carry out an interview.
- Take information from an interview and use it to write an expository article.
- Plan and carry out a service-learning project (optional).

Language arts content standards:

- Read a wide range of texts to acquire new information regarding the needs and demands of society.
- Employ a wide range of writing strategies, and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
- Conduct research on issues and interests by generating ideas and questions.
- Gather, evaluate, and synthesize data from a variety of sources to communicate their discoveries in ways that suit their purpose and audience.

Materials:

- "Interview with the Boltons"
- "Affordable housing in the United States"
- "Tips for writing your newspaper article"

Preparation:

Arrange for one or more experts on local housing issues to visit your class so they can be interviewed by your students. You can contact your local Habitat for Humanity affiliate to request a representative to come to your class. To find a local Habitat for Humanity affiliate, go to <http://www.habitat.org/local>. Many college and high school campuses also have Habitat for Humanity campus chapters and the members might be willing to visit your class. To contact a campus chapter near you, e-mail campuschapters@habitat.org.

org. Explain to the Habitat for Humanity representative that you are using the middle school lessons from Habitat's youth programs, and would like to interview a Habitat for Humanity representative as part of the lesson materials.

Procedure:

1. Read the interview on one family's struggle to get housing.

Distribute the handout "Interview with the Boltons." Instruct students to read the interview and to underline any parts that they find particularly interesting, and to note any questions they think of while reading the interview.

2. Review information on housing and affordability.

Distribute the handout "Affordable housing in the United States." Read it together in class. Discuss how this data relates to the Bolton family.

3. Prepare for and interview an expert.

Explain to the class that they are going to be writing a newspaper article about affordable housing in your community. They will use information that they have learned in the "Interview with the Boltons" and in "The lack of affordable housing in the United States."

Explain that in the pre-writing stage they will need to gather information. Their primary source of information will be the expert(s) on affordable housing who will be coming to the class. Tell the students they need to prepare to interview the expert by deciding what information they want to know and what questions they need to ask.

Break the class into small groups and have them come up with lists of questions to ask the housing expert. As a whole class, compare questions and then have each student come up with a finalized list of questions that they would like to ask. Each student can have their own separate list. Have students write each of their questions on an index card. Tell them that during the interview they should write the answers to each question on the index card. Have some blank index cards ready for questions that they think of during the interview. Explain

that they might not have time to ask all their questions but they should try to get their most important questions answered.

Sample interview questions include:

- How many people in our local community have trouble affording housing?
- How many children do not have decent homes to live in?
- Why is it important for children to have a decent, affordable home to live in?
- How does having a stable home help adults?
- Is there enough affordable housing in our community? If the answer is no, then why not?
- How can we increase the supply of affordable housing in our community?
- How is a community affected when there are many families who cannot afford housing? How is a community affected when most families are able to afford housing?
- Why did you personally become interested in helping people find housing that they can afford?
- What activities do you or your organization do to help families find affordable homes?
- How many families does your organization help each year?
- How do you decide which families to help?
- Why did you get involved in issues of affordable housing?
- How can middle school students get involved in helping in the area of creating more affordable housing?

If you have more than one expert coming to your class, have students break up into groups so that each group can interview one of the experts. You may

encourage students to do additional research using other sources of information (e.g., books, periodicals, databases, videos).

4. Have students write a newspaper article.

Distribute the handout “Tips for writing your newspaper article.” This contains instructions to help the students identify the purpose of their article and write towards that purpose with that audience in mind.

Assign the article as homework. When you have read the completed articles, choose several examples for students to read aloud and share with the class.

Optional Extension:

Plan and carry out a service-learning project to help the local Habitat for Humanity affiliate.

You can get involved with Habitat for Humanity through a myriad of potential activities. Students could:

- Pack lunches for volunteers building a house.
- Hold fund-raisers to raise money to help build a new house.
- Participate in Habitat for Humanity’s Youth United program (www.habitatyouthprograms.org/youthunited). In this program, youth groups work together all year long to raise money and build a Habitat home for a partner family.

Note that in order to be allowed on a construction site, Habitat for Humanity requires youth to be a minimum of 16 years old. For younger children there are many other types of volunteer activities available. Speak to your local Habitat for Humanity affiliate for detailed information about what is available in your local area.

Develop your students’ expository writing skills further by having them write about your group’s activities for the school newspaper, newsletter or Web site.

Interview with the Boltons

Jerry and Linda Bolton* recently moved into their new home with their four children. The Boltons had never owned a home before. They were able to purchase a home with the help of a loan they could afford to repay that they got from Habitat for Humanity.

Where did you live before buying this house?

Linda: We lived in a house that we rented. Even though we lived in that house for 12 years, I never really felt like it was home for us. Since we didn't own it, I didn't feel comfortable doing what I wanted to the house. Plus, there was always an insecurity about never knowing what might happen. We always had a fear that the landlord would knock on the door and tell us that they were selling the house and that we needed to find a new place to live. The house wasn't in a great neighborhood, either. I didn't really feel that the kids were safe there. But this neighborhood is much better. I'm so happy that we finally own our own home.

Why didn't you buy a home earlier?

Jerry: My job is taking care of developmentally disabled adults. I love what I do, but I couldn't afford to buy a house for a family of six on my salary. Instead, we rented a home.

How much did it cost you to rent a home?

Jerry: Even renting a place would have been too expensive for us without help. We definitely wouldn't have been able to rent anything big enough to fit all of us, except that we were able to participate in a government run low income housing program. Through that program we rented a house and I paid 35 percent of my income each month towards the rent.

Were you able to save money while renting a home?

Jerry: Through the program, 35 percent of my income automatically went to pay the rent. That means over a third of my income was going to paying for housing. That barely left us with enough money to feed and clothe the kids. I couldn't save any money to get ahead.

Even when I would get a raise at work, our rent would automatically go up to be 35 percent of my income. There was no way for us to save money to make a downpayment on a house.

What other difficulties did you have while renting a home?

Linda: We definitely had some hard years. With so much of our income going to pay the rent, it was hard to have enough money to pay for other things that the kids needed or wanted. We bought pretty simple food and clothing – nothing fancy. We barely had enough to get by.

What makes owning this home more affordable?

Jerry: Owning this home is a huge relief to me because I know I can afford the monthly payments I have to make on the loan for this house. The monthly payments are fixed. That means they stay the same every month, without going up. If my income goes up, my house payment does not go up. It always stays the same. That's a big advantage over when I had to pay 35 percent of my salary in rent. Every time my salary went up, my rent went up, too.

Through Habitat for Humanity, we got a loan with a zero percent interest rate. That means no extra money is added to the monthly payments, and it keeps the monthly payments at a level that I can afford. I pay less on the monthly house payments than what I had to pay in rent each month.



*Names of family members have been changed.

What can you do with the money you save on housing costs?

Linda: Since the monthly payments are low, we have more money to pay for other things that we need or want for the kids. They're all in high school now, and believe me, teenagers want a lot of things. They don't get everything they want, but at least we're not so stressed out about paying for groceries and other necessary things anymore.

Jerry: I'm also able to save money, now, too. Before I could never get ahead. Now the rent doesn't go up each time my income goes up, so if my income goes up at all, I have the opportunity to put that extra income into savings instead of just paying it right back out to a landlord.

How do you feel about having an affordable a place to live?

Jerry: The relief of fear and stress is incredible. I don't have the fear of being homeless again. We have been homeless in the past, many years ago. We had three kids then. I lost a job and we didn't have any income to pay for rent. We also didn't have any savings to pay for the rent. We had no choice but to go to a shelter for a few months. I don't ever want to have to do that to my family again. I want us to have a safe place that we know is our home. Through Habitat we were able to get this house at a price that we could afford. It is incredible peace of mind.

I didn't think we would ever be able to own a home. We always rented. Everyone in my family had always rented—it was just something you did. But renting was really not letting us get ahead financially. We were always just pouring money into the rent, and it was too expensive for us. I'm glad we finally went to talk to Habitat for Humanity about owning a home through their program. They required a lot of work out of Linda and me, but it was worth it.



Affordable housing in the United States

Housing is considered affordable if a family spends no more than 30 percent of its income on housing. According to the United States government, there are more than 12 million households in the United States that spend more than 50 percent of their income on housing.¹ That means one out of every seven American families is having trouble being able to pay for a place to live. Why is there such a lack of affordable housing in the United States?

Part of the problem is because it is difficult for many families to earn enough to money to afford a home. The average person who works full time at a minimum wage job cannot afford to rent a two-bedroom apartment in any county in the United States. In many families, mothers and fathers have to work two or three jobs just to be able to pay for simple, decent housing for their families.

Part of the problem is because there is not enough of a supply of low-priced houses or low-rent apartments. Builders of houses, condominiums, and apartment buildings have been able to make a greater profit by building more expensive homes than simple, low priced homes. Thus, in the past few decades there has been a high number of more expensive housing built, and a low number of low cost housing that has been built. As a result, the supply of low-priced housing

remained the same or went down, while the number of families that could only afford low priced housing increased.

Since these families are spending so much of their money on a place to live, they are most likely also having trouble paying for other very important things such as food, clothing, medical care and transportation. They also have little money to spend on education and entertainment, and have no opportunity to save money for their future needs.

“These families are in precarious situations; they are one medical emergency, one sick child, one car problem away from losing the roof over their heads. While we sometimes think of these problems as being limited to a small segment of families, many of the workers we rely on every day—teachers, police officers, health care workers, those who provide child care, and others in the service industry—are finding it increasingly difficult to afford housing without foregoing other basic necessities.”²

Finding affordable housing is not a problem that is isolated to a small number of American families. Instead, it is a widespread problem that affects many families, including those in which the parents work full time at jobs providing an important service to the community.

1 Department of Housing and Urban Development, <http://www.hud.gov/offices/cpd/affordablehousing/>

2 Preface to “Out of Reach 2007-2008,” National Low-Income Housing Coalition ©2008, <http://www.nlihc.org/oor/oor2008/>.

Tips for writing your newspaper article

You are going to be writing a newspaper article about affordable housing in your community. You should write the article based on information from the “Interview with the Boltons,” “The lack of affordable housing in the United States,” and your interview of a local housing expert.

Here are some tips on writing your article:

- 1. Decide on the purpose of your article.**

Is the purpose of your article to break the latest news on something that happened yesterday? For many newspaper articles it is, but not for this one. For this article, you are informing the reader about whether or not there is affordable housing for low-income families in your community.
- 2. Include the following information in your article:**
 - Who or what the article is about
 - Where the events or other information in the article took place
 - When the events or other information in the article took place
 - Why or how things happened – an explanation of the situation or events
- 3. Grab the reader’s attention right away!**

Your first sentence needs to be interesting in order to get your reader’s attention. Mention something unusual or a specific piece of information that you think is particularly interesting. Make sure your entire first paragraph is very simple to read. Don’t include long explanations in the first paragraph.
- 4. Keep the article impersonal. (It is not about you.)**

The article is meant to inform the reader about a subject, not about you or your opinion. Write in the third person voice (use proper names or the pronouns he, she or they instead of writing about I or me). Do not include your opinion. You should, however, include opinions of the people you interviewed since they are either experts on the subject or have personal experience related to the subject. Use quotes from people you interviewed.
- 5. Explain any unfamiliar terms or complicated details.**

When you write for the general public, you cannot assume the reader has any prior knowledge about the topic. Thus, you cannot jump into details about an issue without first explaining what the issue is and how it relates to the overarching subject of your article.



The benefits of homeownership

Objectives:

Students will:

- Analyze information from a written text, form an opinion, and formulate arguments to support their opinions.
- Write a persuasive essay.
- Publish their written text in electronic or printed format to share with a wider audience.
- Create a blog entry. (Optional)

National content standards:

Language Arts

- Read a wide range of texts to acquire new information regarding the needs and demands of society and the workplace.
- Apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts.
- Employ a wide range of strategies as they use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Materials:

- “Interview with the Evans family”
- “Educating partner families”
- “Teacher tips: publishing student essays”

Preparation:

Your students will write a persuasive essay and publish it for fellow students to read. As the teacher, you need to choose what format the students will use to publish their essay. We provide instructions for either creating a brochure or having the students post their essay to a class blog. If you choose to have your students post to a blog, you will have to prepare the blog and instruct students on how to use it. For tips on using a blog, see the handout, “Teacher tips: Publishing student essays.”

To prepare for class, have the students read “Interview with the Evans family” as homework before class.

Procedure:

1. Introduce the topic of homeownership.

Discuss the places a family might live. Be sure to bring up the following points:

- A family might live in a house, an apartment, a condominium, with friends or relatives, or in a temporary housing shelter.
- The term “rent” means to pay a landlord to be able to live in a home, but that the home itself still is owned by the landlord. Most home renters pay the landlord a certain amount of money every month. This payment is called “rent.”
- In the United States, and all around the world, many lower income families have difficulty paying for a place to live (either renting or buying a home)

2. Discuss the “Interview with the Evans family” article.

As a class, address the discussion questions included in the article. Go through each question and ask students to pinpoint places in the interview that are relevant to each question. Have students make notes on the margins of the article so that they can easily refer back to their notes.

Students should search the article for evidence that becoming a homeowner either did or did not cause significant improvements in the lives of Melissa Evans and her family.

Topics to watch for include:

- Mental health and stress
- Physical health
- Safety
- Education
- Job or career
- Finances

3. Have each student write a persuasive essay.

Distribute the handout “Educating partner families.” This explains the task of writing an article to persuade lower income families about the benefits of owning a home rather than paying monthly rent. The grading rubric included in this handout will help students organize their thoughts before writing. Explain how the rubric shows what they need to include in their essays.

4. Publish the persuasive essays.

Have students publish their essays in some format in order to share them with one another. Choose whether you will have them create a brochure or post their essay to a class blog. You can find information on both formats in “Teacher tips: Publishing student essays.”

Have students read each others’ essays. Finish the lesson with a class discussion on how homeownership effected Melissa Evans and her family, and why owning a home can be more beneficial to a lower income family than paying montly rent.

Interview with the Evans family

While you read the interview:

Evaluate how becoming a homeowner affected Melissa and her family. Did things change for the family in any of these categories? If so, were the changes related to owning their own home?

- Finances: Did they feel they had enough money to buy what they needed?
- Mental health: Did they worry a lot about things?
- Physical health: Was anyone sick or ill?
- Safety: Did anyone get hurt, or were they afraid of getting hurt by other people or unsafe conditions?
- Education: Was anyone's ability to attend school or do homework affected by where they lived?
- Job or career: Was anyone able to get a better job or improve their chances of getting a better job?

For each of these categories, there may be a lot of evidence, no evidence, or only a little evidence of how owning a home affected Melissa and her children.

Highlight parts of the text where you find evidence of how the two housing arrangements affected the family in different ways. When you highlight text, use the Notes Column to write down which of the categories above are discussed in that part of the text.



Meet the Evans Family

Melissa Evans lives with her children, Trey and Emily, in Colorado. Trey is 17 years old and is in high school. Emily is 11 years old and is in elementary school. Melissa has raised her two children on her own and has worked hard to support her family. They used to rent a small apartment, but then Melissa heard about how she could get her own house through Habitat for Humanity. Melissa jumped at the chance and now is a proud homeowner. Here is an interview with Melissa and her son Trey.

What was your life was like before you moved into this house?

Melissa: I have always been a working mother. I didn't make a lot of money, but I was able to provide a stable environment for my kids. But we certainly didn't have any extra money. We were literally living paycheck to paycheck. At times I wouldn't be able to afford to buy groceries for us. Do you know how terrible it feels to not be able to buy food to feed your children? Those were tough times. I fed my kids a lot of ramen noodles, macaroni and cheese, and spaghetti – the types of foods that were inexpensive but that would stretch for a long time.

One of our biggest problems was finding a decent place to live. The government will help you pay for housing if you make less than a certain amount each month, but I always made over that amount by one or two hundred dollars. I felt like I was between a rock and a hard place. It was very discouraging. So I budgeted and somehow made it work. Looking back now, I really don't know how I did it. We lived with my mom for several years, and then lived in an apartment before getting this house.

Tell me about where you used to live.

What was it like?

Melissa: We used to live in an apartment that was part of a big apartment complex. Each apartment had its own outdoor entrance. Our apartment had two bedrooms and one bathroom. Emily and I shared a bedroom, and Trey had his own room.

*Names of the family members have been changed.

How did you feel living there?

Melissa: The apartment complex wasn't in a very good neighborhood. The people who lived there were kind of rough. A lot of fights would break out between the people living there. Sometimes the fights would be close to our apartment. The fights really bothered me because of the kids—I knew they were scared. The kids would come inside and we'd stay in the apartment and keep to ourselves.

Trey: I remember being a little scared when the neighbors would start hollering at each other. I would end up just staying inside most of the time.

Melissa: It wasn't very easy for a boy like Trey. He wanted to be outside doing stuff, but if he stayed outside he'd probably get mixed up in some adults fighting, so he had to stay inside.

Trey: At one point more people moved in who were willing to get into fights with anyone and everyone. When they came around my friends and I would just leave. We didn't want to mess with them. Mom's car got stolen while we lived there, too.

Melissa: Not just stolen, it also got broken into twice. All of that happened within one year. I never found out who did it.

Trey: I didn't really like living there.

Melissa: I'm just glad to be out of there, plain and simple.

Did you feel connected to your neighbors?

Melissa: It was hard to get to know any neighbors because we didn't spend much time outside. The outside entrance area wasn't kept very clean, so there was no good place to sit outside.

Trey: I knew a few kids there from school. I was already friends with them from school—I didn't meet them at the apartment complex. We would sometimes hang out, but mostly we would go to a place away from the apartments where we felt safer.

Melissa: I would have liked to have gotten to know the neighbors, but it just wasn't a good atmosphere for connecting to people. Also, a lot of people would only live there for a few months, and then they'd either be evicted or move somewhere else. We didn't make any friends there.

How much rent did you pay for the apartment?

Melissa: I thought the rent was too high for a small apartment. I paid \$700 a month. It left us with no extra money. That was scary. If you're not saving money, then you don't have much of a safety net. You just pray every day that you don't lose your job for some reason because, if you do, then you just don't have enough money.

Trey: You also complained about the heating bills.

Melissa: Yes, the heating bills were too high. Since the heating was shared between the attached apartments we couldn't control how much heat we got. My utilities bills were way too high for our tiny apartment. But I didn't have any control over that.

At one point when we were living in the apartment I got laid off. I lost my job in December. I didn't know when I would find another job. That was a very grim Christmas that year. I was applying for any customer service related jobs I could find. I was out of work for almost three months. I needed to pay the bills and feed my kids, so I ended up using all my savings to get us through that period. I remember hoping and praying that none of us got sick, because I knew I couldn't afford any medicine or doctor bills.

After three months I ended up getting my current job at the Children's Hospital. Having the safety net of a job gave me time to think. I knew I didn't want to keep paying \$700 each month to live in a place that was too small and unsafe. Plus I was always afraid that the landlord might raise the rent. It was too much stress and worry. That's when I first heard about Habitat for Humanity.

Tell us about how you got involved with Habitat for Humanity.

Melissa: I saw a commercial on television about Habitat. I went to a meeting and learned about the work I'd have to do in order to get a home through Habitat. I also learned that Habitat gives families zero-interest loans to buy a house. That way the family has to pay back just the loan amount, not any extra interest. That makes it easier for someone to buy a house.

I decided after the orientation meeting that even though it would be a lot of work, it was worth all the effort to get a home. I applied to get a home through Habitat and after a while was approved. From the time I applied it took two years until we were able to move into our new home.

What work and training did Habitat for Humanity require you to do?

Melissa: There are a lot of steps you have to go through before Habitat will approve you for a loan and a house. You have to show that you wouldn't be approved for a regular bank loan to buy a house because you don't earn enough money. You also have to prove that you are reliable enough to pay back the loan you do get from Habitat. Part of proving that you are reliable is taking training classes on how to manage your finances. You also have to put in work hours. You have to work by helping to build your own house, maybe helping build other people's houses, or helping out at the Habitat office. They don't give houses away for free – you have to work for it. What they do is give loans that are easier than normal bank loans to pay back, because you don't have to pay back extra interest. Since I'm a single parent I was required to put in 250 hours of work. When I heard we were approved to get a home through Habitat, I literally wanted to jump up and down and do cartwheels.

Trey: Yeah, I remember how excited you were! You told us we were approved to get a house, but we were too young to understand what that meant. Over time, I understood more.

Melissa: The reality of it started hitting Trey and Emily as the house was being built. We would drive by the build site every time we went out. I remember one particular weekend—the weekend of my sister's wedding. We drove by the house on our way to the wedding. It was the only weekend that I didn't spend working on the house. I asked the construction supervisor if it would be okay if I brought my kids by [since kids aren't usually allowed on the build site while active construction is going on]. By that time we had the drywall up and you could really see what the house would look like. It really had the definition of a house. The kids got to see the walls of their rooms. That's when it really hit them that this was real. "This is going to be my room! Mom, I want to do this in my room. Mom, I want to do that in my room." I don't think I've ever seen my kids in so much awe. They were also impressed by the fact that I had helped to build it, that I had helped to put up these walls, that I had put in the drywall.

Trey: That was a big day. I was so happy. My sister and I were looking at the rooms we'd be getting. Emily was saying where she wanted her bed, and I said I wanted my bed over here. That made the day fantastic, even though it was already good because of my aunt's wedding. My sister and I could imagine

what our rooms would look like and could plan where we wanted to put things. Now my sister has her room set up almost exactly the way she described it that day.

Why do you think owning a home is better than renting a home?

Melissa: There are so many reasons!

Trey: I like living in my own home instead of renting a place because now we can do what we want to the inside. I love this house. Now my room is mine. Before I couldn't do anything with my room because we never knew how long we'd be staying in that apartment. I wanted to paint my room, but it was too much trouble because I had to get permission from the landlord, and if we moved I had to paint it white again.

I'm going to paint my room now. I want to paint it a dark blue, but not too dark—maybe a grayish blue. Emily wants to paint her room bright blue. I even want to put up some shelves. I wanted shelves in my room in the apartment, but I couldn't do it because we weren't allowed to drill holes into the wall.

Melissa: I think the best part of having your own home is that you're not paying rent anymore. When you pay rent, you're giving money to the landlord every month and you'll never see that money again. When you have a house, you pay back the mortgage loan every month, but then you eventually own the house completely. You're paying money for something that will become completely yours. When you rent, you don't get closer to owning anything because the place still belongs to the landlord.

Because I worked with Habitat to get this home my monthly payments on the mortgage loan are pretty low. My mortgage payments are \$150 less than my rent was! I'm spending a lot less on other things, too. My car insurance payments went down because I'm living in a safer neighborhood. I'm spending much less on utilities because I have control over how much heat or electricity we use. I just have a lot more money at the end of the day.

When we lived in the apartment, we were living paycheck to paycheck. After I paid the bills each month, I'd have maybe \$50 left over. That's not much. And God forbid we should be in an accident or some kind of emergency where I needed extra money. Now things are much better because my monthly bills are less. Since we're spending a lot less, we have a lot more money at the end of the day. I'm not as worried about emergencies anymore. I'm not to the point where I'm

in tears every paycheck wondering how am I going to get my family through the next two weeks until the next paycheck.

Trey: When I was smaller and we were living in the apartment, I didn't realize how much stress my mom was going through. I remember times when we'd be at a store and there'd be something I really wanted, but we couldn't get it. Sometimes that would be upsetting. But now I understand how hard it was for my mom to have money to buy anything extra after paying the bills.

Now I realize things are better. My mom's still really careful with our money, but we do get to buy things once in a while. Like I really wanted this CD by Greenday, and I finally got to buy it.

Melissa: I'm still very cautious with money. The kids don't always get what they want, but once in a while I can treat the kids to something, like the CD that Trey wanted. Before when we were living in the apartment and the money was much tighter, if we were in a store and they asked for something I would cringe because I didn't want to have to say in front of everybody, "No, I can't buy you that because I don't have the money."

Trey: Now that I'm older I can see my mom was under a lot of stress back then. Now she is much more relaxed.

I want to be more like my mom. Now that I actually have a summer job I want to start managing my money. My mom is helping me. We put a certain amount into savings whenever I get paid. I want to learn how to avoid getting into a situation where you have absolutely no extra money for little things you may want to buy or in case of emergencies.

Melissa: Since our monthly expenses are lower, I don't have to worry so much about how we spend every single dollar. I feel like I can concentrate on other things more, like my job and doing well there, hopefully getting a promotion.

What else is different about where you live now compared to where you lived before?

Melissa: We feel so much safer here. The neighborhood is safer in general. I don't worry about the kids getting into trouble anytime they go outside.

Trey: I like this neighborhood. There's a park down the road where we can hang out, and a skate park nearby. We know all

our neighbors, so that's nice.

Melissa: That's definitely a bonus of living in a safer neighborhood. In the apartment complex we didn't know our neighbors. We didn't talk to anybody. Here on Saturdays we're all out working on our front yards and people will stop by to say, "Hi," and find out what's new. It's a great feeling. On summer nights we'll sit outside and talk to the neighbors. We get to know each other and learn to look out for each other. Even just going to work I know someone's around the block keeping an eye on things. It's a very comforting feeling.

Trey: Another great thing about living in your own home instead of in a rental place is that we get to have pets now! We have a dog, Brandi, who is really attached to Mom. And my sister and I each have a cat.

Melissa: Trey's cat is a calico named Sprinkles. Emily's is a pure black cat named Shadow Princess. Our animals are part of our family – now we have a family of six.

Trey: I also like having more space. The apartment we had before was really too small, and we were really outgrowing it as we got older.

Melissa: Trey didn't have a good space to study or do homework in the apartment. Now that we have more space, he has a good place to study. Emily does too. That makes me happy because education is so important and I want them to have a good environment at home where they can study.

Any final things to say about owning your own home?

Trey: When we were renting a place, it felt really temporary. We never knew if we were going to be moving.

Melissa: In this house it's totally different. I don't think we'll ever move away from here. It's hard to think of a place as a home if you are always worried that you won't be able to afford the rent. This place feels much more like home.

Trey: My sister's birthday is coming up soon. She's wanted to have a sleepover for a long time. Before we couldn't do it, but now we have the space. So she may get her sleepover party, after all.

Educating partner families

Habitat for Humanity works with lower income families to help them become home owners. Families that work with Habitat for Humanity are called Habitat partner families. In order to become a Habitat partner family, the family must commit to attend a significant number of classes on money management and volunteer many hours to help construct their new home or homes that will belong to other families.

Pretend you work for Habitat for Humanity. Your job is to inform lower income families that there could be advantages for their family to getting an affordable loan and owning their own home.

Using the Evans family as an example, write an article explaining the benefits of becoming homeowners. Include evidence from “Interview with the Evans Family” in at least three categories that show how Melissa’s family benefitted from moving out of a rental home to a home they were buying.

Your article should consist of these items:

- Title
- Introductory paragraph
- Paragraph on the first category (from the list above)
- Paragraph on the second category (from the list above)
- Paragraph on the third category (from the list above)
- Conclusion

The following rubric explains what your article should include.

Title	State your opinion clearly in the title.
Introductory paragraph	Introduce the subject of your essay. State your opinion. Use a minimum of three sentences in this paragraph.
Paragraph on first category	State the category you are addressing. State whether the family was affected positively or negatively or not at all. Support your argument with references to at least two specific points from the interview. Use a minimum of three sentences in this paragraph.
Paragraph on second category	State the category you are addressing. State whether the family was affected positively or negatively or not at all. Support your argument with references to at least two specific points from the interview. Use a minimum of three sentences in this paragraph.
Paragraph on third category	State the category you are addressing. State whether the family was affected positively or negatively or not at all. Support your argument with references to at least two specific points from the interview. Use a minimum of three sentences in this paragraph.
Conclusion	Summarize the main points of each paragraph. Restate your opinion. Use a minimum of three sentences in this paragraph.



Measuring the percentage of change

In this lesson students learn that prices and income do not remain static, but instead change over time. They learn how to compare income or the price of an object at two different points in time and learn how changes in income or price affect a person's purchasing power. The examples in this lesson relate to income and the price of housing.

Objectives

Students will:

- Practice pre-algebra skills by:
 - Calculating percent change between data points.
 - Converting fractions to decimals.
- Create bar graphs to communicate the significance of changes.
- Understand that wages and prices are not static but instead change over time.
- Understand how disparate changes in income verses home prices can affect people's ability to buy homes.

Math content standards

Algebra

- Use mathematical models to represent and understand quantitative relationships.
- Analyze change in various contexts.

Data analysis and probability

- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

Representation

- Use representations to model and interpret physical, social, and mathematical phenomena.

Materials:

- "Calculating percentage of change"
- "Methods of comparing change: Port St. Lucie"
- "Extra practice problems" (Using U.S. housing data)

Procedure:

1. Practice calculating percentage of change.

Distribute the worksheet "Calculating percentage of change." Review the first example together and do the rest of the worksheet together in class. Be sure to explain that:

- Percentage of change is a useful tool for understanding whether the price of an object has changed a lot or a little.
- Percentage of change can be positive or negative, meaning that the numbers can have gone up (positive) or down (negative).
- Zero percent change means the price stayed the same—that there was no change.
- 100 percent change in price means that the price of object doubled.

2. Calculate percentage of change using real data on income and home prices.

Distribute the worksheet "Methods of comparing change." Have students calculate the percentage of change of income and home prices in Port St. Lucie. Begin by reviewing the table of information and discussing the questions with the class. Be sure to discuss the term median, as well as the following:

- *What does the term "median income" mean?*
If you line up all the salaries that people make in order, from smallest to largest, the number that is in the middle of the data set is the median income. The "median income" is meant to give you an idea of what a typical person in the community earns.

Technology

You may opt to have students calculate the percentage of change for the worksheets or create their bar graph by using a computer spreadsheet program.

- *What does “median home price” mean?*
If you line up the prices of all homes in an area in order, from smallest to largest, the number in the middle of the data set is the median price of a home in that area. The “median home price” is meant to give you an estimate of how much a typical home in the area costs.
- *Why do you think the income and prices changed?*
Prices and salaries change over time due to inflation (the value of the dollar falls over time). Something that cost \$1 today will probably cost more dollars 20 years from now and even more dollars 50 years from now. For example, look at the price changes for three basic items between 1998 and 2008¹:

	1998	2008
Dozen eggs	\$1.12	\$2.18
1 lb. of apples	\$0.92	\$1.16
Gallon of milk	\$2.70	\$3.83

3. Create bar graphs to display the data.

Have students create a bar graph showing the 1998 data and the 2006 data. Help students analyze their bar graph. Did it get harder or easier for a person to buy a home in 2006 versus 1998?

Extra practice problems:

Included in this lesson are extra problems you can provide your students to practice calculating percentage of change and creating bar graphs. The data comes from the U.S. census at <http://www.census.gov/hhes/www/income/histinc/state/state1.html>. The data is given in current U.S. dollars (dollar values of the year the data was reported).

If you want to have students look up information on median home prices and median income in your own state or county for the last census date, these two websites may be useful:

- Quick facts site from the U.S. census: <http://quickfacts.census.gov/qfd/>
- County and city data from City-Data.com: <http://www.city-data.com/>

4. Discuss the widening gap between median income and median home price, and the impact it has on people’s ability to buy homes.

In the past decade in the United States, the median price of homes has risen much faster than the median income. Ask students what this means for the average American. They should come to the conclusion that it has become harder for someone to buy a home during this time period.

Habitat for Humanity is one of several organizations that work to make housing more affordable. Habitat loans money to lower income families with no-profit charges. This makes it easier for the families to repay the loan over time. In addition, Habitat builds simple, decent, low-cost homes for the families to purchase with the loans. Families are also required to do “sweat equity,” helping build their own home and homes for other Habitat for Humanity homeowners. Through organizations like HFH, American families can hope to own their own homes despite a rising disparity between income and the price of a home. Habitat also helps families around the world into simple, decent, affordable housing. For more information on Habitat for Humanity, see <http://www.habitat.org>.

Calculating percentage of change

Example:

Tom's house cost \$100,000 in the year 2000. In 2008 he sold his house for \$125,000.

- By how many dollars did the price change? _____
- Was the change in price a positive or negative change?
POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in Price}}{\text{Original Price}} = \frac{25,000}{100,000} = \frac{25}{100} = 0.25 = 25\%$$

Problem 2:

Jordan's house cost \$100,000 in the year 2000. In 2008 she sold it for \$90,000.

- By how many dollars did the price change? _____
- Was the change in price a positive or negative change?
POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in Price}}{\text{Original Price}} =$$

Problem 1:

Rebecca's house cost \$100,000 in the year 2000. In 2008 she sold it for \$210,000.

- By how many dollars did the price change? _____
- Was the change in price a positive or negative change?
POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in price}}{\text{Original price}} =$$

Problem 3:

Matthew's house cost \$45,000 in the year 2000. In 2008 he sold it for \$60,000.

- By how many dollars did the price change? _____
- Was the change in price a positive or negative change?
POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in Price}}{\text{Original price}} =$$

Teacher's copy

Calculating percentage of change

Example:

Tom's house cost \$100,000 in the year 2000. In 2008 he sold his house for \$125,000.

- By how many dollars did the price change? By \$25,000
- Was the change in price a positive or negative change? POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in Price}}{\text{Original Price}} = \frac{25,000}{100,000} = \frac{25}{100} = 0.25 = 25\%$$

Problem 2:

Jordan's house cost \$100,000 in the year 2000. In 2008 she sold it for \$90,000.

- By how many dollars did the price change? By -\$10,000
- Was the change in price a positive or negative change? POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in Price}}{\text{Original Price}} = \frac{-10,000}{100,000} = \frac{-10}{100} = -0.1 = -10\%$$

Problem 1:

Rebecca's house cost \$100,000 in the year 2000. In 2008 she sold it for \$210,000.

- By how many dollars did the price change? By \$110,000
- Was the change in price a positive or negative change? POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in price}}{\text{Original price}} = \frac{110,000}{100,000} = \frac{110}{100} = 1.10 = 110\%$$

Problem 3:

Matthew's house cost \$45,000 in the year 2000. In 2008 he sold it for \$60,000.

- By how many dollars did the price change? By \$15,000
- Was the change in price a positive or negative change? POSITIVE or NEGATIVE
- What was the percentage of change in the price of the house?

$$\frac{\text{Change in Price}}{\text{Original price}} = \frac{15,000}{45,000} = \frac{15}{45} = .33 = 33\%$$

Methods of comparing change: Port St. Lucie

Here is some housing data for Port St Lucie, Florida, one of fastest growing cities in the United States.

Port St. Lucie, FL	1998	2006	Percentage of change
Median Income	\$44,500	\$54,600	
Median Home Price	\$78,400	\$257,500	

The formula for calculating the percentage of change between two prices is:

$$\text{Percentage of Change} = \frac{(\text{New Price} - \text{Original Price})}{\text{Original Price}}$$

What was the percentage of change in median income between the years 1998 and 2006?

What was the percentage of change in median home price between the years 1998 and 2006?

Directions for creating a bar graph:

Create a bar graph that shows the median income and the median home price for Port St. Lucie in the year 1998 and in the year 2000. Follow these steps:

- Draw an X axis and a Y axis.
- What will you label the Y axis?
- What will you label the X axis?
- Plot the two years on the X axis.
- Plot the four dollar values on the Y axis.
 - Start by labeling the bottom of the Y axis as zero. The top of the Y axis should be slightly higher than the largest dollar value in your data set. Choose a round number to make it easier to plot other reference points.
 - Draw more reference points on the Y axis.
 - Now plot the four dollar values on the Y axis.
- Plot the points for the year 1998:
 - Plot the point for the median income in 1998. Draw a column from this point down to the X axis.
 - Plot the point for the median home price in 1998. Draw a column from this point down to the X axis.
- Plot the points for the year 2000:
 - Plot the point for the median income in 2000. Draw a column from this point down to the X axis.
 - Plot the point for the median home price in 2000. Draw a column from this point down to the x axis.

Discussion questions:

1. Does the graph show a positive or negative change in median income?
2. Does the graph show a positive or negative change in median home price?
3. Which change was larger?
4. Compared to the change in median income, was the change in median home price large or small?
5. How did these changes affect people in Port St. Lucie who wanted to buy a home in 1998 compared to people who wanted to buy a home in 2000?
6. Why do you think prices of homes in Port St. Lucie rose so much?

Teacher's copy

Methods of comparing change: Port St. Lucie

Here is some housing data for Port St Lucie, Florida, one of fastest growing cities in the United States.

Port St. Lucie, FL	1998	2006	Percentage of Change
Median Income	\$44,500	\$54,600	22.6 %
Median Home Price	\$78,400	\$257,500	228 %

The formula for calculating the percentage of change between two prices is:

$$\text{Percentage of Change} = \frac{(\text{New Price} - \text{Original Price})}{\text{Original Price}}$$

What was the percentage of change in median income between the years 1998 and 2006?

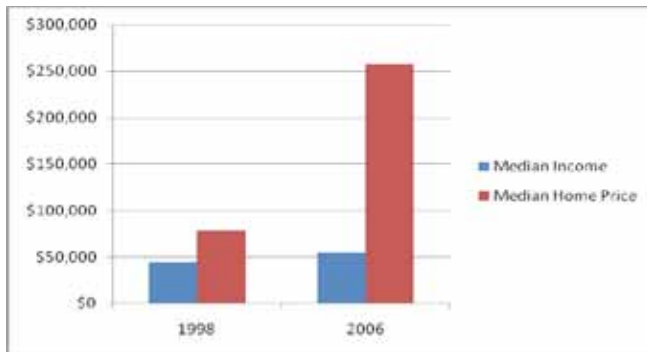
$$\text{Percentage of Change} = \frac{(54,600 - 44,500)}{44,500} = \frac{10,100}{44,500} = 0.226 = 23\%$$

What was the percentage of change in median home price between the years 1998 and 2006?

$$\text{Percentage of Change} = \frac{(257,500 - 78,400)}{78,400} = \frac{179,100}{78,400} = 2.28 = 228\%$$

Directions for Creating a Bar Graph:

The bar graph should look like the following:

**QUESTIONS:**

- Does the graph show a positive or negative change in Median Income?
Positive
- Does the graph show a positive or negative change in Median Home Price?
Positive
- Which change was larger?
Change in Median Home Price
- Compared to the change in Median Income, was the change in Median Home Price large or small?
It was a large change.
- How did these changes affect people in Port St. Lucie who wanted to buy a home in 1998 compared to people who wanted to buy a home in 2006?
The prices in 2006 were much higher than the prices in 1998, which made buying a home more expensive than eight years before.
- Thinking question: Why do you think prices of homes in Port St. Lucie rose so much?
Between 1998 and 2006 many people decided to buy homes, meaning there was a high demand for buying homes. This made the prices higher, because supply was probably not able to keep up with the demand at that rate of increase.

Extra practice problems

Here is some housing data for the United States as a whole.

National Data for U.S.	1980	1990	2000	2006
Median Income	\$16,841	\$30,056	\$41,994	\$48,023
Median Home Price	\$93,400	\$101,100	\$119,600	\$257,500

Plot the Median Income and the Median Home Prices on a graph.

1. Do the changes in Income and Home Price change at the same rate?
2. Between what years did Median Income change the most?
3. Between what years did Median Home Price change the most?
4. What is the percentage of change in Median Income from 1980 to 2006?
5. What is the percentage of change in Median Home Price from 1980 to 2006?
6. Is it easier for a household with Median Income to afford a home in 1980 or in 2006?



Who can afford a home?

In this lesson students reinforce the concept of median and apply it and other pre-algebra skills to actual U.S. census data. Through these exercises students experience how applying mathematical concepts can help them make sense of real life data. They also gain an understanding of how much of a family's income is typically spent on housing.

Objectives:

Students will:

- Identify the median in a data set.
- Calculate percentages using whole numbers.
- Utilize pre-algebra skills to make sense of real life data in their own communities.
- Convey mathematical information by creating visual graphs (pie graphs).
- Learn about the difficulty of finding affordable housing and discuss reasons why housing is unaffordable for many.

Math content standards:

Algebra

- Use mathematical models to represent and understand quantitative relationships.

Data analysis

- Formulate questions that can be addressed with data, and collect, organize, and display relevant data to answer them.

Problem solving

- Build new mathematical knowledge through problem solving and solve problems that arise in mathematics and in other contexts.

Materials:

- "Paying for a place to live"
- "Understanding median"
- "What does median household income mean?"
- "Can you afford the rent?"
- "What percent do we spend on housing?" (Extension Activity)
- "Housing in your community" (Extension Activity)

Procedure:

1. Introduce the lesson.

Tell the class you will be looking at some typical costs that families incur every month. Ask the students to name items their family pays for each month.

Categories include:

- Food
- Clothing
- Housing (mortgage or rent, plus utilities)
- Transportation
- Health care
- Education
- Entertainment
- Travel

2. Distribute "Paying for a place to live" for students to read.

Discuss the terms "rent" and "mortgage."

3. Explain the term "median."

Distribute "Understanding median." Work with the students through the problems.

4. Calculate percent using whole numbers.

Distribute "Can You Afford the Rent?" Have students work through the problems individually. This worksheet asks students to determine whether households at four different levels of income can afford housing.

5. Create a live representation of the data.

After completing the worksheet, divide the class into five groups by counting off by fives. Assign each group to represent one of the five families from the worksheet. Have the families that cannot afford the average rent for a two-bedroom apartment stand on one side of the room. Have the others stand on the opposite side of the room. Tell the students that this is a rough representation of the percentage of families in the United States who are having troubles paying for a place to live. (Almost half of American families have difficulty paying for a place to live.)

Optional Extension:**Create graphs to visually represent the data:**

- Use the worksheet “What percent do we spend on housing?” to have students draw a visual representation of the percent of income different families spend on housing.
- Have each student draw a pie graph for each of the families from the “Can You Afford the Rent?” worksheet. You may have the students use a computer program to practice technology skills. The pie graph should show what percentage of its income the family would have to spend on rent.

Examine data for your county:

- Students can look up housing data for every state and county in the United States at the National Low Income Housing Coalition’s Web site, <http://www.nlihc.org/oor/oor2008/?CFID=27816722&CFTOKEN=19793713>. Get the required data for your county and find out whether people who earn different levels of income in your county can afford to rent an apartment there. Have students use the included worksheet, “Housing in Your Community.”
- After completing the worksheet, discuss the problems that lower income families face in trying to pay for a place to live. What resources are there for families in your community who are having trouble paying rent? Research organizations in your local community that help families afford housing and investigate how they work.

A good starting place is to see if there is a local affiliate of Habitat for Humanity International in your area. To do this, go to www.habitat.org/local to enter

your zip code and find the Habitat affiliate that is closest to your community. From here you can click to open the affiliate’s Web site and see what ongoing work and events are going on in your community.

Further Exploration:**Workforce and workforce housing: Who does median income represent?**

People who earn the median income in a community are usually the people who make a living by providing services to others who live in the local community. This includes people who make a living by working in jobs such as:

- Teachers
- Police
- Nurses
- Medical technicians
- Restaurant staff
- Store clerks

A term used to describe the group of people in these community service jobs is the community “**workforce**.” People in workforce jobs usually earn around 75 percent to 100 percent of median income in a community. From the lesson you can see that households that are in this income range are having trouble paying for housing in many parts of the United States.

The term “**workforce housing**” refers to housing that people in the community “workforce” can afford. If home prices increase far more than incomes do, people in community workforce jobs cannot afford to live in the community they are serving. You can see this phenomenon happen in many areas of the country where housing prices are high.

Paying for a place to live

A home is one of the most expensive things people pay for each month. In the United States almost all families pay for housing in some form every month.

- **How much can a family afford to spend on housing?**

Wealthy people can certainly spend a lot on housing.

In general, however, economists consider housing to be affordable if a family spends no more than 30 percent of its income on housing. For example, if a family earns \$2,100 per month, it should spend no more than \$630 per month on rent. This leaves enough money to cover the other monthly costs in a household budget.

- **What do housing costs consist of?**

1. **Rent or mortgage:**

Most families pay either rent or mortgage for their homes, but not both.

- **Rent:** Rent is money you pay to a landlord each month to live in an apartment or house that is owned by the landlord.
- **Mortgage:** When you are ready to buy a house or a condominium, you can either pay the full price right away or get a loan from a bank to buy it. This loan is called a mortgage. Most people in the United States get a mortgage loan from a bank to buy a home. You must pay back a small part of the mortgage loan each month to the bank.

2. **Utilities:**

Utilities are services and things you use as part of living in your home. They include things like electricity, water, phone service, and trash pick-up. You pay for utilities whether you own or rent a home.

3. **Other fees:**

Other things you need to pay for include keeping the home in a good living condition. This means costs like repairing things that break, keeping any landscaping clean, and keeping the outside of the building weatherproof. A household may pay these costs when they occur, or pay a monthly fee to a homeowners association to take care of these items.

When Housing Becomes Unaffordable

In the past few decades it has become harder and harder for middle and lower class families to pay for a place to live. Why has housing become so hard for people to afford?

Rising home prices:

If a town or city grows quickly, there are a large number of people looking for a place to live and not enough homes for sale or apartments for rent. When this happens, the prices of homes rise.

For example, in Seattle the growth of the Microsoft Corporation attracted many new businesses and people to the area. Because there were many more people looking for places to live and not enough houses, condominiums, or apartments, the price to buy or rent a home went up.

When home prices go up, people who earn high salaries will still be able to buy a home or find a place to rent. But people who have middle-paying jobs (including community serving jobs such as teachers, nurses, police officers, etc.) or lower paying jobs will have more difficulty finding a place they can afford to live.

Few simple low-priced homes:

In the past decades, companies that build housing have focused on building more extravagant, expensive homes rather than less expensive homes. Also, many landlords have converted simple apartments into fancier, more expensive apartments. As a result, there is not a large supply of inexpensive housing. At the same time, the number of lower income families has increased.

The number of low-cost places to live has not kept up with the number of lower income families. When the cost of renting or buying a home increases, middle to lower income families suffer. They will have trouble finding a place where they can afford to live. If they have to spend more than 30 percent of their income on housing costs, the families end up spending less on other necessary items like food and clothing.

Understanding median

What does “median” mean?

If you have a group of numbers and you put them in order from smallest to largest, the number in the middle is the median of that group of numbers.

What does “median household income” (MHI) mean?

The U.S. government gathers information on how much money households in the United States earn each year (“household income”). If you put all the household incomes

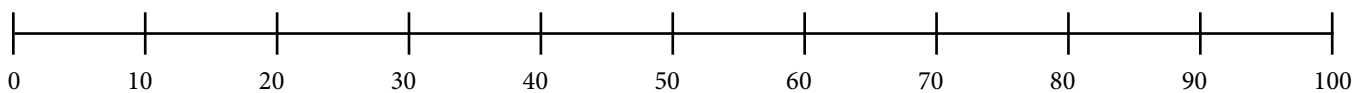
in order from smallest to largest, the one that is in the very middle of the group is the median household income. Half of the households earn more than the MHI, and half of the households earn less. MHI is one way to show what a typical American household earns in a year.

Directions:

For each of the problems below, circle the median number and plot the numbers on the line graph. When you plot the line graph, plot the median number in red so it is easy to identify.

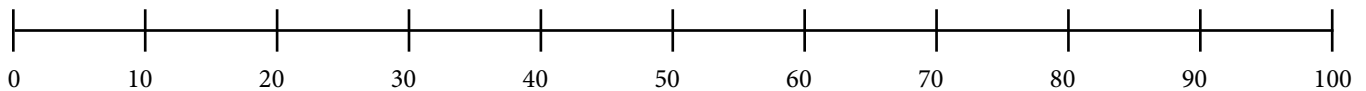
1.

Data Points	2	3	46	47	49
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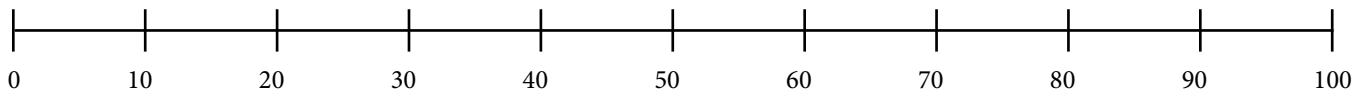
2.

Data Points	4	7	46	78	82
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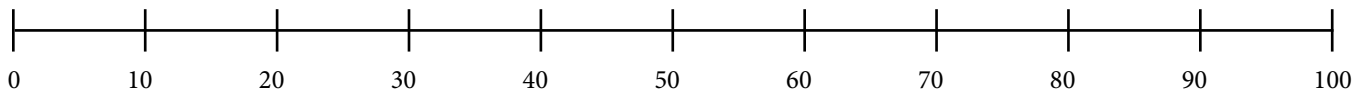
3.

Data Points	43	45	46	78	87
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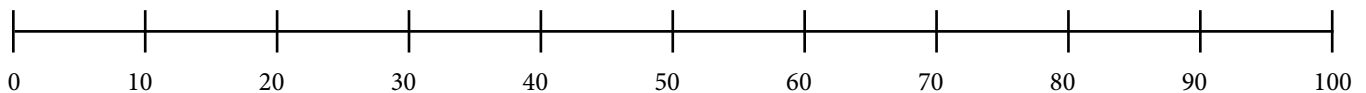
4.

Data Points	4	8	12	46	47
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5.

Data Points	38	42	46	55	96
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Questions:

1. When the data points are spaced on a number line, is the median number always located at the midpoint between the smallest and largest data points?
2. Is the median number always in the middle of the data points?

Understanding median

What does "median" mean?

If you have a group of numbers and you put them in order from smallest to largest, the number in the middle is the median of that group of numbers.

in order from smallest to largest, the one that is in the very middle of the group is the median household income. Half of the households earn more than the MHI, and half of the households earn less. MHI is one way to show what a typical American household earns in a year.

What does "median household income" (MHI) mean?

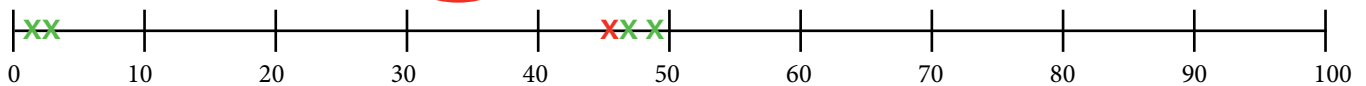
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Directions:

For each of the problems below, circle the median number and plot the numbers on the line graph. When you plot the line graph, plot the median number in red so it is easy to identify.

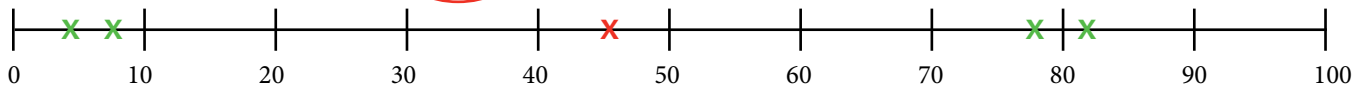
1.

Data Points	2	3	46	47	49
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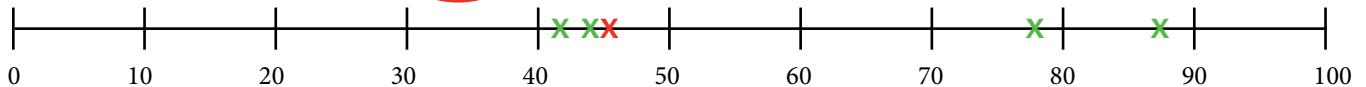
2.

Data Points	4	7	46	78	82
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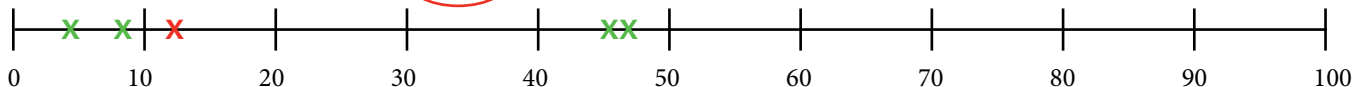
3.

Data Points	43	45	46	78	87
-------------	----	----	----	----	----



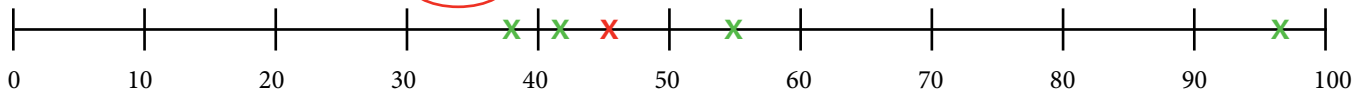
4.

Data Points	4	8	12	46	47
-------------	---	---	----	----	----



5.

Data Points	38	42	46	55	96
-------------	----	----	----	----	----



Questions:

1. When the data points are spaced on a number line, is the median number always located at the midpoint between the smallest and largest data points?

No

2. Is the median number always in the middle of the data points?

Yes

Can you afford the rent?

Mr. and Ms. Median live in the town of Housingland.

Their family income is \$46,000 per year. In terms of income, they are in the middle of all the families, or households, in Housingland. This means half of the households in their town earn less than they do, half of the households earn more.

Mr. and Ms. Median are good friends with two families that live nearby. These families have very different incomes.

- The Fiftypercent family earns half of what the Medians earn. This means they earn \$23,000 per year.
- The Hundredfiftypercent family earns 1.5 times what the Medians earn. They earn \$69,000 per year.

Some other families that live in the neighborhood include the Seventyfivepercent family and the Hundredtwentyfivepercent family.

What is each family's montly income?

First determine how much money the different families earn.

Problem 1:

Can Mr. and Ms. Median “afford” to pay the average rent for a two-bedroom apartment?

Remember, amount they can afford to spend on housing = $30\% \times$ Monthly household income
Show your work here:

What can Mr. and Ms. Median afford to spend on housing each month? _____

Can Mr. and Ms. Median afford to pay the \$900 average rent?

YES or NO

Remember Mr. and Mrs. Median's income is in the middle of all household incomes in their town.

Family	Income per Year	Income per Month
Mr. and Ms. Median	\$46,000	\$3,833
Hundredfiftypercent Family		
Fiftypercent Family		

Which of these families can “afford” to rent a two-bedroom apartment?

Use the following information in determining your answer¹.

- The average rent for a two-bedroom apartment in the United States is \$900 per month.
- Housing is considered “affordable” if you spend 30 percent or less of your monthly income on housing costs.

¹ Based on 2005 figures from 2005 U.S. Census.

Problem 2:

Can the Hundredfiftypercent family “afford” to pay the average rent for a two-bedroom apartment?

Remember, amount they can afford to spend on housing = $30\% \times$ Monthly household income

Show your work here:

What can the Hundredfiftypercent family afford to spend on housing each month? _____

Can the Hundredfiftypercent family afford to pay the \$900 average rent?

YES or NO

Problem 3:

Can the Fiftypercent family “afford” to pay the average rent for a two-bedroom apartment?

Remember, amount they can afford to spend on housing = $30\% \times$ Monthly household income

Show your work here:

What can the Fiftypercent family afford to spend on housing each month? _____

Can the Fiftypercent family afford to pay the \$900 average rent?

YES or NO

Problem 4:

The Seventyfivepercent family earns \$2,875 per month.

What can this family afford to spend on housing each month?

Can the Seventyfivepercent family afford to pay the \$900 average rent?

YES or NO

Problem 5:

The Hundredtwentyfivepercent family earns \$3,066 per month.

What can this family afford to spend on housing each month?

Can the Hundredtwentyfivepercent family afford to pay the \$900 average rent?

YES or NO

Teacher's copy

Can you afford the rent?

Mr. and Ms. Median live in the town of Housingland.

Their family income is \$46,000 per year. In terms of income, they are in the middle of all the families, or households, in Housingland. This means half of the households in their town earn less than they do, half of the households earn more.

Mr. and Ms. Median are good friends with two families that live nearby. These families have very different incomes.

- The Fiftypercent family earns half of what the Medians earn. This means they earn \$23,000 per year.
- The Hundredfiftypercent family earns 1.5 times what the Medians earn. They earn \$69,000 per year.

Some other families that live in the neighborhood include the Seventyfivepercent family and the Hundredtwentyfivepercent family.

What is each family's monthly income?

First determine how much money the different families earn.

Remember Mr. and Mrs. Median's income is in the middle of all household incomes in their town.

Family	Income per Year	Income per Month
Mr. and Ms. Median	\$46,000	\$3,833
Hundredfiftypercent Family	\$69,000	\$5,750
Fiftypercent Family	\$23,000	\$1,917

Which of these families can "afford" to rent a two-bedroom apartment?

Use the following information in determining your answer¹.

- The average rent for a two-bedroom apartment in the United States is \$900 per month.
- Housing is considered "affordable" if you spend 30 percent or less of your monthly income on housing costs.

Problem 1:

Can Mr. and Ms. Median "afford" to pay the average rent for a two-bedroom apartment?

Remember, amount they can afford to spend on housing = 30% x Monthly household income

Show your work here:

$$X = 30\% \times 3833$$

$$X = 0.3 \times 3833$$

$$X = 1149.9$$

$$\text{Round to } X = 1150$$

What can Mr. and Ms. Median afford to spend on housing each month? \$1,150 per month

Can Mr. and Ms. Median afford to pay the \$900 average rent?

YES or NO

Problem 2:

Can the Hundredfiftypercent family “afford” to pay the average rent for a two-bedroom apartment?

Remember, amount they can afford to spend on housing = 30% x Monthly household income

Show your work here:

$$X = 30\% \times 5750$$

$$X = 0.3 \times 5750$$

$$X = 1725$$

What can the Hundredfiftypercent family afford to spend on housing each month? \$1,725 per month

Can the Hundredfiftypercent family afford to pay the \$900 average rent?

YES or NO

Problem 3:

Can the Fiftypercent family “afford” to pay the average rent for a two-bedroom apartment?

Remember, amount they can afford to spend on housing = 30% x Monthly household income

Show your work here:

$$X = 30\% \times 1917$$

$$X = 0.3 \times 1917$$

$$X = 575.1$$

$$\text{Round to } X = 575$$

What can the Fiftypercent family afford to spend on housing each month? \$575 per month

Can the Fiftypercent family afford to pay the \$900 average rent?

YES or NO

Problem 4:

The Seventyfivepercent family earns \$2,875 per month.

What can this family afford to spend on housing each month?

$$X = 30\% \times 2875$$

$$X = 0.3 \times 2875$$

$$X = 862.5$$

$$\text{Round to } X = 863$$

Can the Seventyfivepercent family afford to pay the \$900 average rent?

YES or NO

Problem 5:

The Hundredtwentyfivepercent family earns \$3,066 per month.

What can this family afford to spend on housing each month?

$$X = 30\% \times 4791$$

$$X = 0.3 \times 4791$$

$$X = 1437.3$$

$$\text{Round to } X = 143$$

Can the Hundredtwentyfivepercent family afford to pay the \$900 average rent?

YES or NO

Teacher's copy

What percent do we spend on housing?

Assume each of the families below pay \$900 per month to rent a place a live.

What percent of their income does each of the following families spend on housing?

Family	Monthly Income	Percent Spent on Rent
Mr. & Ms. Median	\$3,833	23%
Hundredfiftypercent Family	\$5,750	16%
Fiftypercent Family	\$1,917	47%
Hundredtwentyfivepercent Family	\$4,791	19%
Seventyfivepercent Family	\$2,875	31%

Problem 1:

Mr. and Ms. Median

$$\text{Rent} = \text{Percent} \times \text{Monthly Income}$$

$$900 = \text{Rent} \times \text{Monthly Income}$$

$$900 = Y \times 3,833$$

$$900 / 3,833 = Y$$

$$0.23 = Y$$

$$Y = 23\%$$

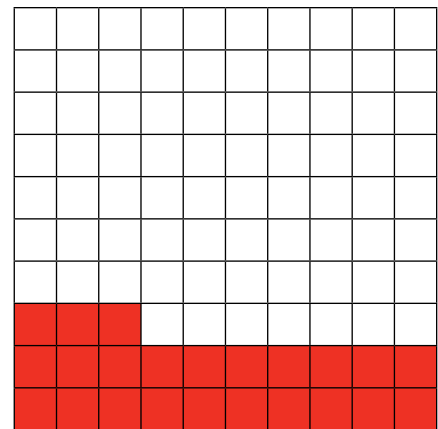
What percent of their income do Mr. and Ms. Median need to use to pay \$900 per month rent?

23%

Is this "affordable" (less than 30 percent of their income)?

YES or NO

Color in the number of boxes that equal the percent of their income the Medians need to spend on \$900 rent each month.



Problem 2:**Hundredfiftypercent Family**

Rent = Percent x Monthly Income

900 = Rent x Monthly Income

$$900 = Y \times 5,750$$

$$900/5,750 = Y$$

$$0.156 = Y = 0.16$$

$$Y = 16\%$$

What percent of their income does the Hundredfiftypercent family need to use to pay \$900 per month rent?

16%

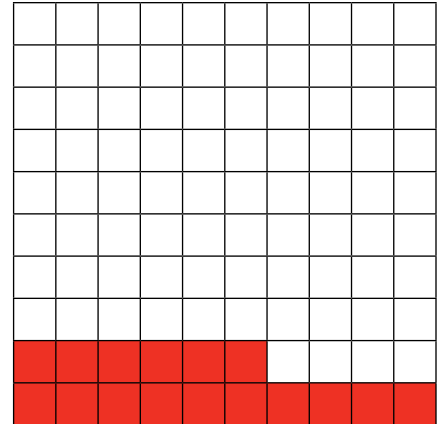
Is this “affordable” (less than 30 percent of their income)?

YES

or

NO

Color in the number of boxes that equal the percent of their income that this family needs to spend on \$900 rent each month.

**Problem 3:****Fiftypercent Family**

Rent = Percent x Monthly Income

900 = Rent x Monthly Income

$$900 = Y \times 1,917$$

$$900/1,917 = Y$$

$$0.469 = Y = 0.47$$

$$Y = 47\%$$

What percent of their income does the Fiftypercent family need to use to pay \$900 per month rent?

47%

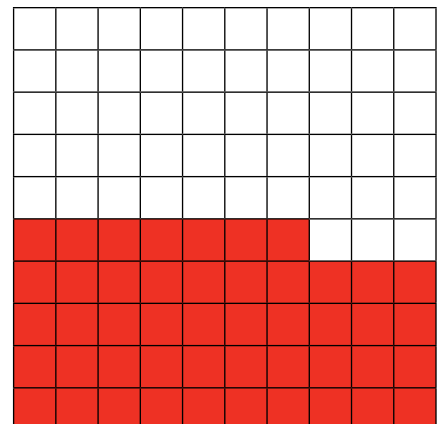
Is this “affordable” (less than 30 percent of their income)?

YES

or

NO

Color in the number of boxes that equal the percent of their income that this family needs to spend on \$900 rent each month.



Problem 4:

Hundredtwentyfivepercent Family

Rent = Percent x Monthly Income

900 = Rent x Monthly Income

$$900 = Y \times 4,791$$

$$900/4,791 = Y$$

$$0.187 = Y = 0.19$$

$$Y = 19\%$$

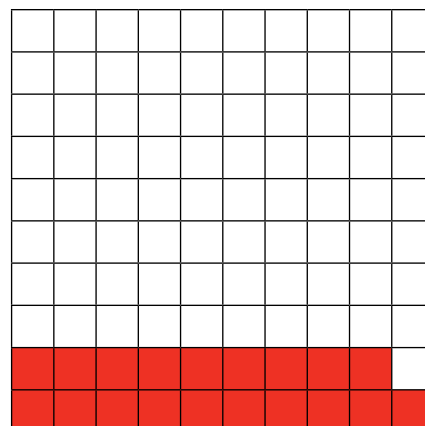
What percent of their income does the Hundredtwentyfivepercent family need to use to pay \$900 per month rent?

19%

Is this “affordable” (less than 30 percent of their income)?

YES or NO

Color in the number of boxes that equal the percent of their income that this family needs to spend on \$900 rent each month.



Problem 5:

Seventyfivepercent Family

Rent = Percent x Monthly Income

900 = Rent x Monthly Income

$$900 = Y \times 2,875$$

$$900/2,875 = Y$$

$$0.313 = Y = 0.31$$

$$Y = 31\%$$

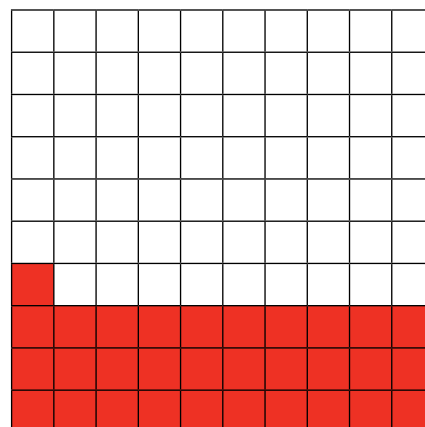
What percent of their income does the Seventyfivepercent family need to use to pay \$900 per month rent?

31%

Is this “affordable” (less than 30 percent of their income)?

YES or NO

Color in the number of boxes that equal the percent of their income that this family needs to spend on \$900 rent each month.



Housing in your community

Look up housing data for your state and county by going to the National Low Income Housing Coalition report entitled “Out of Reach.” Go to www.nlihc.org or try <http://www.nlihc.org/oor/oor2008/?CFID=27816722&CFTOKEN=19793713>.

Get the following data:

Fair Market Rent for a two-bedroom apartment in your county: _____
(Fair Market Rent is a term in real estate that indicates the amount of money that a given property would command if it were open for leasing at the moment.)

Area Median Income for your county: _____

Remember, housing is considered “affordable” for a family if the family spends 30 percent or less of its income on housing costs each month.

1. Can a family that earns Median Household Income (MHI) in your county afford to rent an apartment there?

Show your work below:

2. Can a family that earns 50 percent of MHI in your county afford to rent an apartment in your county?

Show your work below:

3. Can a family that earns 75 percent of MHI in your county afford to rent an apartment in your county?

Show your work below:



Inequality in Latin America

In this lesson students read about how colonialism in Latin America, and in particular in Guatemala, resulted in economic and social inequalities that are still reflected in contemporary Latin American society. They then discuss the prevalence of poverty in Guatemala and what it means to live below the poverty line.

Objectives:

Students will:

- Explore how struggles of indigenous peoples in Latin America fit into the historical context of colonialism and independence.
- Read about inequity and contemporary civil conflict in Guatemala.
- Define “poverty” and discuss what it means to live below “the poverty line.”

Content Standards:

Geography

- Places and regions
 - Analyze the physical and human characteristics of places.
 - Discover how people create regions to interpret earth’s complexity.
- Human systems
 - Learn how the forces of cooperation and conflict among people influence the division and control of earth’s surface.

Language arts

- Read a wide range of texts to build an understanding of the cultures of the world.

Materials:

- “Inequality in Guatemala”
- “Living below the poverty line”

Preparation:

Assign students to read the article “Inequality in Guatemala” before teaching this lesson.

Procedure:

1. Identify geographic locations on a world map.

Have your students locate the following places on a world map:

- Guatemala.
- The three countries that border Guatemala (Mexico, Belize, and Honduras).
- The reaches of the Mayan Empire at the height of its power.
- The region of Latin America.
- Spain.

2. Discuss the history of colonialism in Latin America focusing on Guatemala.

The article “Inequality in Guatemala” has questions printed that address the larger context of colonialism in Latin America. Start discussing the article by addressing these questions. The discussion will help students understand some of the general background about colonialism. While the information in this article is specific to Guatemala, it reflects the general economic and political history of Latin America as a whole. Thus, discussion of the article provides you with an opportunity to use the information about Guatemala as a common example of the Latin American experience under colonialism.

3. Discuss the prevalence of poverty in Central America.

Discuss how poverty is measured. Start by asking students, “What is poverty?” Listen to their responses. Provide them with the World Bank’s explanation of poverty:

What is poverty?

Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read.¹

Explain that there are many ways of measuring poverty. The term “**poverty line**” refers to the minimum level of income that a person needs to feed, clothe and

shelter himself or herself in a given country. The World Bank measures how many people in a country live on an equivalent of US \$1 per day and US \$2 per day as one measurement of poverty in a country.

Distribute the reading, "Living below the poverty line." Explain that over 75 percent of the population of Guatemala lives in poverty. Many other countries in Latin

America have similar rates of poverty. This article gives students an idea of the types of problems a majority of people in Latin America face in their daily lives. Read the article aloud in class. Discuss the questions at the end of the article. Explain that in the next few days the class will be examining poverty in Latin America through the issue of substandard housing.

Inequality in Latin America

Where is Guatemala?

Guatemala is a country just south of Mexico that is approximately the size of Tennessee. It is a mountainous country that lies between the Pacific Ocean and the Caribbean Sea, so you can find both mountains and beaches there. Guatemala also has 37 volcanoes, four of which are currently active.



Who lives in Guatemala?

There are three main ethnic groups in Guatemala. About half of Guatemala's population are native, or **indigenous** people. They descended from the Mayan Empire that ruled much of Latin America. These people are referred to either as indigenous people or Mayans. The second largest group of people in Guatemala are Ladinos (also called Mestizos). Ladinos are people who can trace their ancestry to both Spanish and indigenous people. Most of the other people in Guatemala are of European descent, primarily of Spanish blood. The official language is Spanish, although 40 percent of the population speak one of the several Mayan languages.

Guatemala is one of the poorest countries in **Latin America**. The wealth that the country does have is

distributed very unevenly. A small, elite group of people own most of the resources in Guatemala, including the best land for growing crops located on the Pacific coast of the country. The rest of the population earns much smaller amounts of income, with a large percentage earning extremely small amounts each year. In both the cities and rural areas, many families live in poverty conditions. This means that they may live in homes that are overcrowded, have dirt floors and leaky roofs, and may not have electricity or running water.

Colonialism and inequality.

Latin America has many **natural resources**, including lands that are good for growing crops. Guatemala's main products are coffee, sugar, bananas and flowers. Despite this wealth of agricultural production, however, most Guatemalans remain very poor. Over half of the population lives below the poverty line.

Why are so many people in Guatemala living in poverty? One of the main reasons is the unequal spread of wealth and resources. This is the result of the colonial history that is common to all Latin American countries.

Christopher Columbus first set foot in the new world in 1492. His voyage to the Americas set off an effort by Spain to conquer the new world. The Spaniards sailed across the Atlantic Ocean and unwittingly brought diseases that were new to America. These diseases killed almost one third of the indigenous population in many regions of the Americas. As a result, the indigenous people's ability to fight the Spanish conquistadors was significantly weakened. Spain conquered

What does the word "indigenous" mean?

What area is considered to be Latin America?

Where did the name "Latin America" come from?

What are "natural resources?"

Why are natural resources important to a country?

Do you know where the bananas you eat come from?



CAROLINE STARBRID

Indigenous woman in the marketplace.

much of the area now known as Latin America. They set up a system of government that put Spaniards in control of the land and people. They claimed the territories in Latin America as colonies, took the natural resources that they found there, and shipped them to Europe. Under this system, the indigenous people were deprived of their lands and their freedom.

Spain ruled Guatemala for almost three hundred years. In 1821, Guatemala successfully declared independence from Spain. Despite independence, the power structure in Guatemala did not change very much. People of Spanish blood were still in control of the land and the government. Ladinos were next in line in terms of wealth and power. At the bottom of the economic and political system were the indigenous people. The rulers of Guatemala viewed the indigenous culture as inferior to European culture. The government created laws that allowed those of European descent to **exploit** the indigenous people.

Who owns the land?

The wealthy in Guatemala grew rich by growing agricultural products to sell to other countries. In the early 20th century, coffee became Guatemala's largest **export** product. German companies working with wealthy Guatemalans owned most of the coffee plantations. Fruit also became a large **export** crop. The United Fruit Company was a U.S. corporation that owned a vast amount of land in Guatemala that was good for farming (the company later became Chiquita Brands International). Government policies forced the indigenous people to work for little pay on the coffee and banana plantations. These large corporations, however, did not use all the land that they owned. Instead, they only grew their products on a small fraction of the land and left the

rest unused. However, they did not allow the indigenous population to use the remaining land to grow food to feed themselves.

In the 1940s and 1950s, a reform party gained control of the government. This new government tried to change policies in order to improve life for the majority of people in Guatemala, who were very poor. The government spent more money on education and health care and passed laws protecting labor organizations and small farmers. The government also tried to redistribute the land so that even the poor could own some land. In 1950, 2 percent of the population controlled almost 75 percent of the land in Guatemala that was suitable for growing crops.

The government passed a law to redistribute the land. The law would have broken up big plantations, taken away the land that was not being cultivated, and distributed those lands to the poor. The wealthy landowners and the foreign corporations were not happy with the idea of redistributing land. They supported an overthrow of the reform government and successfully prevented the redistribution of the land.



CAROLINE STARBRID

Colonial square in Antigua, Guatemala.

What is a "colony" and what is "colonialism?"

What does it mean to "exploit" something or someone?

What is an "export?"

The civil war

After the overthrow of the reform government, power was firmly back in the hands of the wealthy. Peasants and laborers once again faced discriminatory and repressive laws. Groups of poverty stricken Guatemalans formed guerilla groups to fight with government troops for improved conditions for the poor. This started a period of civil war that lasted over 30 years. During the civil war many peasant villages were destroyed and many Guatemalans were killed and tortured. Hundreds of thousands of indigenous people fled the violence to become refugees in Mexico or the United States.

The end of war

A peace agreement was signed in 1996 to end the civil war. There have been some improvements in life for the poor, but there are still a large number of impoverished people in both rural and urban areas of Guatemala. Today, 75 percent of the population of Guatemala lives in poverty.

What is a civil war?

What does it mean to describe a law as “repressive?”

What is a guerilla group? (The term comes from the Latin word, “guerra,” which means war.)



CAROLINE STARBUCK

Farmland and mountains in Guatemala.

Questions to consider:

1. What evidence can you find in the article to show that wealth in Guatemala was and still is unequally distributed?
2. How is Guatemala's colonial and post-colonial history similar to that of most Latin American countries?

Living below the poverty line

What is it like to live in poverty in Guatemala?

About half the people in Guatemala live on less than \$2 per day. There are many problems that people living in such poverty face, including the following:

Education:

In countries where many people live in poverty, there is generally a high illiteracy rate. That means many people in the country are not able to read and do not have much education. This is because they may not have schools nearby, or because the children need to work to support the family and do not have time to go to school. If you don't get a good education and cannot read, it is difficult to earn enough money to support yourself and your family. In Guatemala, 40 percent of the population is illiterate.

Jobs:

In a country like Guatemala, it is difficult to find high paying jobs. Most people living in rural areas work in agriculture, finding jobs on coffee and banana plantations. They hopefully make at least enough money to feed their families. However, the coffee industry has recently faced serious problems and many people working on coffee plantations lost their jobs.

Nutrition:

People living in poverty are often malnourished. This means they don't eat enough food often because they cannot afford it, and therefore, don't get the nutrients a person needs to be healthy. This makes them more likely to catch diseases, less able to do hard, physical labor, and have less energy to accomplish other tasks.

Health:

People living in poverty are far more likely to get sick than wealthier people due to problems like bad housing and poor nutrition. They also have a harder time getting medical care often because they can't afford to pay for medical care or because they live in a small village in the countryside and the nearest health clinic is several days walk away. It may also be because they do not have

enough education to understand when getting medical care can help prevent or cure a health problem.

Housing:

People living in poverty often live in poor housing conditions. Other terms for this are "sub-standard housing" or "poverty housing." This means the homes are harmful or dangerous in several ways:

- The poor often have last choice of where their homes are located. Thus, substandard housing is often found in dangerous locations, for example in an area where mudslides or floods often occur.
- The physical condition of the home is usually not good. Homes may have dirt floors and leaky roofs and bad ventilation systems.
- In rural areas, people may not have a separate stable for their animals, so the animals have to shelter in the house with them. In many rural homes, the animals live on the first floor and a second floor is built above out of wood where the people sleep. Having livestock animals such as cows and goats living in the same house can lead to sanitation and health problems.
- The homes often have no plumbing. With no bathrooms and no running water in the kitchen, it is harder to keep oneself and the food clean. This makes it easier for bacteria and viruses to stay in the home and infect the people living there.
- The homes often have no electricity. This means there is less opportunity for people to work or study, and there is no heat during cold winter months.
- The homes are usually overcrowded. Large numbers of relatives crowd into small homes. With many people sharing tight spaces, the chance of passing diseases from one person to another rises dramatically.
- The neighborhoods may be considered unsafe. There may be violence in the region and poor neighborhoods usually offer little or no protection from such violence.

Questions about living in poverty in Guatemala:

1. What does it mean to live below the poverty line?
2. How much money do you spend in a day? What does your family purchase? Imagine what it would be like to have only \$2 a day to get everything you need to survive. How would your life be different?
3. List ways in which your home is probably different from that of a substandard home in Guatemala.
4. How are other problems of poverty related to substandard housing? How might better housing help address these problems?



Substandard housing in Guatemala

In this lesson students learn about poverty housing in Guatemala. They then research links between substandard housing and other economic factors and present this information (using internet technology) to their peers.

Objectives:

Students will...

- Read about poverty in Latin America (e.g., poverty in Guatemala).
- Research the interrelationship between housing, health, education and other economic factors.
- Utilize technology to share their research and opinions (by creating a multimedia slideshow). They will also respond to and critique other students' presentations (by participating in the slideshows of peers). (Optional)

Content standards:

Geography

- Places and Regions
 - Analyze the physical and human characteristics of places.
 - Discover how people create regions to interpret earth's complexity.
- Human systems
 - Learn how the forces of cooperation and conflict among people influence the division and control of earth's surface.

Language arts

- Read a wide range of texts to build an understanding of the cultures of the world.
- Conduct research on issues and interests. Gather, evaluate, and synthesize data from a variety of sources to communicate their discoveries in ways that suit their purpose and audience.
- Use a variety of technological and informational resources to gather information, such as voice thread, to create and communicate knowledge.
- Participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

Materials:

- "Interview with Gloria Garcia"
- "Creating your voice thread"
- "Grading rubric for voice thread"
- "The impact of poverty housing" (Fact sheets Nos. 1-7)

Preparation:

You have the option of having your students create voice threads about poverty housing. This activity can also be done through Power Point or a poster presentation.

*Although this lesson encourages subscription to the voice thread service, HFHI does not endorse or take responsibility for the performance of this product.

- A voice thread is a platform for people to make presentations using written text, audio commentary, and visuals. Others in the class review the voice thread and share their comments with the author and the rest of the class.
- If you choose to have your students create voice threads, you will need to register for a voice thread account at <http://voicethread.com/pricing/k12/>. You should register for a class account (approximately \$10 per month). This provides a secure network where you control who has access to view the voice threads that your students create.
- You should give your students at least one week to build their voice threads. This gives them time to get familiar with the technology platform.

The day before teaching this lesson, distribute "Interview with Gloria Garcia" for students to read as homework.

Explain that the interview is about what it is like to live in poverty and in substandard housing conditions in Latin America. Briefly introduce the term "substandard housing" before the students read the article (see Step 1 in the Procedure).

Procedure:

1. **Discuss what it is like to live in poverty in Latin America.** Review the meaning of substandard housing (poverty housing) with your students.

What is substandard housing?

Substandard housing means housing that is inadequate at sheltering people from bad weather, pests and other dangers. The housing may also be unsanitary and harmful to people's health. There are people all over the world who live in substandard housing. Substandard homes are often made of cardboard, scraps of metal, and have no floors. The people usually don't even own the land, so the owners can kick them off the land at any time. Living in substandard housing is a major facet of living in poverty.

Discuss your students' reactions to the "Interview with Gloria Garcia." Use the discussion questions at the end of the article to introduce how housing affects people's health, education and income. The students will explore this in further detail as they prepare their multimedia slideshows.

2. Show a sample voice thread.

Explain to the class that they will be researching more about Guatemala and presenting their information to the class in the form of a multimedia slideshow. Show the students a sample voice thread. You can either create your own multimedia slideshow or you can use the sample voice thread on "Alleviating poverty housing in Guatemala" at www.voicethread.com/share/303797.

3. Living below the poverty line.

Tell students that they will be creating slideshow presentations on what it is like to live in poverty in contemporary Guatemala. Their presentation should highlight how health, housing and education are interrelated. You can choose to have the students work independently or in pairs.

Suggested Topics for Slideshows

- The Impact of Poverty Housing: Poverty in Guatemala
- The Impact of Poverty Housing: A Strong Roof
- The Impact of Poverty Housing: Plumbing and Electricity
- The Impact of Poverty Housing: A Solid Floor
- The Impact of Poverty Housing: Overcrowding
- The Impact of Poverty Housing: Health and Poverty
- The Impact of Poverty Housing: Education and Poverty

Review and assign the topics. Distribute the appropriate fact sheet to each student (or student pair) based on the topic you have assigned them. Encourage the students to use the information on their fact sheet and present it using written text, audio commentary and visuals that make sense to them. *You may allow the students to build their voice thread based on the information in the fact sheet alone, or require them to do additional research on the topic.*

4. Provide instructions on creating their presentation.

If you choose to use the voice thread technology: Distribute the handout "Creating your voice thread." Review the template for creating a voice thread. Tell the students they should fill in this template while designing their voice thread. Also distribute the grading rubric to show students what they should include in their voice thread.

Review the instructions on commenting on someone else's voice thread. Tell students you will be grading them not only on their own voice thread, but on their participation in other people's voice threads.

There are photos on www.habitatyouthprograms.org that students can use to create their voice threads. You may also have students find photos or graphics through other sources. Other Habitat Web sites that may have useful information or photos include www.habitat.org/intl/lac/86.aspx and www.habitatguate.org.

5. Review some student slideshows in class.

Give the students at least a week to complete the assignment so they have time to play with the technology. If your students have access to a computer and the internet at home, they can create their slideshows outside of class time. If they do not have access to the internet outside of school, you will have to allot class time for them to create the slideshows.

When they have completed their slideshows, review some of the more interesting ones in class and have a follow up discussion on the issues raised.

Be sure to emphasize how health, housing, education and other factors are interrelated. The fact sheets provide information on these interrelationships so that students will be able to highlight these interrelationship in their slideshows.

Invite parents to view students' voice threads, providing them with directions on how they can access the secure network.

Interview with Gloria Garcia



CAROLINE STARBIRD

Gloria Garcia

How many bathrooms do you have at home? Can you imagine having to share one bathroom with 15 people? That's what Gloria Garcia and her family had to do.

Gloria Garcia lives in Esperanza, a small town in Guatemala. Gloria Garcia, her husband, and their three children lived in a one-room house for eight years. There was no indoor bathroom, just a hole in the ground outside that they shared with neighbors.

Gloria Garcia and her family were not comfortable in their one-room house. The floor was made out of dirt. They didn't have any windows. They had no actual doors to the outside because they could not afford to buy any. Instead, the house was always open to the outside. They had to do all their activities in their one room – cook, work, study, eat, and sleep. “We were very squeezed in that house,” said Gloria Garcia. “It was so hard for our family of five to live in just one room.”

The town of Esperanza is in the mountainous highlands of Guatemala. There are two seasons – the rainy season and the dry season. During the rainy season it rains almost every day. At night it can get very cold (about 8 degrees celcius or 45 degrees fahrenheit), although not cold enough to snow.

“Living there was very uncomfortable,” said Gloria Garcia. “During the rainy season the rain would soak into the dirt floor. The floor would stay damp for six months. It would get so cold that my feet would hurt to stand on it. The cold made it hard to get my work done. It was stressful because I needed to complete my work in order to earn money. Also with the cold my children would often get sick.”

Now Gloria Garcia and her family have a new house. They were able to build this house with a loan from Habitat for Humanity in Guatemala. It is a small house with just four rooms. Each room has a window and can only fit a few pieces of furniture. It is a very simple house, but “It is a huge improvement from before,” said Gloria Garcia.

Now, instead of a dirt floor, they have a floor made of concrete. This means that during the rainy season, the floor stays dry. “This helps us stay healthy. Before, when we had a dirt floor, the children would get sick a lot. They would get colds and bad coughs and sore throats - especially my oldest son. He would get sick at least once a month and have to miss school. It wasn't good for him to miss so much school. Now

*Names of family members have been changed



CAROLINE STARBIRD

This is Gloria Garcia's old house. The walls are not sturdy and allow in cold air and pests, and the dirt floor can stay wet for the entire six months of the rainy season.



CAROLINE STARBIRD

The steep road to Gloria Garcia's house in Esperanza.

that we live in this new house, there's a big difference in his health . . . a huge difference. Now he hardly ever gets sick."

Gloria Garcia also likes that it is easy to wash her concrete floor. "This is important, especially for my youngest son who sometimes plays on the floor. Now that I can wash the floor, I can wash away germs so that he doesn't get them on his hands and into his mouth."

"Having our own bathroom is great," added Gloria Garcia. "Before, there was always a bad smell and it was dirty. I did not like cooking so close to such bad smells and unsanitary conditions. We are a lot healthier now that we have a bathroom," she said.

Other improvements include solid walls, windows and doors, and a strong roof. Having solid walls helps to keep out stray animals or pests like rats, snakes, and bugs. Having windows and a door to the outside means the family can open them for fresh air or close them to keep out the cold. And a solid roof means the rain does not leak into the house. Having a warm, dry place to live is a simple thing, yet has made such a big difference to this family.

Gloria Garcia is also happy to have a little more space. "Now my sons have a quiet place to do their homework. I can see that they are improving in school."

Gloria Garcia hopes to save money to make even more improvements to her house. "I'd like to install wood ceilings in all the rooms. This will provide insulation to keep them even warmer during cold weather. I'd also like to save money to buy more furniture."

"I love my house," said Gloria Garcia with a smile. "My family feels safe and healthy here. I'm so thankful for Habitat for Humanity," she continued, "There's nothing like having your own home."

DISCUSSION QUESTIONS

1. How did having a sturdy house affect the health of Gloria Garcia's family?
2. How did having a sturdy house affect the education of Gloria Garcia's family?
3. How did having a sturdy house affect Gloria Garcia's income?
4. How would you feel sharing a bathroom with 15 people?



CAROLINE STARBRID

Gloria Garcia's new house is simple but sturdy.



CAROLINE STARBRID

Gloria Garcia uses the kitchen as a place for her boys to do their homework.



CAROLINE STARBRID

Gloria Garcia, her husband, and two of her sons stand outside their home.

Creating a Voice Thread

You will be creating a voice thread about Guatemala. Use the template to plan the design of your voice thread. Refer to the grading rubric to see what is important to include in your voice thread.

What is a voice thread?

A voice thread is an online presentation that combines photos, voice, and text. A voice thread provides you with an electronic platform to make a presentation on a topic and allows everyone else in class the opportunity to view it and share their comments with you and the rest of the class.

How do I design my voice thread?

Use the template on the next page to decide what photos and text you will put on your slides, and what order your slides will go in. Use the last column to plan out what things you need to mention when adding in your audio commentary. Make sure the order of the slides make sense. Also be sure to plan how you will be asking your audience to participate in your voice thread – for example, will you ask them questions about the photos, or ask for their opinions on a specific issue that you raise in a slide?

How do I comment on someone else's voice thread, and how do other people comment on mine?

A voice thread is like throwing a rock into a pond – your presentation is the rock hitting the water, and that causes viewers to respond or think of related ideas and experiences, like ripples spreading around the rock. Viewers then add their comments or questions to your voice thread.

To get a good audience response, be sure to include detailed information in your presentation. A vague statement like “People in Guatemala are very poor” is not as interesting as specific information like “It would take a year for an average Guatemalan to earn what an average American earns in a week.” You could also point out some interesting details in a photo that you have included on a slide. Asking the audience directly for their opinion on a specific subject you have brought up is another way to get responses.

If you are viewing another person's voice thread, be sure to add comments when the slide makes you think of something interesting. For example, you might say that you agree or disagree strongly with what the slide says, or that it reminds you of an experience you once had, and then explain that experience. It's always interesting to see or hear other people's reactions to the presentation.

Design template for voice thread

Slide #	Purpose of this Slide	Photo	Text	Audio Commentary
1 Introduction				
2 Topic One				
3 Topic One				
4 Topic Two				
5 Topic Two				
6 Topic Three				
7 Topic Three				
8 Conclusion				

Grading rubric for voice thread

An excellent product will include:

Introduction	A clear introduction to the overall subject on the first slide.
First Topic: (two slides per topic) _____ _____ _____ _____	<ul style="list-style-type: none"> • Photos or other visual displays that show effective images of the topic. • Clear or provocative headings that get the audience thinking about the visual displays. • Audio commentary that provides: <ul style="list-style-type: none"> — An explanation of why you chose this visual image – how it relates to the topic, and details about the image that we might not notice at first glance — Interesting statistics, data, or other information you found while researching the topic — A statement of your opinion on the information you learned about this topic. — At least one question you are posing to the audience about this topic.
Second Topic: (two slides per topic) _____ _____ _____ _____	<ul style="list-style-type: none"> • Photos or other visual displays that show effective images of the topic. • Clear or provocative headings that get the audience thinking about the visual displays. • Audio commentary that provides: <ul style="list-style-type: none"> — An explanation of why you chose this visual image – how it relates to the topic, and details about the image that we might not notice at first glance — Interesting statistics, data, or other information you found while researching the topic — A statement of your opinion on the information you learned about this topic. — At least one question you are posing to the audience about this topic.
Third Topic: (two slides per topic) _____ _____ _____ _____	<ul style="list-style-type: none"> • Photos or other visual displays that show effective images of the topic. • Clear or provocative headings that get the audience thinking about the visual displays. • Audio commentary that provides: <ul style="list-style-type: none"> — An explanation of why you chose this visual image – how it relates to the topic, and details about the image that we might not notice at first glance — Interesting statistics, data, or other information you found while researching the topic — A statement of your opinion on the information you learned about this topic. — At least one question you are posing to the audience about this topic.
Conclusion	<ul style="list-style-type: none"> • A statement of your opinion or thoughts on the overall subject. • Ideas for further thinking or action that you or your audience might take.
Audience Participation	An excellent voice thread will elicit responses from the audience. The audience should respond to something specific in each slide, including the audio commentary.

Fact sheet #1

Poverty in Guatemala

Almost two-thirds of Guatemalans live in extreme poverty¹. More than six in ten Guatemalans live on less than two dollars a day. Guatemalans also have the lowest life expectancy in Latin America, and some of the lowest education levels. The indigenous population suffers disproportionately from poverty.

Indicators of Poverty:

There are many ways to spot poverty. Three major indicators of poverty are:

- High rates of infant mortality
 - Malnutrition
 - Substandard housing.
- **What does infant mortality mean?**
Infant mortality means the number of babies out of every 1000 that die before they reach the age of one year.
 - **Why is the infant mortality rate an indicator of poverty?**
When the rate of infant mortality is high, it is a strong indicator of poverty. Guatemala has a high infant mortality rate. In 2006, the infant mortality rate was 31. This means 31 out of every 1,000 infants under age of one died. (The infant mortality rate in the United States is six) The major causes of infant deaths were treatable diseases, including:
 - Diarrhea
 - Pneumonia
 - Cholera
 - Tuberculosis

Infants from wealthier families rarely die from these diseases for two reasons. First, they are less likely to be

exposed to conditions where they would get the diseases (for example, unsanitary homes, bad ventilation systems, or overcrowding). Second, if a baby did get one of these diseases, the wealthier families would be able to find and pay for a doctor or nurse and for medicine to treat the baby.

- **What is malnutrition?**
Malnutrition is when people do not eat enough nutrients to keep their bodies healthy. Generally, malnutrition occurs when people do not get enough food to eat.
- **Why is malnutrition an indicator of poverty?**
Malnutrition does not occur among wealthy people because they can pay for an adequate supply of nutritious food for their families. Malnutrition is one of the major causes of death among children in Guatemala. According to the World Bank, “Malnutrition rates among Guatemalan children are abysmally high—among the worst in the world.”²
- **What is substandard housing?**
Substandard housing (poverty housing) is housing that is inadequate at sheltering people from bad weather, pests, and other dangers.
- **How many people live in substandard housing?**
 - Over 1 billion people worldwide live in substandard housing.
 - 40 percent of people in Guatemala live in substandard housing.
 - 75 percent of Guatemala’s rural population lives in substandard housing. Most of the rural population is of indigenous descent.
 - 80 percent of indigenous children in Guatemala live in substandard housing.

1 “Poverty in Guatemala,” 2006 by Inter-American Development Bank.

2 “Guatemalan Poverty Assessment,” by World Bank.

Fact sheet #2

A strong roof

Why is a roof important?

Would you enjoy getting rained on every night? In the Guatemalan highlands it rains almost every evening during the rainy season (May–October). You can imagine how wet things can get in a home that does not have a solid roof. In addition to keeping out rain and other natural elements (wind, sun, cold), a solid roof keeps out animals and provides people with a clean place to live.

What are advantages of a good roof in Guatemala?

Habitat for Humanity builds homes in Guatemala with roofs made of sheet metal (corrugated sheets of tin). These types of roofs have many advantages. First, they are sturdy and stand up well against years of rain. Second, they are easy to maintain and fix. Third, the material is inexpensive to buy. Thus, poor Guatemalan families can afford to put a tin roof on their house. Fourth, they are easy to put onto a house. Thus, sheet metal roofs are sturdy, simple and affordable.

How does a good roof affect a family's health?

A good roof protects you from cold, wind, rain and sun. In the Guatemalan Highlands, people have to worry most about rain and cold. When rain leaks into a house, the house can remain damp for the entire rainy season, which lasts up to six months! Some roofs in Guatemala are made from baked

clay. Baked clay can soak up water and remain damp for months, too. The dampness can make the house extremely cold as well. The dampness and the cold make people less likely to be able to fight off infections. If they can keep out the damp and cold, people are less likely to get sick.

How does a good roof affect a family's education?

Health affects income. If you are sick, it is much harder to study, to further your education or to work. When Habitat for Humanity partner families move into a home with a solid roof, they find themselves getting sick far less often and are better able to work.

How does a good roof affect a family's income?

People can do more work in the home when, they are healthy and now are protected by a good roof. For example, weaving is a traditional art among Mayan people. Many indigenous people in Guatemala make a living by weaving traditional cloth that can be used to make different types of clothing or decorations. The weaving loom is approximately 4 feet by 10 feet, and must be kept indoors safe and dry. A good roof allows indigenous Guatemalans to keep a weaving loom, and materials to dye and spin the wool, inside their homes. Other types of work can also be done in a home as long as it is protected from the outside elements.

Fact sheet #3

Plumbing and electricity

What is it like to not have indoor plumbing?

If you don't have plumbing in your house, then you don't have a place at home to wash your hands. You don't have a convenient kitchen sink to wash your food or clean your dishes. You don't have water to cook with. You don't have water to drink. And you don't have a toilet to use in the house. You also don't have a place to wash yourself inside the house. Instead, you would have to go somewhere to do all of these activities. How would your life be different if you didn't have indoor plumbing?

Indoor plumbing makes everyday life easier. When water comes to your house, you don't have to spend time and effort going somewhere else to gather it. In some parts of the world, people have to walk for an hour or more to get water every day.

How can indoor plumbing improve health?

The most important thing indoor plumbing can do is improve your health. With easy access to water, people have more opportunity to wash their hands, wash dishes, and wash anything. Easy access to water, especially being able to access water in your home, lets you wash away germs that can cause illnesses. With this improvement in basic sanitation, people's illnesses decrease and their overall health improves.

How can electricity affect education and income?

Without electricity in your house, you have to stop doing whatever you're doing that requires your sight when the sun goes down. That means no reading, using a computer, cleaning your room, cooking, etc. There would be a great number of activities you wouldn't be able to do after dark.

In Guatemalan homes without electricity, when the sun sets, people have to stop many of their activities. Children can't study or work and adults can't cook, clean, or do other work. When the people get electricity in their home, things change dramatically. Children can do homework and read in the evening. This means that when they come home from school in the afternoons, they can do the tasks that take up daylight hours and still be able to do their schoolwork later in the day.

With electricity, adults can continue to do their work at night. For example, many indigenous Guatemalans weave "cortas" or sell "quipiles". Cortas are traditional skirts made from about 8 feet of woven cloth. Quipiles are blouses for women embroidered with traditional designs. With electric light, adults can continue to weave or sew even after the sun sets. They can increase the number of cortas or quipiles that they make each month and have more to sell at the market. This extra income can help a family significantly. Adults can also use the light to read or study. This helps adults further their own education. And when someone gets more education, they can sometimes find a better paying job to increase their income.

Fact sheet #4

A solid floor

What are the problems with a dirt floor?

In Guatemala there are two seasons—a wet (rainy) season and a dry season. During the rainy season (May–October), if the floor gets wet (for example, if there’s a leak in the roof), you can’t just wipe the floor dry. Instead, the floor stays damp for a long time. Often a wet dirt floor will stay damp for the entire six months of the rainy season. The dampness also makes it uncomfortably cold inside the house.

A dirt floor can present big problems during the dry season, too. The dirt can get so dry that it makes the air in the room constantly dusty. Gloria Garcia had this problem during the dry season and said that it made it difficult to breathe because “dust would get into the familie’s lungs.” She also noted that, “the dust would also get in our food. Having a concrete floor keeps the air much cleaner during the dry season.”

Another significant problem with dirt floors is that you cannot wash them. In Guatemala, rivers are likely to be polluted. In rural areas the rivers often flood during the rainy season, spreading parasites throughout the ground. Damian Lopez, the principal of a village school in the Guatemalan highlands, estimates that 200-300 people in the area around his village die each year from illnesses they get from parasites. “Most of the people who die are young children,” he says. “When someone walks into a house, their shoes might transport parasites onto the floor. It is easy for little children

playing on the floor to get exposed to these parasites.” He thinks that concrete floors are better because, “it is easy to wash a concrete floor and keep it clean. You can’t do the same with a dirt floor.”

How does a solid floor improve health?

In addition to allowing people to wash parasites off of the floor, a concrete floor can improve health in other ways, too. Respiratory (lung) diseases are a common health problem among the poor in Latin America. A concrete floor solves these problems by eliminating dirt floors that are either damp or too dusty.

How does a solid floor improve education and income?

Gloria Garcia credits her concrete floor for improving her children’s education. According to Gloria Garcia, when they had a dirt floor her children often got sick during the rainy season. Her oldest son, especially, would get sick at least every month, and as a result would miss up to a week of school each time he got sick. Now that they have a concrete floor, she notices that he does not get sick so often, and thus does not miss as much school. The floor keeps her children healthy enough so that they can attend school consistently. Likewise, a concrete floor can keep Gloria Garcia and her husband healthy so that they can work consistently and have a chance at earning a steady income.

Fact sheet #5

Windows and doors

How do doors and windows improve a house?

The great and simple thing about doors and windows is that you can open or close them. When they are shut, you can shut out strangers, keep out wild or stray animals, and keep you, your family, and your belongings safe. Doors and windows should not be taken for granted.

Many substandard homes in Guatemala do not have doors. Pests like mice, frogs and insects can enter the homes at any time, carrying in dangerous germs. Without being able to keep out pests, stray animals, and strangers, a family cannot often feel safe in their home.

Are different types of windows used for different purposes?

In Guatemala, Habitat for Humanity International builds different models of simple homes, depending in part on the location of the land. The types of windows used in the home also depends on the location. In the tropical regions near the coasts, Habitat for Humanity International installs short but wide windows near the top of the walls. When the windows are opened, the hot air that has gathered inside the house rises up and escapes through the windows. Thus, these windows help to naturally cool down a hot home. In the mountainous highlands, however, where there is no need to

cool the homes, Habitat for Humanity International installs windows at the midpoint of the walls. These windows can swing open wide to let in fresh air or close completely to shut out the cold weather.

How do windows and doors affect health?

Having windows and doors can significantly improve the health of the people living in the home. First, being able to shut out pests keeps the home more sanitary. Second, doors that close can keep out bad weather that makes people more susceptible to illnesses. Third, windows that can open or shut are useful for letting in fresh air even while keeping the home safe. The fresh air can help prevent people from developing respiratory health problems (problems with their lungs).

How do windows and doors affect education and income?

Health always affects education and income. If you are sick, it is harder to work and learn. You might miss school or you might not be able to go to the market to sell your goods. A basic level of health is a foundation for getting a good education, being productive at your work, and in turn, being able to earn more income.

Fact sheet #6

Overcrowding

Is overcrowding a common problem?

Overcrowding in a home is very common in rural Guatemala. Because indigenous people have had trouble claiming ownership of land, sometimes they don't have much space to build a house on. Also, they often cannot afford to build a home, so the extended family lives together.

Gloria Garcia's brother, Jorge, lives just down the hill from his sister, along a very steep, dirt road. He also has a home built by Habitat for Humanity. His home is small and simple, but a huge improvement from where his family was living before. Jorge has a wife and three children. His family of five used to live in one house with his parents, his brothers, and their families. "There were 15 people living in a tiny, two room house," he said. "It was terribly crowded."

How does adequate space affect health and education?

When there are too many people living in one small space, sanitation becomes a problem. It is hard to keep things clean. In many rural Guatemalan homes, family members sleep in every room in the house. Even the living room and kitchen double as places for people to sleep. It's hard to keep a kitchen clean when multiple people are using it as a bedroom. Also, when many people are crowded together in a small living space, it is much easier for someone to pass bacteria and viruses on to the others.

When there are too many people sharing one small space, it is also hard to concentrate and study. What would it be like for you to try to study with 14 other people in a tiny house?

How does having adequate space effect income?

With more space, families like Gloria Garcia's sometimes open a small store in their house. They often sell small items like snacks, school supplies, or things like shampoo and soap. This helps families earn a little more income. With this extra money, some parents go back to school and eventually get promotions at work. Increased income also makes it more likely that the parents can afford to send their kids to high school.

Adequate space also gives a family room to work in the home. For example, many indigenous Guatemalan families need a room for their traditional weaving loom (approximately 4 feet by 10 feet). They can't leave the loom outside because the rain and wind will ruin it. They use the loom to weave traditional cloth to sell at local markets. With too many people crowded into a tiny house, there is certainly no space for a loom this large. Not having extended families crowded together in one home clears up space for people to work productively inside the home.

Fact sheet #7

Health and poverty

- Major health problems and poverty often go hand in hand. Generally, the poor are more likely to get infected with diseases and are less likely to be cured of them.
- In Guatemala, the major causes of death among children are treatable diseases. These include:
 - Diarrhea (caused by parasites in the intestines)
 - Pneumonia
 - Cholera
 - Tuberculosis
- Another common disease among people living in poverty is Chagas disease. This is a disease that you get from being bitten by insects carrying certain parasites. Chagas disease causes serious heart problems. It is widespread in tropical parts of Latin America, and occurs most commonly among people living in substandard housing conditions.
- Another cause of health problems is malnutrition. According to UNICEF, almost 70 percent of indigenous children in Guatemala suffer from chronic malnutrition. This means they do not eat the amount of nutritious food that their body needs to be healthy. In addition to making them unhealthy, it also makes them less able to fight off infections.
- People living in poverty often lack the knowledge of how to fight diseases. This means they have not been taught basic ways to prevent diseases, such as keeping their hands clean to prevent the spreading of germs. Educating people about basic hygiene measures can help improve health significantly by decreasing the transmission of parasites that spread infections.
- People living in poverty usually cannot afford to pay for medical care. They do not have spare income to pay a doctor or to buy medicine.
- It can be difficult for people living in rural areas to get to a medical clinic or to otherwise find medical care. This is called “access to healthcare.” People who live in poor, rural villages usually do not live close to any medical clinics or health care workers.
- The risk of getting infected by parasites is greatly increased by:
 - Living in unsanitary housing conditions
 - Living in housing where insects, mice and other pests can enter freely
- The risk of getting respiratory problems that can result in pneumonia and other lung problems is greatly increased by living in a home with bad ventilation (flow of fresh air).
- The risk of catching a disease from other people is greatly increased by living in overcrowded conditions.

Fact sheet #8

Education and poverty

- When people are living in poverty, they face great difficulties in providing their children with an education. There are several reasons for this:
 - People cannot afford to pay school fees (even if very low amounts), buy school supplies, or pay for transportation to schools.
 - Families need children to help with work in order to earn money to feed the family.
 - They live in areas that are far away from schools and it is hard for the children to get to the schools.
- Of children in Guatemala who start first grade, only 60 percent complete sixth grade³. Many children in Guatemala never even start first grade.
- Of the children who start first grade, only 39 percent complete it in six years. This is because many children miss school due to illness or have to stay out for long periods of time to work.
- 23 percent of Guatemalan children between the ages of 7 and 16 work. Many of these children do not have time outside of their work to attend school.
- 30 percent of the people in Guatemala are illiterate. This means they cannot read or write by the time they are age 15. This is because they have not been able to attend school for some reason, and the percentage of illiteracy among indigenous people is dramatically higher.
- People who have not gotten much education have difficulty getting jobs, especially higher paying jobs. As a result, their incomes are very low.
- Because their incomes are low, people who do not have much education usually end up living in poverty.
- If parents can earn more income (by getting better paying jobs, increasing the amount of work they can do, or creating other streams of income), they are more able to afford to send their children to school. Living in better housing conditions can help parents increase their income in multiple ways:
 - Better housing means better health. This means parents miss less work, and families spend less money on medicines and other health care costs.
 - Better housing usually includes electricity. With electricity, parents can continue indoor work after the sun sets and thus increase their income. (For example, parents can sew clothes to sell by using electrical lighting after dark.)
 - Better housing means more space to do other types of work in the house, and thus add a new stream of income. For example, families can open up a small store to sell paper supplies and increase the money they earn.



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