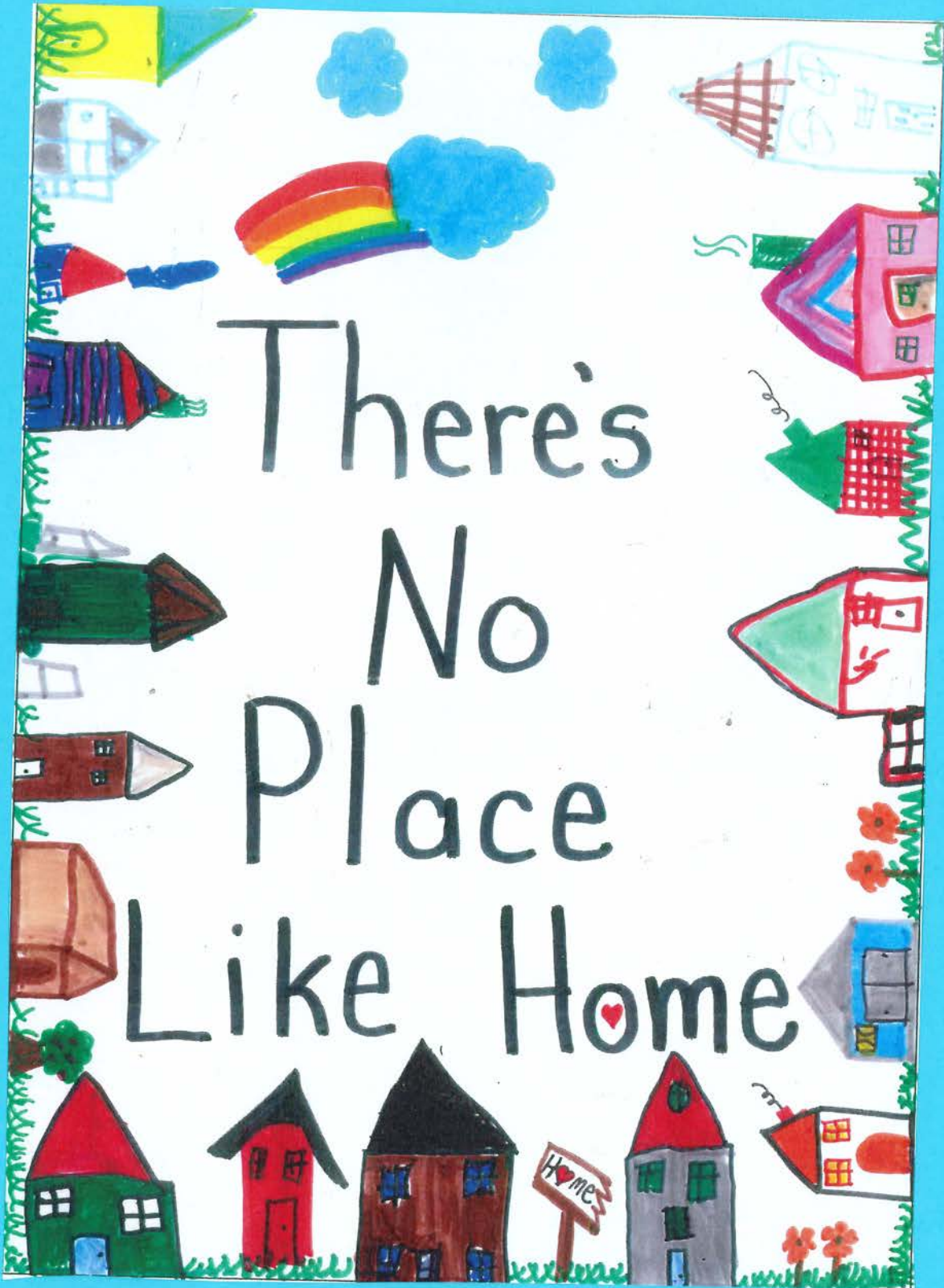


“Building a Future Sustainable Economy on a Foundation of Coal!”

CEDAR TEACHER UNIT 2018

01-08-18



## Pre-Planning

I made a class list of common words that came to mind as students' brainstormed their state of Kentucky. This allowed me to see if students' felt that coal was an important aspect of our state along with jobs, the people in our state, and the other key factors of Kentucky.

Activities written in blue are activities that my students and I added along the way. My students' drive the unit so as we went along if we thought of an activity that we felt helped us to reach our essential questions and tie the other activities together then we added them in. Some of the best activities are the unplanned ones. The additional activities did not require additional supplies.

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**List the Over-Arching Goal of Unit:** To prepare and present a class published book and Market Day Entrepreneurial Event demonstrating the students' knowledge of coal's historical impact on our area, current problems with our local economy, and future solutions for building a local sustainable economy.

<p><b>Essential Questions: (1-3)</b> These should be thinking questions that generally begin with "How" or "Why" and may have multiple answers.</p>	<p><b>KCAS Standards</b> (list those that will support each essential question and will be assessed in the unit.)</p>	<p><b>I Can</b> Statements of what students will be able to do</p>	<p><b>Assessments/Products</b> (list at least one assessment or product for each standard.)  Formative Assessment Is on-going as teacher checks students' progress.  Summative Assessment will be the final product.</p>	<p><b>Activities</b> (describe activities that support the assessment(s)/ product(s) and advance the standard.)</p>	<p><b>List materials</b> required for each activity.</p>	<p><b>Cost</b></p>
<p>1. How has the natural resource, coal impacted our local area? (economy)</p>	<p>English/Language Arts Standard #1: Reading Informational Text Read closely to determine what the text says explicitly and make logical inferences from it.</p>	<p>I can research a topic, by reading articles closely to determine inferences and draw conclusions about the impact that coal has had on our local economy.</p>	<p>Students will research to find articles in relation to Essential Question #1. They will print and highlight facts.  Product: Highlighted articles Class Charts</p>	<p>Activity 1: Students will research and print articles. They will use the articles to make inferences on how the events impacted our local area that we live in today.  Act. 2: They will record facts on post-it notes to complete a fact swap. We will conduct class discussions as students present facts from their research. We will create a class chart to showcase our understanding of essential question number</p>	<p>Highlighters Chart paper Chart markers Paper for research Post-it notes</p>	<p>10.00 20.00 12.00 25.00</p>
<p>English/Language Arts Standard 7 Conduct short research projects that build knowledge about a topic.  Strand: writing</p>	<p>I can research the historical impact of coal on my community and connect my findings to my personal life to build an understanding of coal's impact during my lifetime.</p>	<p>Timelines: Students will use Chromebooks to research coal from present year dating back to the year they were born. They will create a timeline to show their understanding of coal's impact on our area within the years of their life. Students will look at the data for trends and apply critical thinking skills as they use their findings to make future</p>	<p>Activity 3 Students will discuss what timelines are and will watch a video timeline of their area and its relationship with coal throughout the years. Through this activity they will see that coal has built the place they call home. We will connect to the title "There's No Place Like Home" as they see without coal our home wouldn't be what it is today.</p>	<p>Poster board Markers Tape Glue Paper for research Storage pocket file and folders- 50.00 (to use throughout unit)</p>	<p>20.00 45.00 8.00 18.00</p>	<p>50.00</p>

predictions.  
Products:

Timelines

Math 3.MD.B.3- Draw a scaled picture graph and scaled bar graph to represent data with several categories. Solve one and two step problems using information presented in the scaled graphs.

I Can create a scaled pictograph and scaled bar graph to represent data showing Parents and Grandparents jobs in coal related fields.

Product: Scaled Pictograph or bar graph

We will hope to have guest speakers who can share local events during the student's life that has shaped the local

area into what it is today. They will use index cards to write facts throughout the unit.

Activity 4: Students all working collaboratively with our school's STLP (Student Technology Leadership Program) to gather data showing number of parents and grandparents who have worked or are currently working in a coal related job. The STLP team consist of students who were former members of my classroom and veteran students to Coal Units as well as current members of my classroom. The team will assist in data collection using technology as well as other parts of the unit implementation as noted later.

Activity 5: Students will create a scaled pictograph to represent data showing Parents and Grandparents jobs in coal related fields.

Activity 6: Students invited parents and grandparents whom was part of the impact of coal in our area to share their stories and help in reaching our EQ.

Markers  
Gridded chart/graph paper 13.00  
Index cards 10.00

<p>2. Why is it important to utilize the resources that coal has given us to help overcome the issues and challenges our area is currently facing?</p>	<p>English/Language Arts Standard #3 Standard: Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.  Strand: Speaking and Listening  Cedar resources and videos, booklets, and activity books will be used as well to help answer essential question number 1.</p>	<p>I can listen to a guest speaker and ask/answer questions to demonstrate my understanding of coal's past and how it has influenced both the economic and cultural aspects of our community.</p>	<p>Assessment: Students will use dry erase response boards to ask and answer questions.</p>	<p>Activity 7 – Miner In Me Activity- Students listened to the peer explain the importance of coal to his life and asked questions regarding his miner hat. Activity 8- Students listened to our janitor share his coal experiences and the issues he has faced with the loss of coal jobs. Activity 9– Folklore Musician/ Appalachia Story Teller will visit to help our class gain a better understanding of coal's past and the marks it has left within our community, economic and cultural. Activity 10: History Lesson on Wheels: Students listened as I presented historical places that coal impacted and what they meant to our area today. Activity 11: Students will create a classroom coal council where we will conduct weekly coal meetings and address issues and challenges that our community is faced with along with possibilities for our community's future and possible solutions to noted problems. This activity will steer our unit. Activity 12: Students will create a NEWS BROADCAST on the problems and solutions that they come up with. They will use our class Mondo Board and skype to present the broadcast LIVE into the other classrooms within the building.</p>	<p>Dry erase markers  40.00</p>
	<p>English/Language Arts Strand: Speaking and Listening Standard 1  Standard: <u>Engage</u> effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways,</p>	<p>I can participate in discussions with my peers on current issues in my community with possible solutions, building on others' ideas and clearly express my own ideas.</p>	<p>Product/Assessment Problem/Solution On Chart Paper  Class News Cast using Skype and our Class Mondo Board</p>	<p>Chart paper Chart Markers Post-it notes  20.00</p>	

listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.

**Social Studies**  
**S.S.E.P.2.2.1** Identify Social Institutions (Government, economy, education, religion, family) and explain how these social institutions help the community

I can use critical thinking and problem solving skills to understand coal's connection with the economy and how that helps our community.

Product: Cookie Mining  
Activity Sheets with Reflection

Activity 13  
Cooking Coal Mining – Students will participate in a simulation to help them see the problem that Kentucky is facing with coal. They will be a part of a simulation where they will buy land and mine it for coal. They will apply problem solving and critical thinking skills as they choose which land to buy and apply reasoning to their choices. Students will reflect on the simulation by answering questions.  
Students will explain how this impacts local economy and in turn helps our community.

Paper for activity sheets  
Paper clips  
Graph paper  
Cookies  
Tooth picks  
Paper for money  
5.00  
5.00

**Math 3.MD.B.3** – Draw a scaled picture graph and represent data with several categories. Solve one and two step problems using information presented in the scaled graphs.

I can create a scaled bar graph to represent coal produced by our state both in the past (year I was born) and present.

Product: Scaled Bar Graph

Activity 14  
Students will create a scaled bar graph to show coal born and coal production within our state currently. They will use this data to drive the discussion of what they can do as a class and personally to contribute to their community.  
Activity 15: Students shared

Poster board /cardstock  
Markers  
Large Graph paper



<p><b>Math 3.MD.C.6</b> Measure areas by counting unit squares.</p> <p>3. <b>MD.D.8</b> Solve real world and mathematical problems involving perimeters of polygons including finding perimeter.</p>	<p>I can create a real world model on graph paper and measure the area by counting unit squares. I can identify the area and perimeter of the buildings (polygons) within my model.</p>	<p>Product: Reclaimed Land models (These will be judged by STLP and we are hoping for the winning model to represent our school STLP by having a booth at the district competition called: "There's No Place Like Home- KY</p> <p>Students will study reclaimed land and develop plans for ways the land could be utilized economically to build a sustainable economy.</p>	<p>a photo and ideas of how they use resources from coal at home in all of their favorite things.</p>	<p>For models: Card stock 40.00 Crayons 50.00 Paint 20.00 Tape Glue Graph paper Poster board Scissors Markers 20.00</p>
<p>Activity 16: Students will have class on a reclaimed mining land site that has been redeveloped into a local park. We will investigate the area looking for clues of the once mined land and looking at what it was reclaimed into, discussing importance to community before and after the redevelopment.</p> <p>Activity 19: We will discuss the process for reclaiming land and students will develop a model of what they feel would boost our economy. We will use a drone to get coverage of the land as well as coverage of a site that has been reclaimed but not used yet</p> <p>Activity 17: A guest speaker will share the importance of the reclaimed land (park) to him.</p> <p>Activity 18- A guest discussed uses for reclaim land and told us about the Kentucky Industrial Park. We discussed which uses would most benefit our economy.</p> <p>Activity 20: Students will create models of buildings that they would put on reclaimed land to build a sustainable economy. They will follow a teacher created criteria and these models will be judged by the STLP.</p>				

<p>RI.3.9. Compare and contrast the most important points and key details presented in <u>Two texts</u> on the same topic.</p>	<p>I can compare/contrast two text on larger cities and create ideas of how to boost our local economy to build our community.</p>	<p>Product: City Comparisons -- Venn diagrams Reclaimed Land Models.</p>	<p>Activity 21: Students will utilize Facebook (through class page with teacher's help) to reach 3<sup>rd</sup> graders in other parts of the world. Through this we are hoping to find out from a 3<sup>rd</sup> grader's point of view what are some the major important things they have in their city and what are some ideas of things they would be interested in if they were to visit or even better, move to Kentucky. This will be used to help create their business models as well. Students will read articles(text) on larger cities and compare and contrast them with our city to develop ideas that will help to boost our local economy.</p> <p>Activity 22: We had business owners to come in and discuss how they utilized the resources from coal and how coal impacted their business both positively and negatively and how they overcame the issues that they were faced with.</p>	<p>Paper Chart Paper Markers Post-it notes 30.00</p>
<p>3. How can you use your personal interest, talents, and skills to assist in building a future sustainable economy?</p>	<p>I can create a product or service to sell at market day to help create a sustainable economy. I can explain how my small business impacts the economy and helps my community.</p>	<p>Market Day Business- This will include:</p> <ul style="list-style-type: none"> <li>• Business plan</li> <li>• Commercial created using technology (IPad, Chromebooks)</li> <li>• Reflection</li> </ul>	<p>Activity 23: Students researched books in the library to find careers that they could have in this area that would apply their interest, talents, and skills. Activity 24: Students pretended that they were given the foreclosed business/house across the road from our school. They sketched blue prints involving area and perimeter to show their business plans.</p>	<p>Markers Glue Hot glue gun and glue for products Scissors Tape Paper Card stock for brochures Paper bags Clip boards Paint Crayons 25.00</p>

	<p><u>Language Arts –</u> <u>Grade 3</u> <u>Standard 2</u> <u>Write</u> <u>Informative/explanatory</u> <u>text to examine and</u> <u>convey complex ideas</u> <u>and information clearly</u> <u>and accurately through</u> <u>the effective, selection,</u> <u>organization, and</u> <u>analysis of content.</u></p>	<p>I can write a part for our class book to inform/explain coal's historical value to our community, challenges and possible solutions to build up our community, and ways to use my personal talents and interest/abilities to create a future local sustainable economy.</p>	<p>Product: Class Book</p>	<p>Activity 25: Students will open a small business (based on hobbies, interest, and skills, and something they fill could be on reclaimed land or connect with coal) using a tri-fold. They will decorate their store front, and make advertisements using poster board/ card stock. They will create flyers to advertise using cardstock. They will create a commercial and video to promote their business opening day. Students will build/make their inventions/products with teacher assistance (hot glue) as needed. We will hopefully have a guest speaker who is a small business owner in our local area to come speak with the students on the importance of coal to their business and the impact their business has had on the local economy.</p>	
			<p>Activity 26: Students will write and illustrate a class book that will be sent to a book publisher and available to purchase. Students will have a meet the author night after school to showcase and a "Red Carpet" event at lunch. They will read to some of the classrooms and stream live through our Mondo board to read as well. The book will showcase my student's knowledge of the unit's Over-arching goal and essential questions and will be a tool to teach</p>	<p>Markers Pen markers Paper for rough drafts</p>	

	students who are not a part of the unit about the importance of coal to our history, our current events, and most of all our future.				
	Reporting: (link and binder) 50.00				
	Total Request: (Was Granted \$536.00)				

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# 1. Introduction

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## Introduction

Close your eyes for a moment and envision the discovery of an abundance of shiny black rock within the mountains of Eastern, Kentucky. A discovery so big that people would come from all over the world to try their hand in mining it. People of all nationalities and ways of life, moving to the mountains. This very event created a need for homes, schools, and railroads, and in the blink of an eye our hometown was born. Not only did it grow but it quickly grew to greatness. The town flourished, the people settled, and just like that coal mining became the way of life!

Close your eyes one more time and this time imagine a booming economy built upon a foundation of coal. Now, take away the coal jobs, close the businesses, and remove the students' from the schools. The image you are now envisioning is our town. It is my situation, and unfortunately; my student's life. The second image is what has driven my 2018 CEDAR coal unit.

Over my years of teaching I have found a place in my heart for CEDAR and for coal education. However, the last couple of years my units have pivoted from teaching about life in the coal mines to life after the coal mines. As hard as it has been for us to swallow, we must face the issues of the decline of the coal industry in our region. As I look into my classroom and I stare at the empty seats, once occupied by some of the most brilliant students whose lives were uprooted so that their daddy could find a job; I find myself losing my faith in our economy. However, CEDAR has given me the opportunity to reach the students that are still in my classroom. Through this unit, I can help my students' to see coal's role in our region's history, understand current issues

that we are facing, and develop possible solutions to help our region move forward and progress. This reason is why I chose the topic that I did.

I had my students to stand up beside their seats and I explained that if the answer to the question that I was about to ask was yes to have a seat. I asked them if they had a parent that had worked in a coal related job and the majority of the class instantly sat down. I then asked if they had a grandparent to work in a coal related job and after the second question only two students were standing. This activity gave my class insight on how important the coal industry is not only to our region but to our little classroom. Before I could move to the next activity my students began to talk among themselves about their daddies no longer having a job or their family members moving away for work. It was at this moment that I saw how truly important it was to teach a unit that would help my students to find solutions to the issues that they were facing. Next, I gave my students a dry erase map of the United States and asked them to find Kentucky. Once they found our state, I asked them to write down the first five words that came to mind when they looked at their state on the map. I made a class list of the most common answers and sure enough it was coal, jobs, family, and home. It was then that I knew my students' would benefit most from a unit that would tie these words together and teach them that they are the future and have what it takes to help our region reach its fullest potential once again.

My students' talents, interest, and skills played a major role in developing our unit. I wanted to let my students take the wheel and drive our unit so together we discussed what we knew about coal, things we needed to know, and how we could learn them. We created a KWL chart and discussed how we would know when we had

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reached the answers to our questions. As we discussed what we would do with the information that we discovered, we felt making a class book would allow us to share our findings with other students. (I had did this in the past and my current students loved these books.) Having had a market day in the past as well and seeing that outcome, I knew I wanted that to be in our unit if at all possible. Seeing my students trying to sell toys from home during lunch confirmed that I had quiet the entrepreneurs on my hands! I also knew I wanted to implement technology into my unit but wasn't sure of the extent considering the grade level of my students. After returning from a substitute, I realized my Mondo Board had been messed up and I was trying to quickly fix it so that we could move along with our lesson. Before I could even attempt to fix the problem two of my students came up with their Chromebooks and informed me that they had "googled" my problem and began to instruct me on how to fix it. I knew right away that I had a "tech savvy" class and that we could use a wealth of technology in our unit. This is how our unit was developed.

We knew that we wanted the over-arching goal of our unit to be connecting coal's role in our region's history to current issues and challenges in effort to develop possible solutions showing how to build a future sustainable economy for our region on a foundation of coal! We decided this could be shown through our class book and through an entrepreneurial event, "Market Economy Day". The three Essential Questions we developed to help us reach our goal was:

1. How has the natural resource coal impacted our local area? (economy)
2. Why is it important to utilize the resources that coal has given us to help us overcome the issues and challenges our area is currently facing?



3. How can you use your personal interest, talents, and skills to assist in building a future sustainable economy?

In section 2, you will see a snapshot of the activities and a summary of each. The summary will explain the importance of each activity to our unit.

# 2. Activities and Goals

Over-Arching Goal: To prepare and present a class published book and Market Day Entrepreneurial Event demonstrating the student's knowledge of coal's impact on our area, current problems with our local economy, and future solutions for building a local sustainable economy.

## Essential Questions:

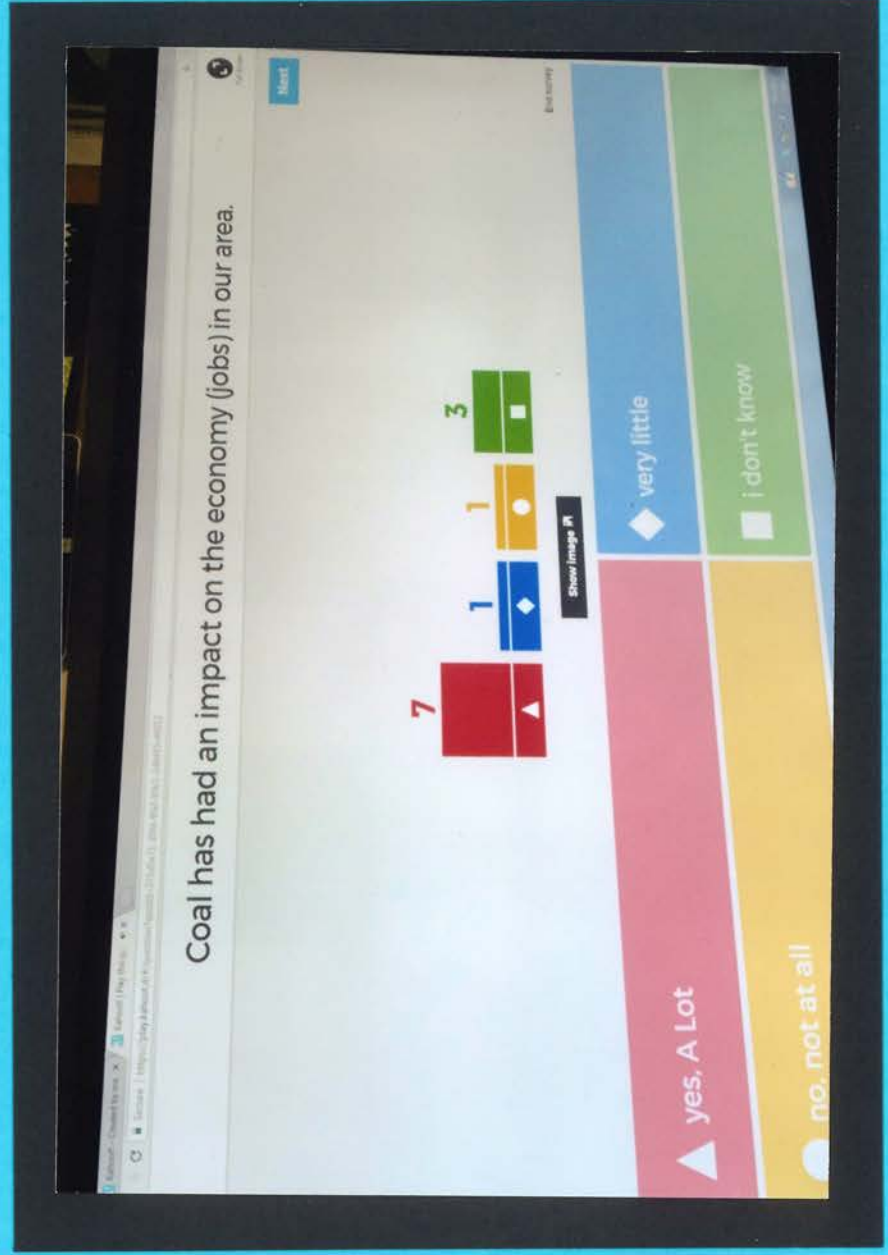
1. How has the natural resource coal impacted our local area? (economy)
2. Why is it important to utilize the resources that coal has given us to help us overcome the issues and challenges our area is currently facing?
3. How can you use your personal interest, talents, and skills to assist in building a future sustainable economy?

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# Planning Our Unit

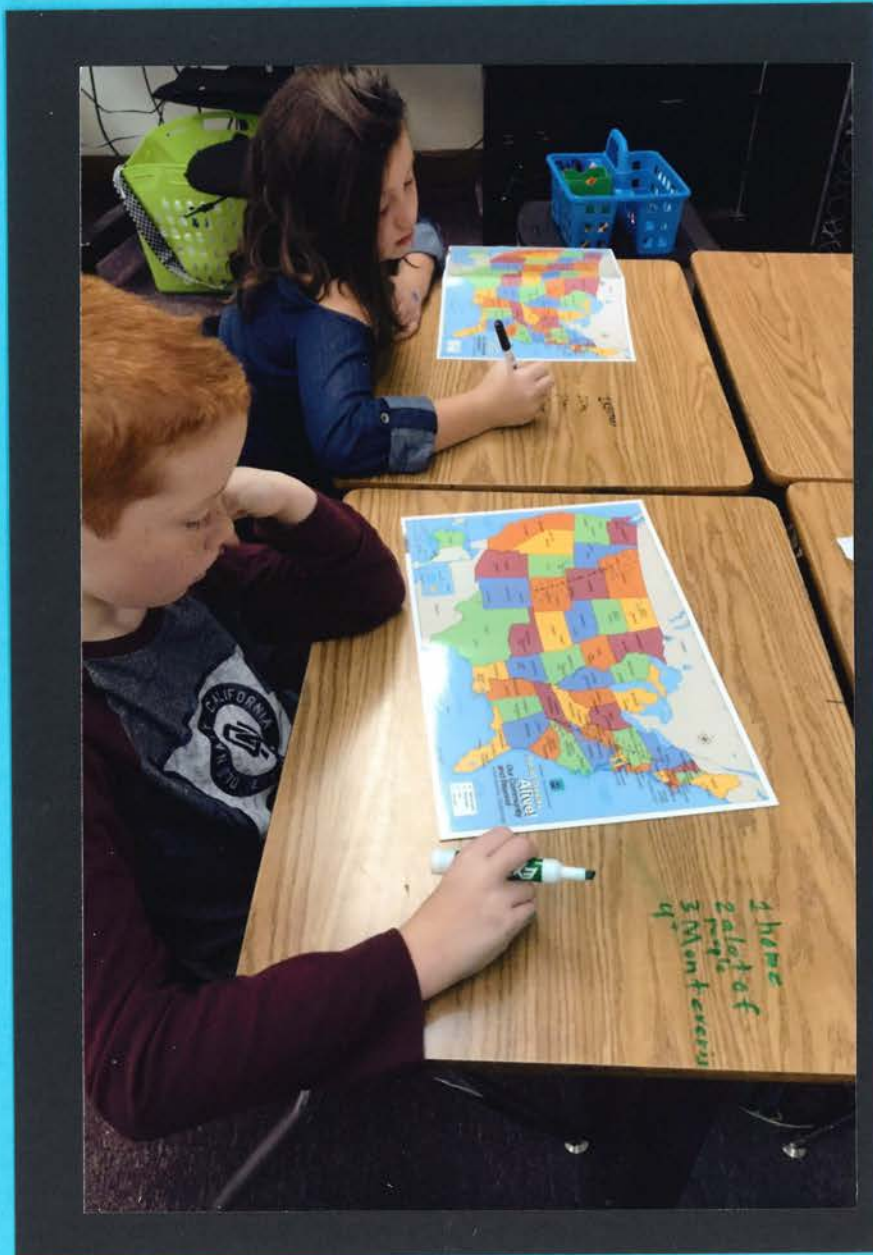
My students' are technology gurus so the implementation of technology through our unit was really important! In this pre-planning activity, we used the online program "Kahoot", to create a survey in which students type in an access code and sync to my "Mondo Pad" allowing their responses to be instantly collected and shown on my board in a bar graph. This allowed me to check prior knowledge and determine our starting point for the unit.

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# Planning Our Unit

As a pre-planning activity, I wanted to see what my student's knew about our state. We used dry erase maps to locate our state and discuss what Kentucky means to us. Students' created a list of words that come to mind when they think of Kentucky.



EQ 1: How has the natural resource coal impacted our local area (economy)?



Looking into the history of coal in our area...

EQ 1: How has the natural resource coal impacted our local area (economy)?

In this section of pictures you will see the activities that we completed to gain knowledge of our essential question number 1.

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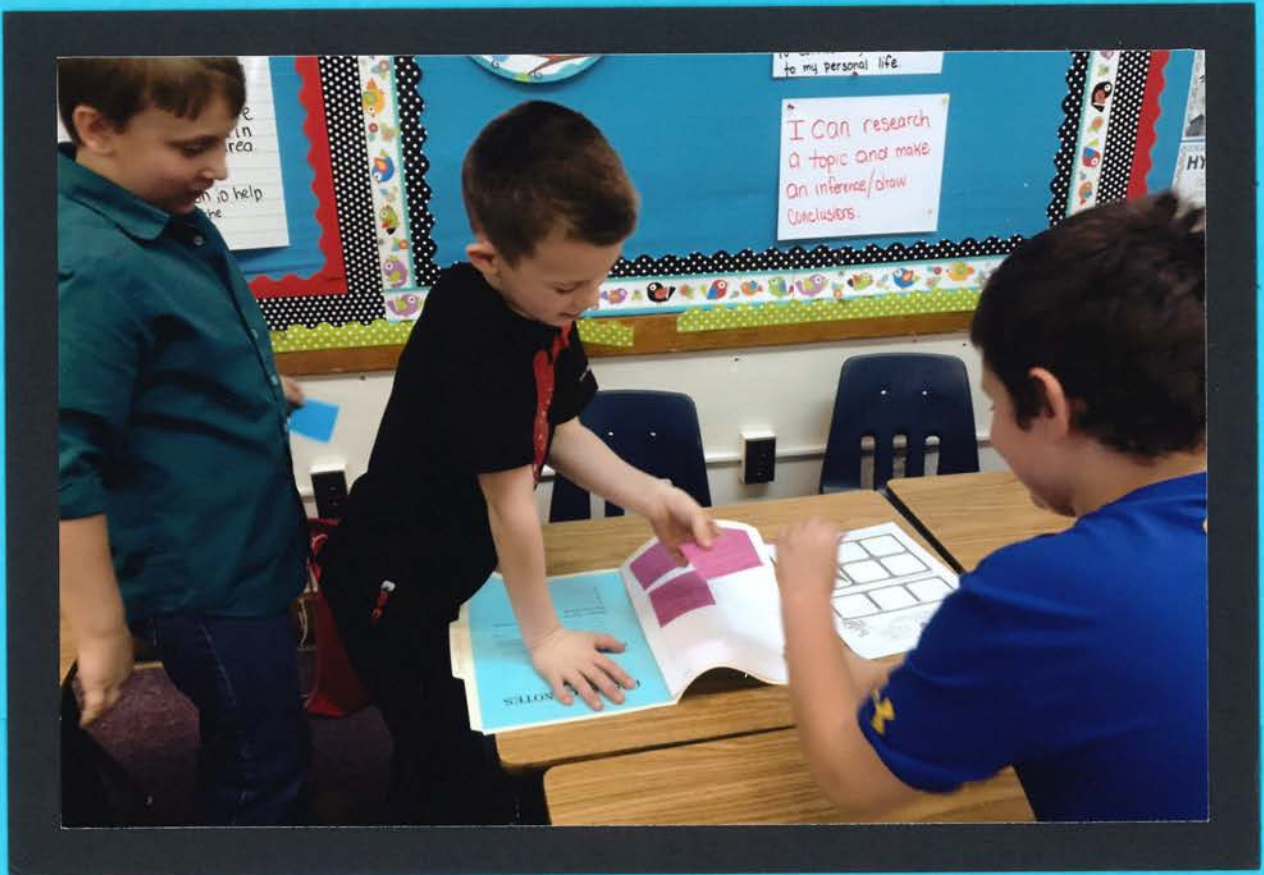
# Activity 1

Students researched to find articles/facts that helped them to understand the history of coal in our area and how that has shaped our community. My students' learned that the discovery of coal all of those years ago and the need for so many men to mine it is what helped to establish our area. Through H. Ford, the "Fordson Coal Company", and the fact that coal could be used in the process of making steel to create automobiles, came coal camp houses in our area. The students thought it was really cool that some of them actually live in or next to these very houses! This research taught my students about the amount of people who moved to our area to mine the coal and how that established the need for roads, schools, railroads, hospitals, and more. This activity allowed them to look at the history of coal and how it was basically the foundation for our community! This activity was important for my students because they must first understand the history, to realize the problems we are currently seeing, to plan solutions for the future of our community!



## Activity 2

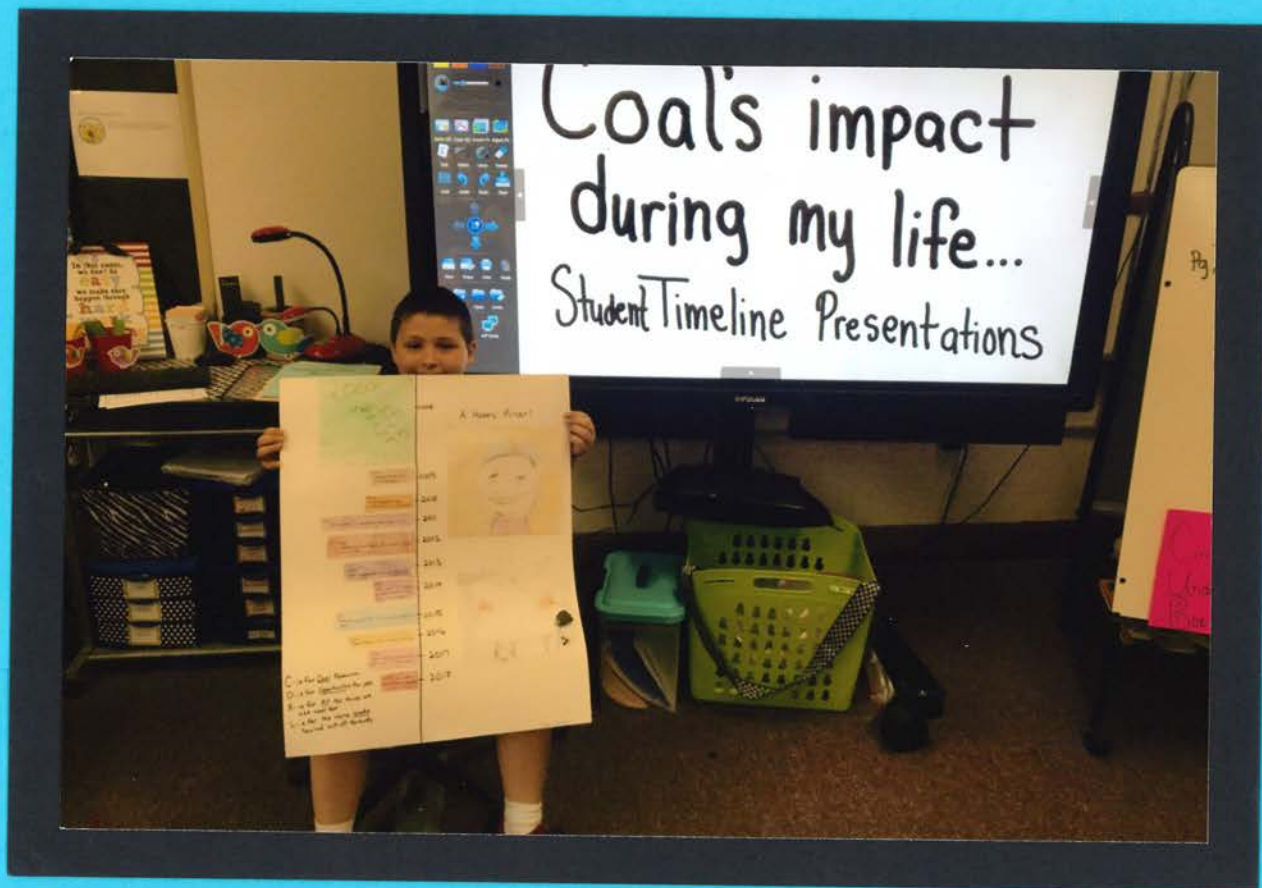
Students' used the information in activity 1 to write down facts on post-it notes. We created "Fact Folders" to keep our facts in throughout the unit. Students then used the folders in class to have a "Fact Swap". This is where they went around the room and collected facts from their peers to write on their fact sheet. They would take the post-it to their desk and read the fact. If it was a fact that they didn't know they would then write that fact on their sheet. This allowed my students to discover new facts from other students perspective that they didn't find during their own research! We then shared the facts that we felt helped us understand EQ1 with the class.



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## Activity 3

After watching a video on the timeline of coal and historical events in America, we zoomed in on coal in our area, during our life! In this activity students researched coal from the present dating back to the year they were born. They searched for an important event that was relevant to their area for each year of their life. They created poster boards to showcase the important events found during their research. Students presented these to the class. This activity allowed students to connect the importance of coal during their actual life. It allowed students to see that every single year of their life coal had impacted our area in one way or the other. Making this connection with coal during their life made our learning relevant which was an important step in answering our essential questions and achieving the over-arching goal of our unit.





# Activity 4

Students' collaborated with our school's STLP (Student Technology Leadership Program) which also included members from our classroom. This collaboration allowed us to utilize technology to reach outside of our school and help us answer EQ1. They used survey monkey to create a survey to find the amount of students' family members working in coal related jobs as well as other questions about the impact of coal to our area. This was important for students' to make the historical connection of coal in our area and how it has provided jobs for their families. They also utilized social media to reach out to families as well as other people around the United States. They helped us to collect and organize the data, and actually decided to make our unit the focus for their STLP project for the school.



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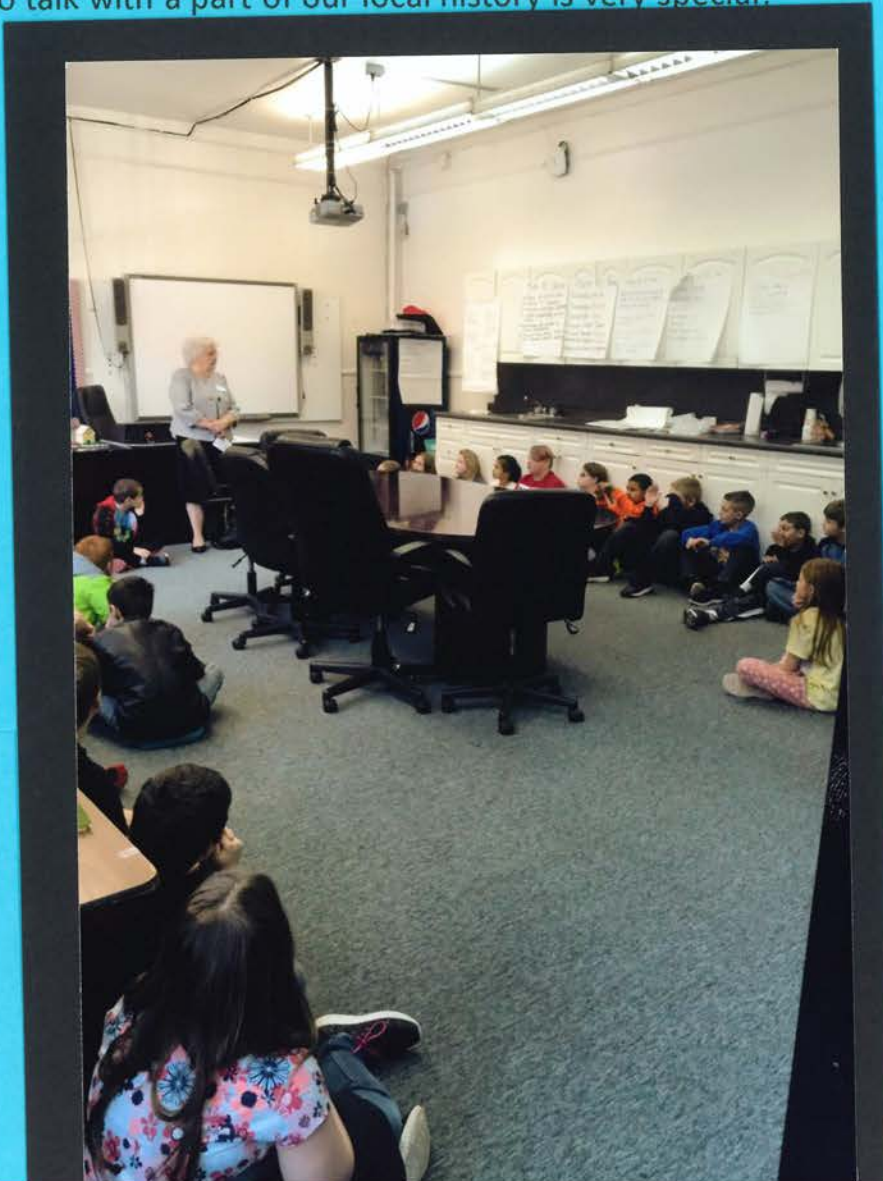
## Activity 5

Students' created graphs to showcase their families who worked in coal related jobs opposed to those that worked in jobs non-related with coal. This graph made a visual for our class to look at and use in answering questions about coal's impact on our family and our life.



# Activity 6

Students' asked their families to share any stories with the class that would help us to see the impact of coal to our community. This guest is a students' grandmother who also taught at our school. The now 85 year old has been retired for over 24 years but reminisced as we went into her old classroom (now a conference room) for her to talk to us. She taught since a one room school house when they would carry coal in to use for heat. She told the students of stories of the economy and how coal built up the community and they transitioned from the one room school to a bigger building with 4 rooms to the building we still use today. 😊 She discussed how she came from a long line of teachers and how it is important education is for my students' future. She had taught the grandparents of many of my students so they enjoyed hearing those stories. It was a very neat experience to have this teacher as part of our unit and to tell us the stories of our community that not too many people know. Researching teaches us a lot but actually getting to talk with a part of our local history is very special!



# Activity 7

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This activity was not a planned part of our unit but an addition by my students. This little guy brought in a miner's hat that his grandfather had gave him and had it painted. It had his grandfather's name on it and some mining equipment and his show and tell sparked us doing "A Miner In Me" presentation where my students shared the Miners in their family and told why that was important part of their family history. This activity sparked activity 8, that you will see on the next page.



# Activity 8

As we were sharing the, "Miner in Me" items our school janitor stopped in to empty our trash. He saw the student's hat and asked him if he knew what the equipment on the hat was. He then began to talk with my class about mining equipment and we discovered that he was a miner before the loss of our area's coal jobs. He showed the students what his underground card looked like and taught them some things like how to signal another miner underground if you needed them to come to you. I thought this was such a special learning experience because it was proof to my students that coal impacts us all, right in the middle of the day, the school janitor walks in and the impact that coal had on him was so great that he stopped his busy schedule to share the importance of coal with my classroom. This also taught my students that when the coal jobs left, people have had to find other jobs and often times they do not make what they made as a miner. It is life experiences that often time teaches us the most!



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## Activity 9

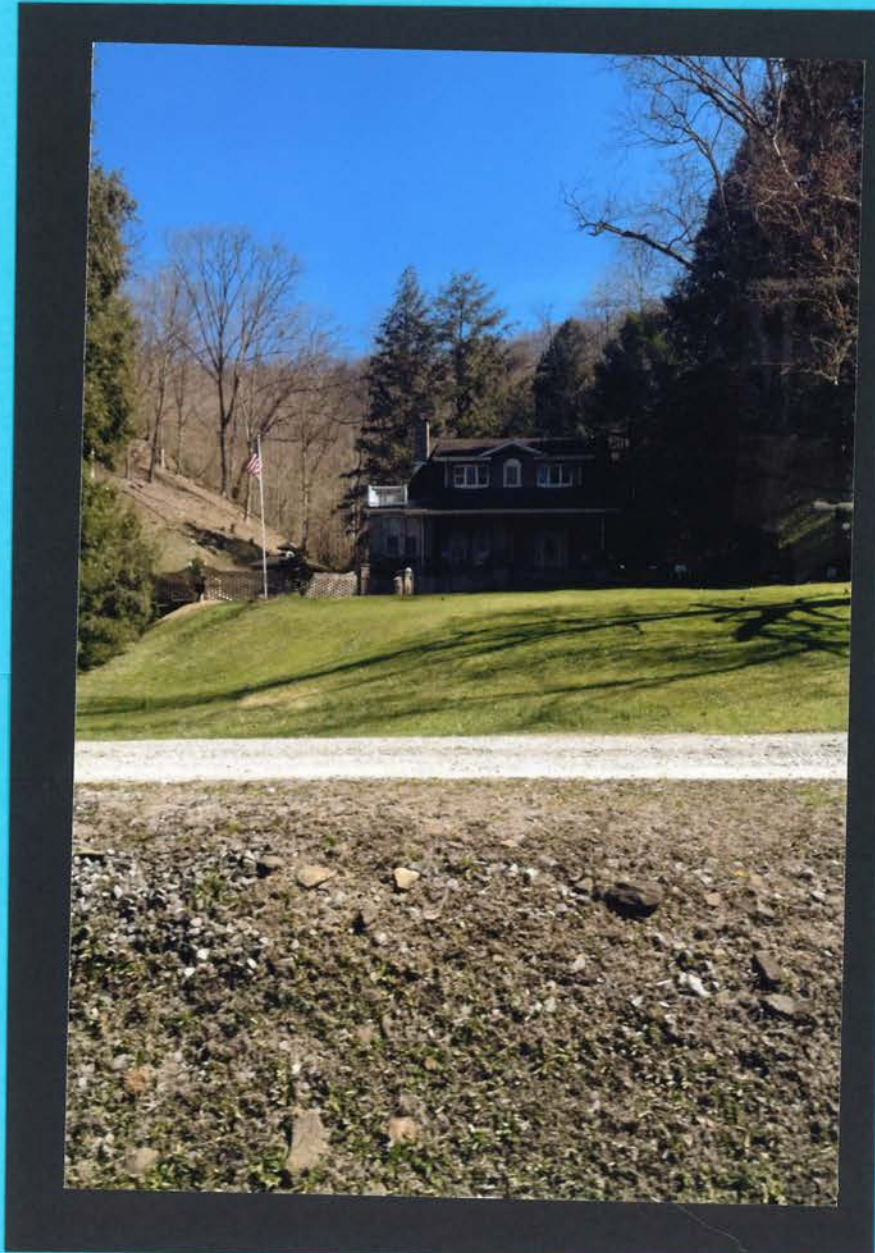
A folklore/Musician/Appalachian Storyteller was our guest for the day. He played his guitar and sung, told stories, and brought artifacts to showcase the history of coal to our area. The students were actively engaged in singing songs with lyrics like, "I owe my soul to the company store". He told a heart wrenching story of how his daddy was killed in the coal mine and how a community member cleaned out his coal truck and came and moved his mother's furniture and their belongings when they had to relocate. He brought along everything from carbon lamps, wash tubs to show how the miners would have to bath, to the ole' tin buckets and dippers that would hold the well water that they would draw up. Students listened to his stories and used dry erase response boards to write questions that they wanted to ask him at the end of the lesson. This activity was such a great experience to help in answering EQ#1. Students' ended this experience with a special mining treat, "A Moon Pie"!



# Activity 10

## History Lesson on Wheels

We took a bus tour of our area on the way to our reclaimed land site and was able to see a little piece of history out of the bus window. We saw the old coal camp houses, the old company store and theatre' and pictured here the Henry Ford House. This activity let students put pictures with all the things we have been talking about that are important to the history of coal in our area.



EQ 2: Why is it important to utilize the resources that coal has given us to help overcome the issues and challenges our area is currently facing?



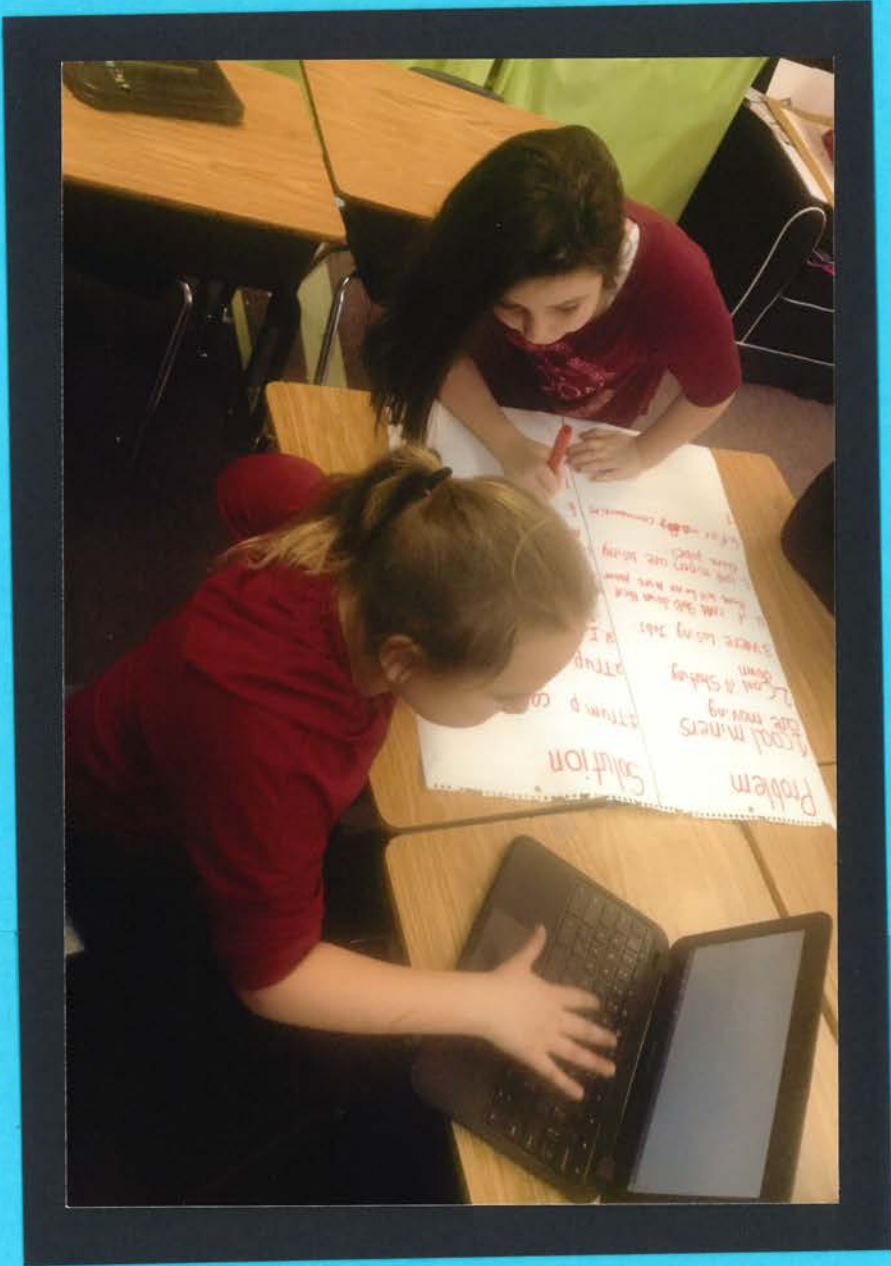
- In this section of the photos you will find photos and explanations of the activities that we completed to help us answer EQ2.
- This part of the unit will allow us to connect to the history of coal to see where we are now.
- Students applied problem solving strategies and critical thinking activities in the following activities to answer EQ2.



# Activity 11

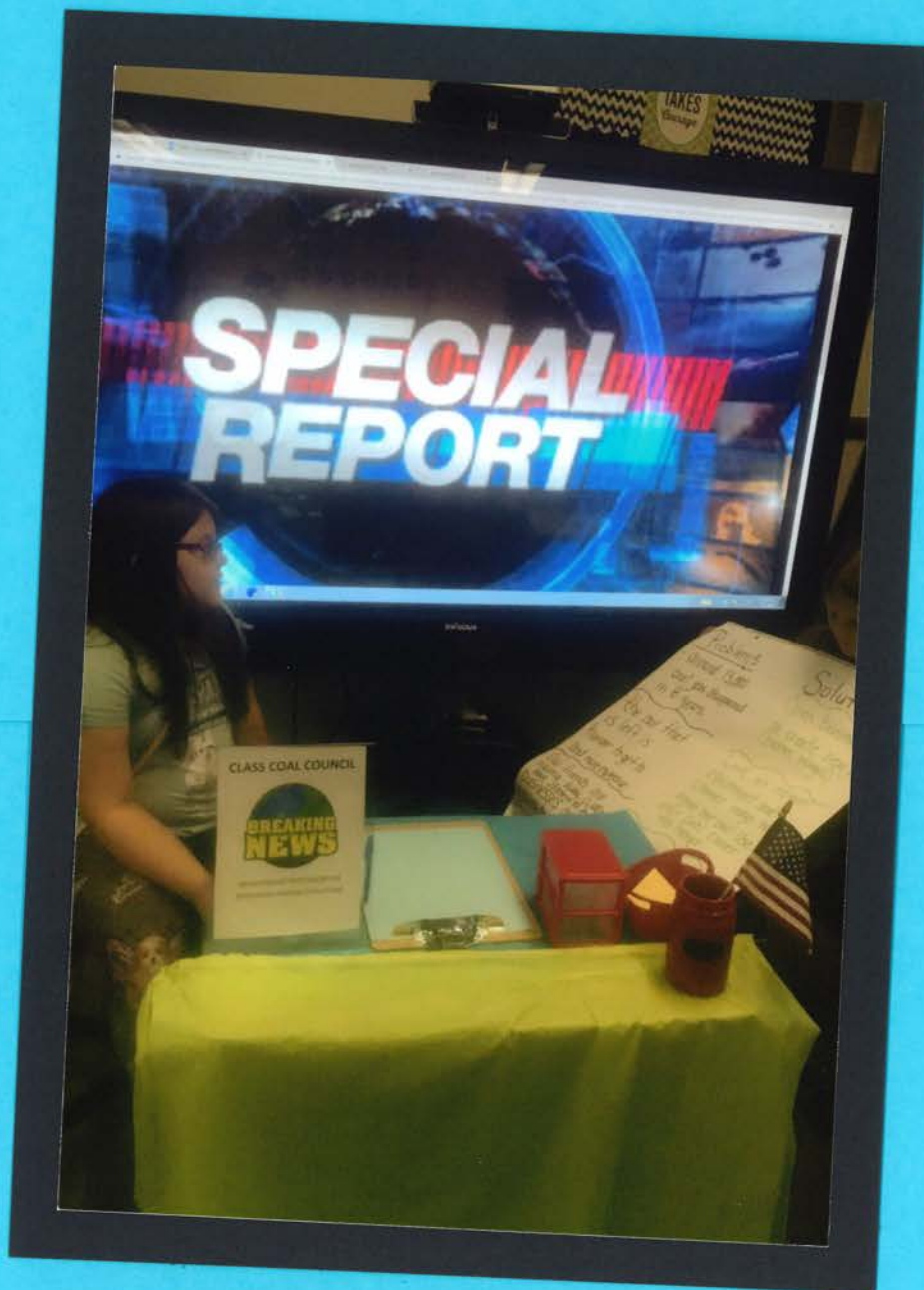
01-08-18

Students researched EQ2 and brainstormed current issues and challenges that we feel that our area is facing. They created problem/Solution Charts which they used to create a collaborative class chart. We discussed the class chart issues and challenges and possible solutions for each.



# Activity 12

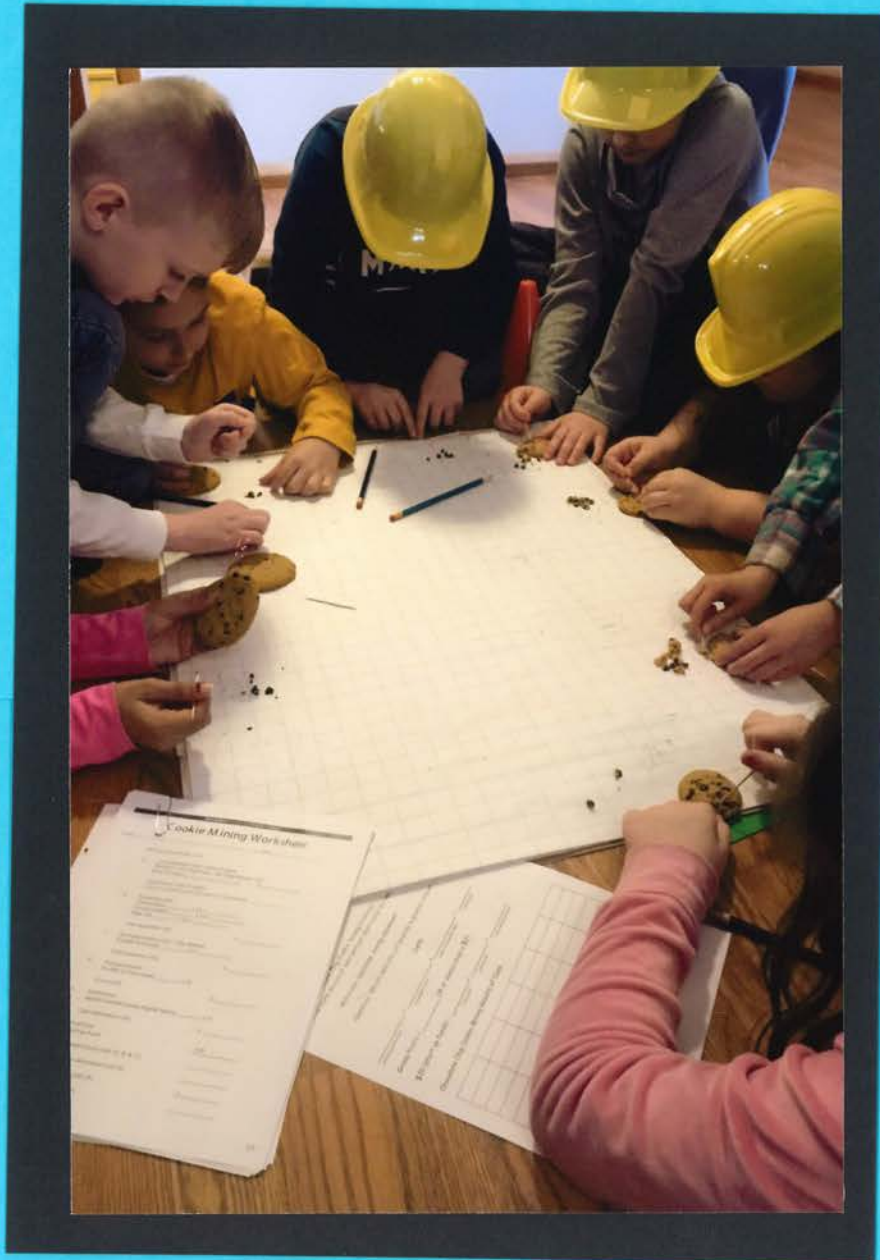
We created a "Class Coal Council" where we discussed the challenges and issues of our area. We then created a News Broadcast where we shared our findings! This activity allowed my students to discuss their concerns and take ownership of ways that THEY personally could overcome these challenges. As a teacher, it is very important to me for my students to see that THEY are the future and that it is never too early to develop leadership skills and look toward the future to help our area overcome the current issues. I want my class to love their history and heritage and to see that is the reason why we have the resources that we do today; but it is equally as important for the students to want to get involved and see their community move forward and progress and it is never too early to begin this step!



01-08-18

# Activity 13

Cookie Coal Mining – Students participated in a simulation to see that much of the coal left in our state is expensive to mine and hard to get to and compare that with mining in other states. In this activity the other states were the “Chewy” soft cookies and the price of these were more as well as the area was larger. The cookie representing our state was hard and was much smaller in area. The students were given a set amount of time to mine the land. They also had to trace the land on the gridded chart paper to find the area for reclamation. All of this was followed by a calculation sheet where we recorded our findings and compared the outcomes with a discussion on our findings. This activity allowed my students to see some of the issues leading into answering EQ2.



# Activity 14

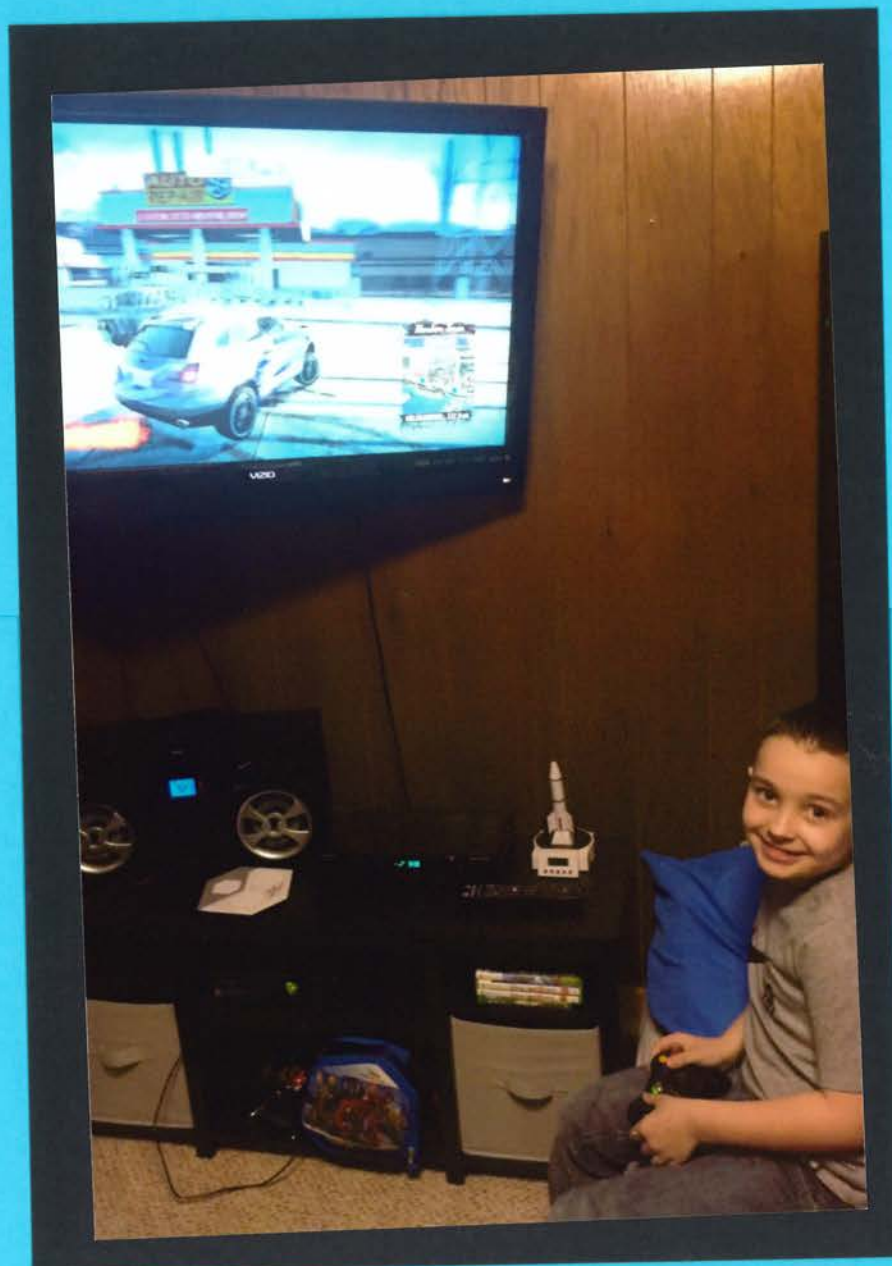
In this activity, students created a scaled bar graph to compare the production of coal in their state the year they was born to the current production. (He used 2016 because that was what we could find in our internet research.) This student's findings showed our class a drastic decrease in coal production in just 8 years! The graph allowed my class a concrete visual that they could look at to see the drop! We used technology to assist us with creating this graph since the values of the numbers were much higher than we graph in our grade level! Once again this shows how students can use technology to excel above their grade levels!!



# Activity 15

01-08-18

This activity was something that the students' wanted to add into our unit. My students drive our unit every year so you will see things added in that wasn't in my original plan. However, if it helps us to better understand our EQ's then I am all for it. In this activity students photographed themselves at home using materials that are provided by coal. Coal plays a big role in production of electricity for the United States and I loved seeing how my students realized the personal impact that coal has on their life. This allowed them to see the decrease in coal production would mean that it could effect things like electricity production. (or cost) Also with less coal jobs, many parents are working in jobs with less pay to remain in the area which makes it hard to pay bills necessary for enjoying their favorite things! This activity allowed my students to see that the issues our state is facing effects each and everyone of them every single day!



# Activity 16

Students had class on a reclaimed mining site in our area to gain a first hand understanding of the impact of reclamation and using the resources provided by coal to solve the issues that our area is facing. In this activity they took a nature detective walk to investigate the area looking for clues of the once mined land and seeing the effects of what it was developed into. In this picture students investigate a rock pile where they noticed some pieces of coal. This investigation allowed them to see the reclamation and how reclaimed land and redevelopment can promote growth of our area.



01-08-18

## Activity 17

In this activity we had a guest speaker to share the importance of the reclaimed land we were visiting to him as well as to the community. He is the park caretaker. He discussed with the students what the land was before and how that played a role into what it was today. The pond that was once a dump for coal slurry was reclaimed into a 10 ft. pond that is now stocked with 5 different types of fish and the land is home to many different animals including ducks and geese, beaver, deer, turkey, bear, bobcat, possums, raccoons, and other small species. This activity allowed the students to see that land from mining is actually a valuable resources in overcoming the issues that we are currently facing.



# Activity 18

In this activity we had a guest speaker who talked with us about the Kentucky Industrial Park and how locally we are utilizing resources from coal such as reclaimed land to build up and look toward the future. While coal mining will remain important to our area and will still benefit our economy this will add other jobs such as factory jobs which will fill the need for good paying jobs since the recent decline in coal jobs have left a high demand in our area. This activity gave us insight in what is currently taking place in Kentucky and how that we could use reclaimed land to overcome the issues that we are seeing.

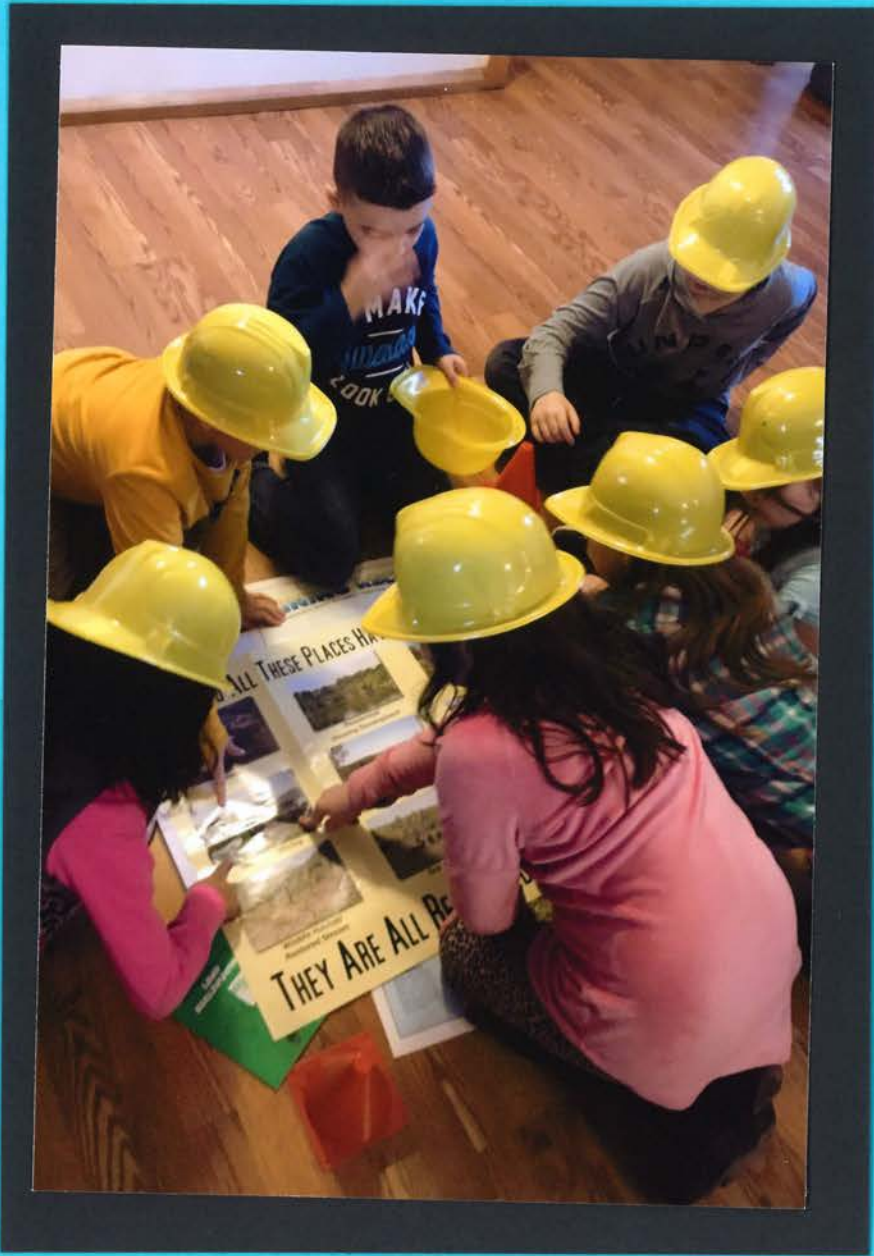




# Activity 19

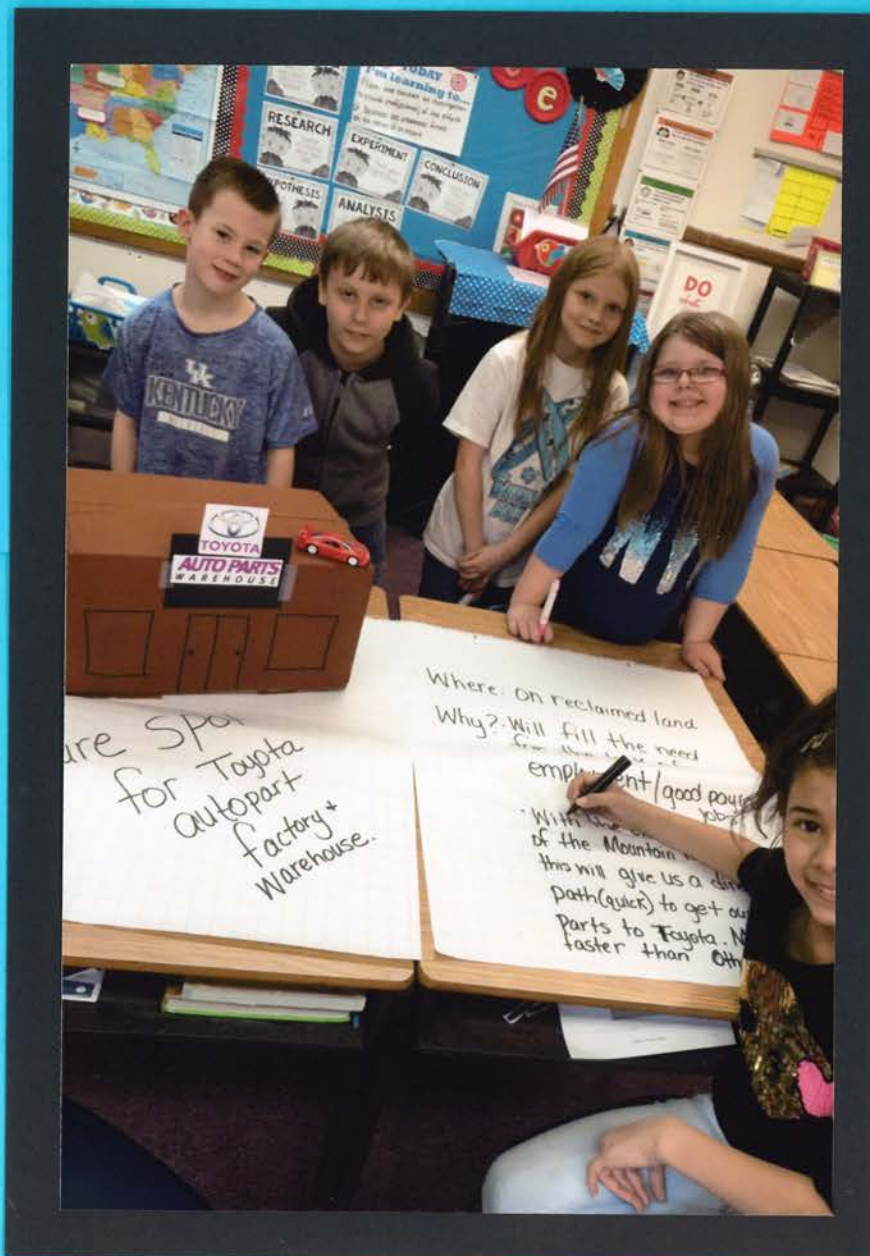
01-08-18

In this activity, students studied a poster provided by CEDAR to demonstrate uses of reclaimed land. They will build upon this activity in a following connecting activity where they discuss uses for reclaimed land and the benefits of the ideas for the community. This activity showed the importance of utilizing the resources that coal has given us to overcome current issues that we are facing which is our EQ2.



# Activity 20

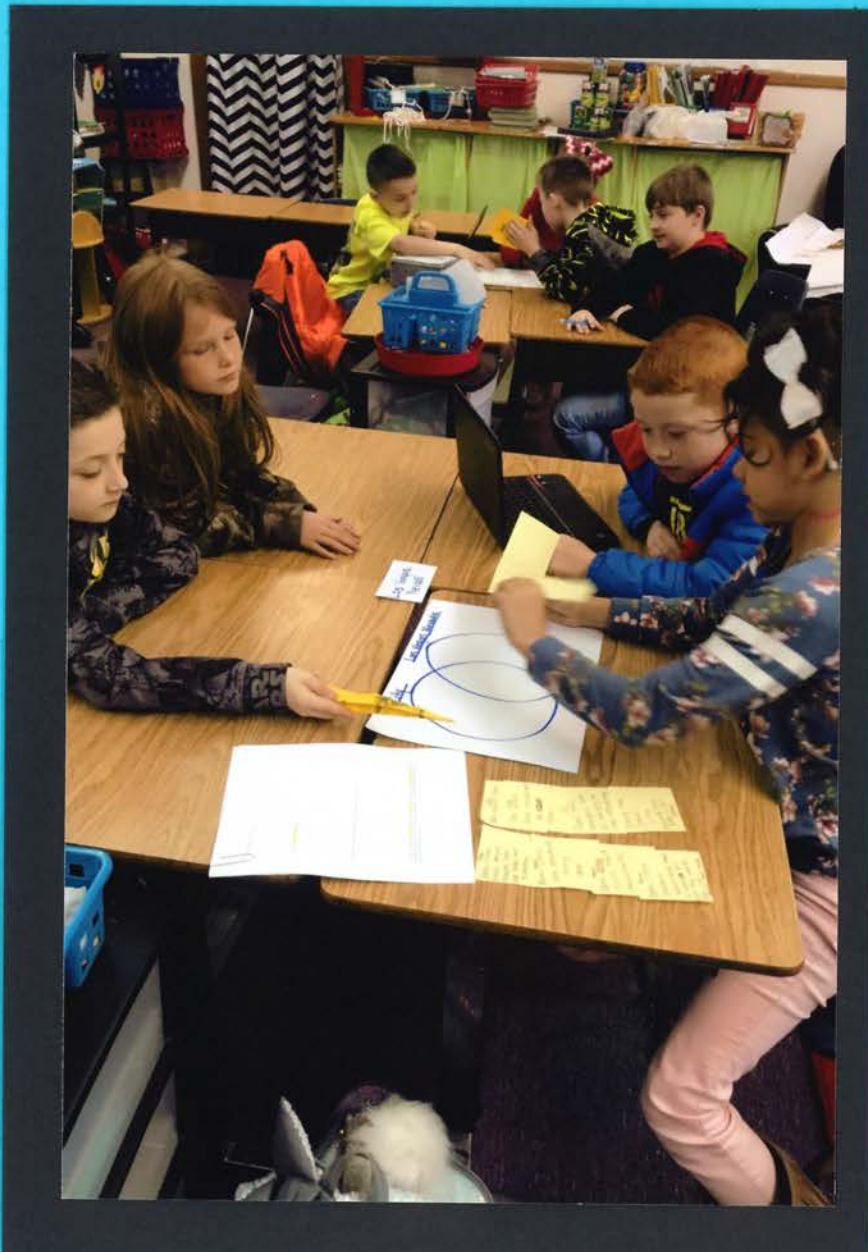
Students brainstormed ideas for reclaimed land and listened to speakers discuss using resources from coal such as reclaimed land to build up their communities. In this activity they demonstrated their knowledge of those activities by creating models of what they would put on reclaimed land to best benefit our community. They came up with three ideas, created two models, and then chose a winning model in which our class discussed and made a class chart. The winning model was a Toyota supply center/ part factory. With the help of a guest speaker we discussed how large factories interested in developing in our area needed reliable infrastructure, roads, sewage, water and power to be successful. We discussed with the expansion of the Mountain Parkway that our area would now be connected to places such as Georgetown, KY which is home to a Toyota Factory. We discussed how a reclaimed site would be a perfect place to manufacture the parts that Georgetown needs to make the automobiles and how we would be able to offer parts delivered directly to the factory. This would eliminate buying parts overseas and having to wait to have those things shipped along with acquiring the expense of doing so.



# Activity 21

01-08-18

In this activity, students utilized social media to reach third graders in other parts of the world. We did this electronically as well as being a part of, "The Great Mail Race". (This is where students around the world in our grade level send us mail regarding their cities and we send them things about our area!) We used the information that we collected to see major components and important parts of other cities. We created a Venn Diagram to compare the larger cities with our city to see possible solutions for overcoming the current issues that we are facing in our area. We collected survey results from over 1,000 teachers!) Our STLP collaborated with our class to organize that data and used a US map and dot stickers to track the responses! STLP created, There's No Place Like Home project in which they shared at the district level and will be sharing at the state level this month. This showcases our findings and how we are seeking to solve the current issues that our area is facing!



01-08-18

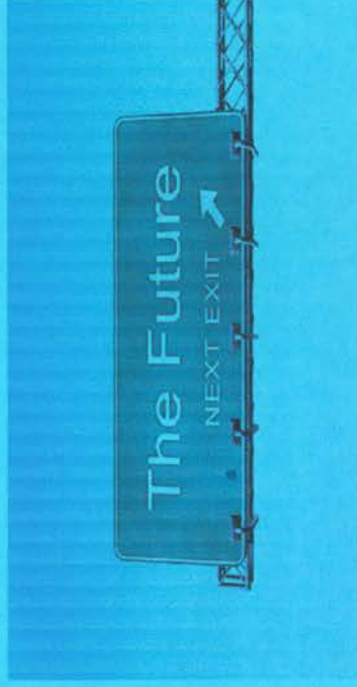
# Activity 22

In this activity, we had a guest business owner which is a grandparent of a student in our class so this activity also played part in EQ 1 and seeing the impact of the history of coal. Our guest was the owner of the very successful Pizza Shop next to our school for over 25 years. With the downfall of the economy and the closure of the nearby mines the pizza place sadly closed their doors. The guest discussed the impact of coal on making their business successful for such a long time. We also discussed the impact of the business on the local community. This little Pizza Shop holds a big spot in our heart and fed all of the students' parents when they were students themselves! They gave so much to the community and to the school. While speaking to the class they focused on being entrepreneurs and gave the students tips on running a successful business for market day. As students participated in Market Day, they applied the skills such as always remember to smile!



EQ #3: How can YOU use your personal interest, talents, and skills to assist in building a future sustainable economy?

In this section, you will see pictures and activities that we completed to help us answer EQ #3.



01-08-18

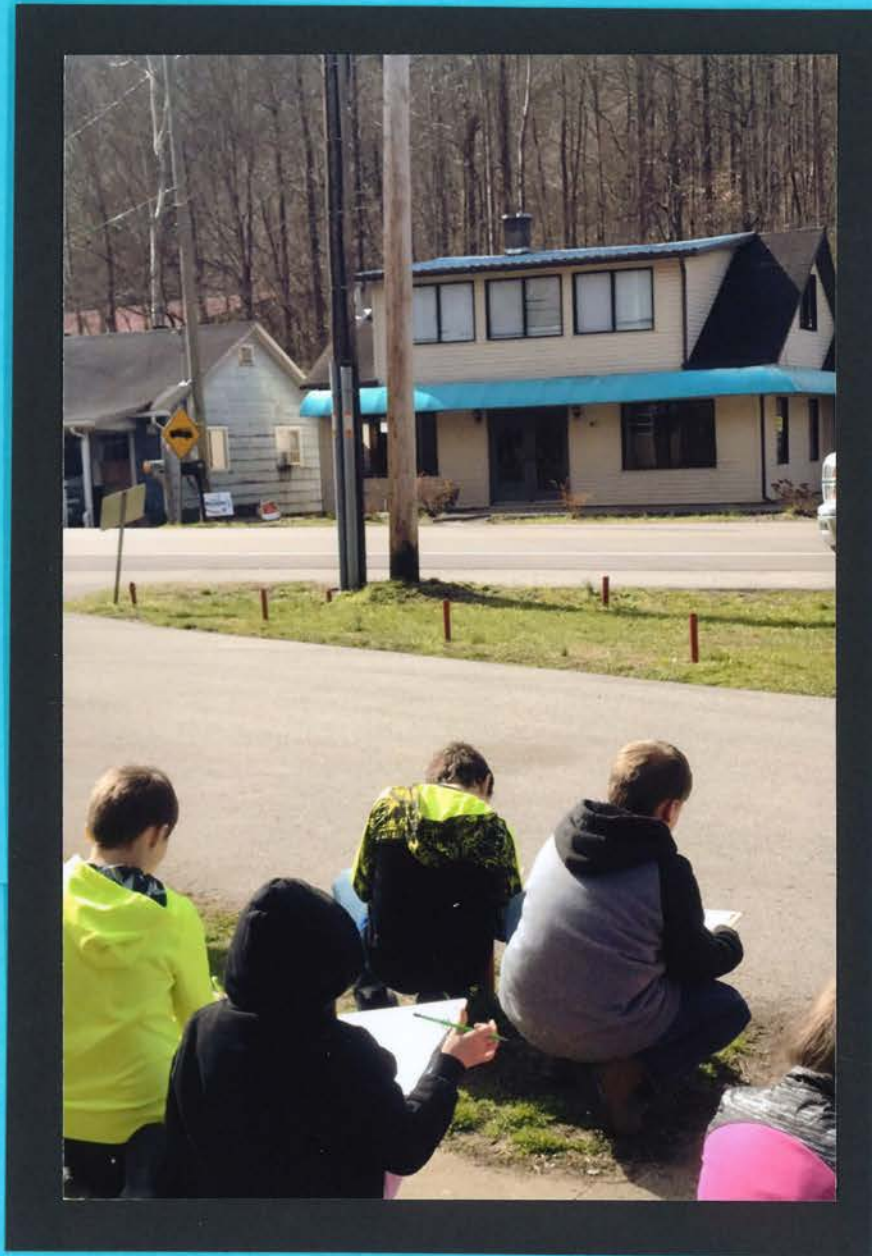
# Activity 23

In this activity, students used Library times to research careers that they could have here in our community. This activity is a part of EQ3 where students are seeking opportunities that they can use their interest, skills, and talents to build up their community.



# Activity 24

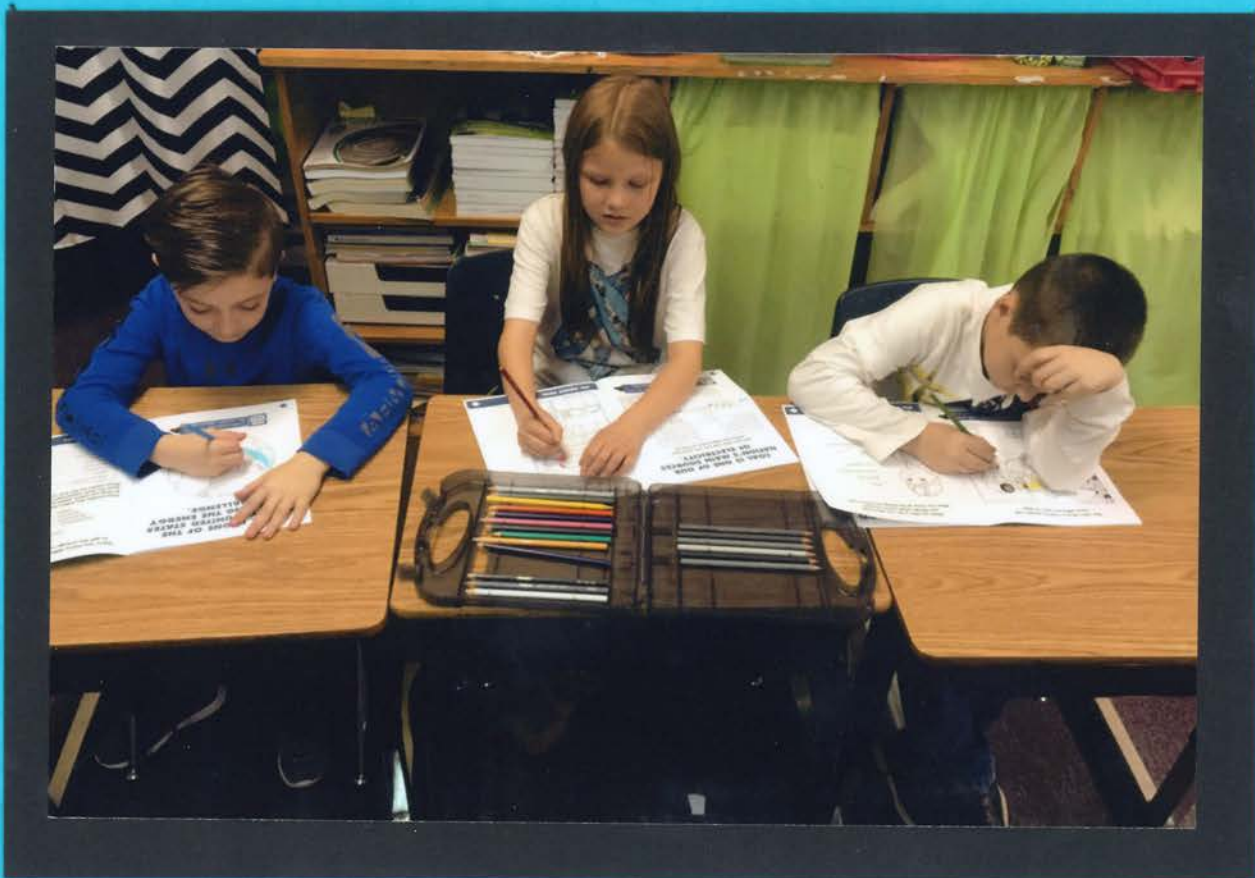
As we discussed issues and concerns in our area, we talked about how so many houses and business were empty or for sale in our area. Just looking out the school there were three buildings empty. We decided to pretend that the building right outside of our school was given to us to open our business in. We then created blueprints using area and perimeter. We went outside and sat and used clipboards to work on our blueprints as we used the "potential building" as our plan/model.



01-08-18

## CEDAR Coal Books

Throughout the unit, students utilized the “All About Coal” booklets to look at the science of coal and how it was formed, to see where coal is mined, the types of mining, and how the industry employs many people.





## Activity 25 – Entrepreneurial Opportunity

This is our "FAVORITE" part of our unit! We anticipated this event as we planned the unit but it was so much greater than our expectations! "WOW, just WOW" ... the real world experiences, the problem solving, and the critical thinking skills applied in this activity! It was amazing to watch these kids go from student to store owner and boy did they play the part! As faculty and staff shopped at our small businesses they took the time to question my students on their knowledge of coal and the impact of coal on their businesses and let me tell you, they delivered. I loved walking around hearing my students explanations of how coal provided resources such as land and electricity for their businesses or that the bi-products of coal was used in the materials they needed for the business. One little boy needed a pen for his receipts and didn't bring it so he bought one from another child's Office Supply Store. This activity provided so much opportunity for my students that it is impossible to put into words. My students' had to pay taxes, pay employees, pay and choose types of advertisements such as billboard signs and commercials, and utilities. They had to rent their store lot and the prices varied from placement on the reclaimed land. This activity really was the connection of our unit's three essential questions. It tied our unit together as we saw that 1. Coal's history built us our community and provided the resources we have today, 2. We have issues concerning job shortages and our economy is down, our population has decreased, and many things in our area have closed; and 3. We can use our talents and abilities and pair that with the resources we have to move our community forward and progress!



01-08-18



## Activity 26

In this activity students wrote and illustrated a class book called, "No Place Like Home". In which we have included in our unit as a sample. This book is an example of our Over-Arching goal. In the book students share what home means to them. The book talks about how in time things need a little more love and how we can work together using interest and talents along with resources from coal to create a home like no other. We want to share with others that when there are issues you must educate yourself of the past, connect it to the present, and take action for the future! We have had so many friends move away! We don't want that to be the final answer for the problems of our community. We want to take action and to educate others on coal so that they are aware of where it has brought us, what it has gave us, and how we can use it to grow and better our tomorrow because we all know, "There's really no place like home!"



A special unexpected part of our unit is when we had a Kentucky author to come visit us and share her work. The students' were taught about the pride that comes with being an author and about how published work allows to share your thoughts and ideas all over the world. During this activity our students' had the opportunity to read their parts of their books to their parents, peers, and community members at our "Meet our Authors" event.

01-08-18



01-08-18

# 3. Summary

01-08-18

## Summary

As we look at our unit through our rear view mirror, to say we are proud would be an understatement. I feel that we successfully addressed the meaningful issues and concerns of my students. The students were actively engaged throughout the unit and problem solved to analyze the issues we felt our region was dealing with. Through creating market day projects, to designing blueprints for a business, to building models for reclaimed land, my students were constantly applying creative and critical thinking skills. My students not only helped to plan the original unit but as we progressed through the unit they added activities to help us connect our original activities and arrive at the answers to our essential questions. Not only did we focus on the history of coal, we also meshed in other topics such as cultural aspects of coal in our region and in our families, issues and concerns of the decline of coal related jobs, and utilizing resources of coal such as reclaimed land to progress and look toward the future. We enjoyed implementing cross-curricular activities including science, social studies, language arts, math, music, art and technology throughout our unit study.

As my students and I were evaluating the success of our unit to see if we had answered our essential questions and met our over-arching goal, my students were completing the part of the survey about what they would change about the unit. I was saddened to think that they would change something because I thought this was by far the most successful CEDAR unit that I had taught. When I read the comments I found out that their responses were that they didn't want the coal unit to end. They wanted to open their markets back up and bring in local miners to shop. They wanted to continue adding to the Toyota Parts factory model and they wanted to connect to more cities

through our social media and great mail race activities. You know the unit went well when they are asking to work. Truth is they didn't view it as work. Our activities were as active as my rambunctious group of kiddos so they thoroughly enjoyed each of the lessons. As an end of unit assessment we used the online program "Kahoot" to complete the activity that we used as preplanning. The students' answers were proof that not only did they find answers to our questions and meet our goal also walked away with a real life experience that they would always remember. I once heard a quote that what you teach may one day light the world. There isn't a doubt in my mind that my students will be the light of our region as they work together to assure that there's no place like OUR home!

01-08-18

# Work samples



01-08-18

Work Samples are numbered with white dots in the top right hand corners to correspond with the activities that they match.

## Work Samples Enclosed...

Just like this student enjoys the Moon Pie he is eating, We have enjoyed our 2018 Cedar unit. We have answered our 3 essential questions and have tied our unit together with our class book and Market Economy Day. Next, we have included some work samples for you to catch a glimpse of some of the learning that has occurred. Thank You CEDAR for making these learning opportunities possible!

01-08-18



## School Coal Fair Projects

This unit inspired some very special coal fair projects. Two of the projects were English content. The first one titles, "All My Friends Have Moved Away" is evidence of our EQ2. This is an issue that we have in our area. My classes start out big and we lose several students before the year even starts. It is a very sad but true situation. The 2<sup>nd</sup> piece titled, "Daddy was a Minin' that Coal, showcases many of our students' situations with daddy working to provide for his family. The next project inspired by our unit was a technology project. This PowerPoint presentation was made by one of my students entirely on his own and shows his knowledge of computers at such a young age. He even emailed it to me on his own. 😊

Daddy was a Minin' that Coal

Momma was a sleepin', baby was a sleepin',  
while Daddy was on his way to minin' that coal.

Momma was a cookin', baby was a eatin',  
all while Daddy was a minin' that coal.

Momma was a cleanin', baby was a playin',  
all while Daddy was a minin' that coal.

Food was on the table, and the house was all warm,  
all because Daddy was a minin' that coal.

Daddy's lungs were black, and he was down in his back,  
all because Daddy was a minin' that coal.

But Daddy didn't care, cause his family was a happy,  
all because Daddy was a minin' that coal.

01-08-18

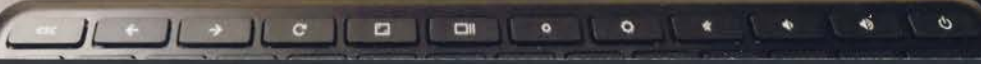
All My Friends Have Moved Away

few years ago, before my time,  
most everyone worked in a mine.  
They worked underground, or on top,  
or driving trucks, or at the shop.  
These were good jobs with good pay,  
but now it is a different day.  
Not many coal trucks on the roads,  
the trains don't run to pull the loads.  
All our mines are shutting down  
and people are moving out of town.  
All those lives forever changed,  
The way we live is rearranged.  
It's really sad to see this day,  
cause all my friends have moved away.

For a long time, Men and women worked hard in the "Coal mines"



lenovo



01-08-18

This sample is of internet research that my students found to be beneficial in answering their essential questions. We especially loved the article of coal's past, present, and future since it tied to our essential questions and over-arching goal.

ENERGY FACTS | FOR TEACHERS | RESOURCE CENTER | CONTACT US

## Future

As an important and plentiful fuel source, many people may not realize just how long it has been around. Looking at past and present uses of coal can tell us what the future of coal might be.

As mankind has thrived. In fact, coal was used to provide heat in caveman times!

In the 1300s in what is now the United States, Native Americans used coal for cooking, making clay pots, and heating. By the mid-1700s, the first U.S. coal mining operations opened in Virginia.

Wood charcoal had long been used to provide fuel in England, but in the 18th century it was discovered that coal burned cleaner and hotter. Soon after, coal use skyrocketed during the Industrial Revolution, when demands for energy sources increased.

Coal was used to fuel the boilers on steam-powered trains, which became a popular mode of transportation in 19th-century America. At the same time, coal was being used in the production of weapons during the American Civil War, and coke (a coal residue) took charcoal's place as the primary fuel for making steel.

About 100 years ago in the United States, coal's abundance led to its widespread use for heating homes, generating electricity, providing cooking heat, powering railroads and boats, and fueling factories.

### The Present

Although coal may not be as visible today as it was around 1900, it is even more prevalent as a source of fuel. Coal production has increased by more than 70 percent since 1970.

If you use electricity, chances are that you are a coal consumer. Nine out of every 10 tons of coal mined in the United States today is used to generate electricity. About 56 percent of the electricity used in this country is coal-generated electricity.

Electricity generation is just one use of coal in the United States. In addition, manufacturing plants and industries use coal to make chemicals, cement, paper, ceramics, and metal products, to name a few. Methanol and ethylene, which can be made from coal gas, are used to make products such as plastics, medicines, fertilizers, and tar.

Certain industries consume large amounts of coal. For example, concrete and paper companies burn coal, and the steel industry uses coke and coal by-products to make steel for bridges, buildings, and automobiles.

About 9 percent of U.S.-mined coal is exported to some 40 countries, including Canada, Japan, and Western European nations.

### The Future

The United States has about a 235-year supply of coal, if it continues to use it at the same rate as today. This is promising because, in addition to the many existing ways to use coal, the future holds new methods and potential for growth. Products from coal may soon be part of communications and transportation systems, computer networks, and even space expeditions.

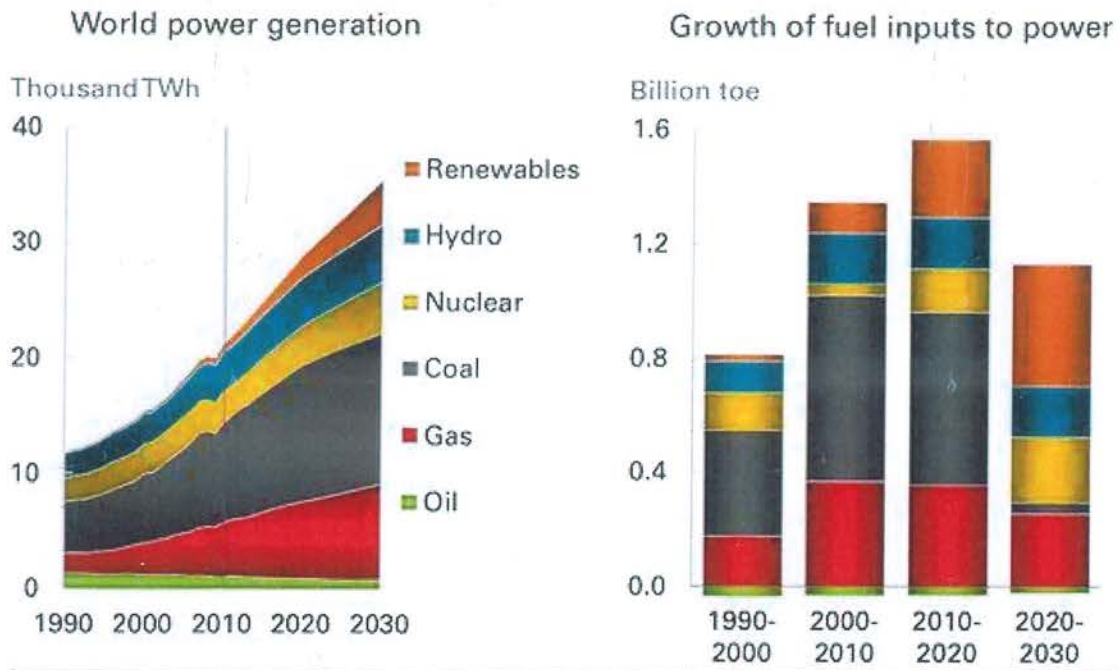
Coal will likely continue to be an important source of electricity generation because it is more abundant and cost-effective than oil and natural gas. Compare these energy costs per million British thermal units (Btus):

- Coal—\$1.20
- Oil—\$4.45
- Natural gas—\$4.30

WOW!!!



Strong growth in power generation continues...





This sample is of our fact swap that we completed using the internet research. Students walked around to their peers and swapped facts with each other to complete their fact sheet.

# Fact Swap

you are learning  
. Then find six more  
facts for one of your classmate's  
9 different facts altogether.

Try to make your facts original so that your classmates will not already have them.




Coal makes energy	Coal can cause climate change	Coal is a fossil fuel formed from the composition of dead plants and animals
-------------------	-------------------------------	--

## Facts from my classmates

Coal can be heated to produce coal	6 billion tons are used a year	Coal is classified by it's carbon content
Coal provides 1/3 of the world's electricity		

**RESEARCH NOTES**



Topic: Coal's Impact on the present, past, and future.

**Big Questions**

1. How has the natural resource coal, impacted our local area (economy)?
2. Why is it important to utilize the resources that coal has given us to help overcome the issues and challenges that our area currently faces?
3. How can you use your personal interest, talents, and skills to assist in building a future sustainable economy?

**Sources:** (List the Sources you used on your fact hunt below)

- 1.
- 2.
- 3.
- 4.



STLP will be presenting the showcase, "No Place like Home" at the state level this month. They have collected a wealth of information and will continue to do so as they showcase all of our findings for our state. I am very proud of all of our students as they prove once more that there is NO place like OUR home!



01-08-18

Upgrade to add users and get team collaboration tools. [View pricing.»](#)



PREVIEW & SCORE ] COLLECT RESPONSES ] ANALYZE RESULTS



QUESTION BANK ? ^

Search for questions

Recommended Questions y

Previously Used Questions y

BUILDER ? v

THEMES ? v

LOGIC ? v

OPTIONS ? v

/ PRINT

Page Logic -

More Actions -

+ UPGRADE TO ADD A LOGO

# No Place Like Home

+ PAGE TITLE

1. What city do you currently live in?

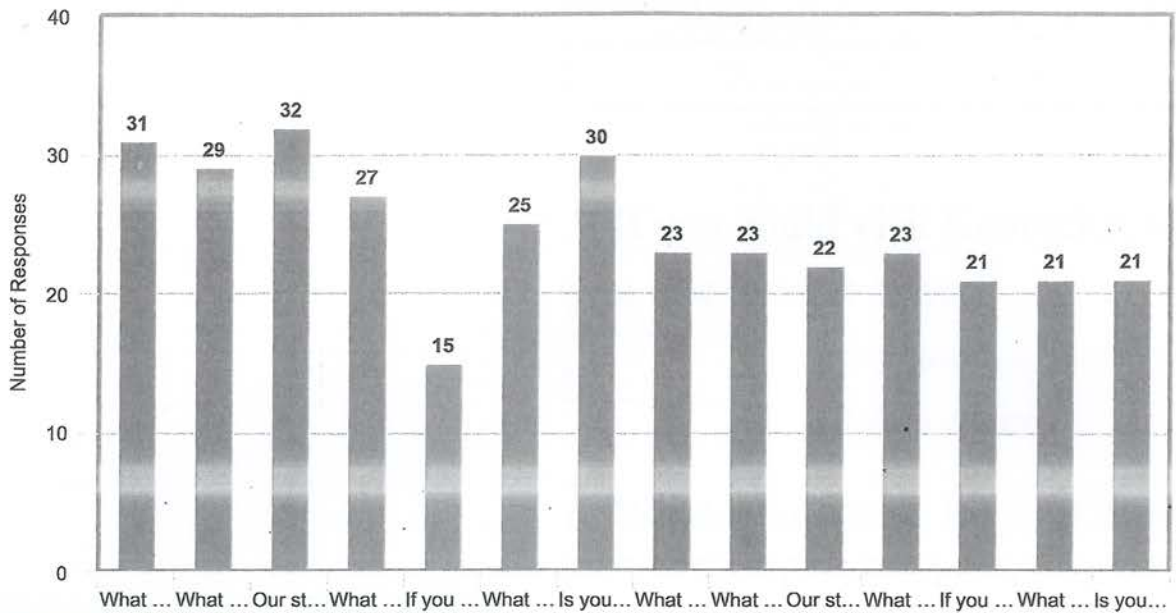
2. What type of job do you or your parents do?

3. Our state is known for coal. What is your area known for?



This is a sample of the survey that STLP distributed using survey monkey. We collaborated with the STLP team throughout the unit to utilize technology in survey results.

Interview Data  
Survey Monkey/personal interviews



This is some of the interview data from parents and grandparents that was collected through survey monkey.

Interview Data

meta-chart.com

01-08-18

This is the note used to collaborate with parents and grandparents in effort to utilize businesses, community members, and people in coal related jobs to help us understand the impact of coal to our region.

*Parents,*

*We are working with you in our class.*

*We would love for you to help us*

*in this learning opportunity. If you own a business or have previously owned a business in our area, we would love to hear how coal has impacted you/your business. If you work in the coal industry and would like to share with the class, we would love that as well. Please complete the bottom of this sheet and return to school by Monday so that we can get everyone scheduled.*

*Student Name: \_\_\_\_\_*

*Name of guest: \_\_\_\_\_*

*Available times to come share your stories with our classroom. \_\_\_\_\_*

*Thanks so much for helping us learn more about the impact that coal has had on our history, economy, and everyday lives.*

This note is concerning our outdoor learning day on reclaimed land. Utilizing reclaimed land gave my students a first-hand experience in effort to help them understand the important of reclamation to the economy and region.

AR coal unit, we will be going to Grant's  
ay, March 16<sup>th</sup> 2018 for an "Outdoor  
Branch is located on a reclaimed mining  
ne resources to assist in teaching our coal  
n issue we will move into the cabin for the  
packing a school lunch. The cost of the trip  
is covered, if any parent wishes to send snacks or extra drinks  
that would be greatly appreciated. Please contact me if you have  
any questions in regards to the trip. As always, thank you for all  
you do to make our students learning experiences, "Simply the  
best!"

Please return the bottom portion of this sheet to school by  
Thursday.

---

\_\_\_\_\_ has my permission to go to Grant's  
Branch Park on the bus on Friday, March 16<sup>th</sup> 2018.

\_\_\_\_\_

Emergency Contact Name and number

\_\_\_\_\_

Parent Signature

# Mining Worksheet

This sample is our group activity, cookie mining. The outcome of this activity showed the kids that the KY was harder to mine and the profit was less than the competition. It cost more to mine the KY coal and with the cookie being hard the coal was more difficult to get out. This allowed students to understand some of the issues that our state is seeing with the coal that is left to be mined.

Date: \_\_\_\_\_

\$19

costs = price of cookie

(Chips Ahoy - \$5; Chips Deluxe - \$7)

Ky \$ 7

price of cookie

pre-mining (used for reclamation) 4

- B. Equipment costs  
 Flat toothpick 1 x \$2 = 2  
 Round toothpick \_\_\_\_\_ x \$4 = \_\_\_\_\_  
 Paper clip \_\_\_\_\_ x \$6 = \_\_\_\_\_  
 Total equipment costs \$ 2
- C. Mining/excavation costs = chip removal  
 Number of minutes 3 x \$1 3  
 Total excavation costs \$ 3
- D. Mining valuation  
 Number of chips mined 17 x \$2  
 Gross profit \$ 34
- E. Reclamation  
 Squares covered outside original outline 0 x \$1  
 Total reclamation costs \$ 0
- F. Profit/loss  
 Start-up funds \$19  
 less total mining costs (A, B, & C) - 12  
 less total reclamation costs (E) - 0  
 plus gross profit (D) + 34  
 Total profit/loss 41

# Cookie Mining Worksheet

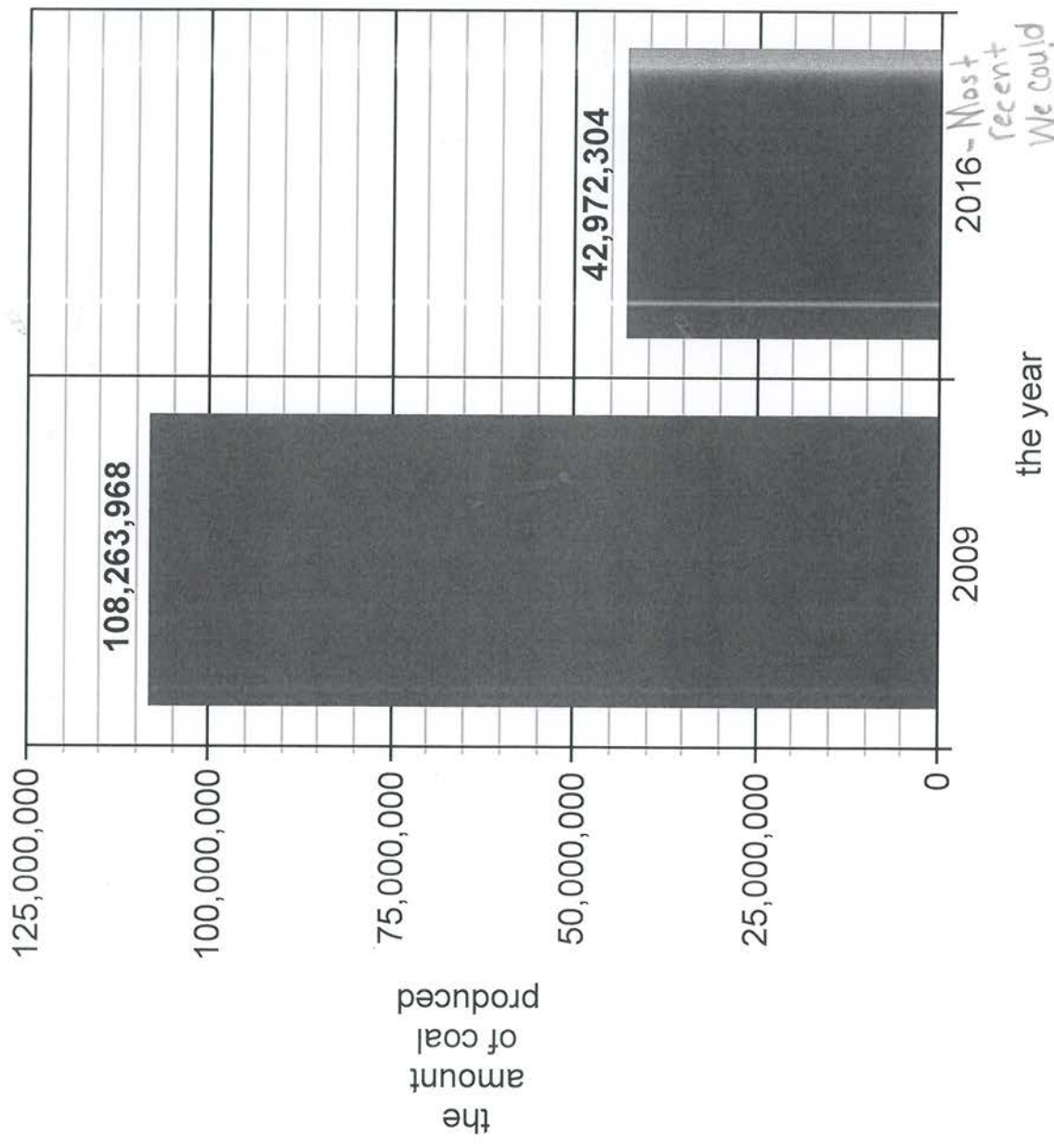
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Mining start-up funds = \$19

- A. Land acquisition costs = price of cookie  
 (M other's - \$3; Chips Ahoy - \$5; Chips Deluxe - \$7)  
 Name of cookie Moni \$ \$5
- Size of mine = size of cookie  
 Squares covered pre-mining (used for reclamation) 8
- B. Equipment costs  
 Flat toothpick 1 x \$2 = 2  
 Round toothpick \_\_\_\_\_ x \$4 = \_\_\_\_\_  
 Paper clip \_\_\_\_\_ x \$6 = \_\_\_\_\_  
 Total equipment costs \$ 2
- C. Mining/excavation costs = chip removal  
 Number of minutes 3 x \$1 3  
 Total excavation costs \$ 3
- D. Mining valuation  
 Number of chips mined 18 x \$2  
 Gross profit \$ 36
- E. Reclamation  
 Squares covered outside original outline 0 x \$1  
 Total reclamation costs \$ 0
- F. Profit/loss
- |                                     |           |
|-------------------------------------|-----------|
| Start-up funds                      | \$19      |
| less total mining costs (A, B, & C) | - 10      |
| less total reclamation costs (E)    | - 0       |
| plus gross profit (D)               | + 36      |
| Total profit/loss                   | <u>45</u> |



Coal Production the year I was born vs. current (2016)



This sample shows the electronic bar graph generated by a student using a computer program. This activity allowed my students a visual of the decrease in coal production. By seeing this drop students could understand the issues of fewer coal jobs in our state.

01-08-18

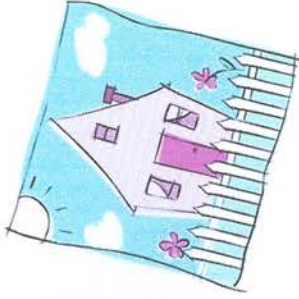
14

2016 - Most recent We could find.

# Coal in my home



# SNAP SHOT



- Directions: Take a snapshot of you at home showing the importance of coal...

01-08-18

Coal provides  
 fun things  
 that I enjoy!  
 What does this picture  
 mean to you?

How has coal fueled this?  
 Coal has  
 powered  
 my xbox with  
 electricity.

What does this picture  
 Mean to your future?  
 Playing my  
 xbox gives me  
 problem solving  
 skills that I  
 could use in real  
 life.

I hope our  
 electricity  
 will always  
 be powered  
 by coal.

This is a sample of a reflection that a student completed to go along with his picture of how coal impacted his daily life and how coal is a resource that provides the things he needs as well as the things that he enjoys!

01-08-18

15

## How coal helps my family

This is my poppy's hard hat. he wore it for safety when he got his job at Mary Helen coal company it was a good job and he was able to buy a house and take care of his family. being a coal miner made our family's life better.



with Poppy's coal hat.

In this sample, a student displays her poppy's hardhat and discusses how coal is important to their family to provide an income and to help them to have a better life.

# Clues of past before reclamation

01-08-18

Small lumps of  
Coal. coal and rocks.  
Coal under rocks.  
lots of hills.  
flat lands

# What does it <sup>16</sup> look like today?

Lots of trees.

Oak tree.

Squid.

chess nuts.  
acorn.

moths.

lots of sticks.

Yellow Poplar.

birds.

lizard.

fish.

Snails.

roses

animal dung.

This is a sample of the nature detective activity on reclaimed land where students looked for clues of what the land was before reclamation and described what it looked like today.

### Outdoor Learning Itinerary

9:00- Load buses

9:00-9:30 Travel to reclaimed land site

9:30- Unload buses- students' complete the history lesson on wheels sheet about the history/heritage of the area they traveled through.

9:45-10:30: Guest Speaker- The park caretaker will discuss before and after of the reclamation and the importance of the park both now and before being reclaimed.

10:30-11:00 – station 1

11:00-11:30 lunch

11:30-12:00 station 2

12:00-12:30 station 3

12:30- 1:00 station 4

1:00-1:45 Recreational time at the park (fishing pond, nature trail, play area.) and snack.

1:45-2:15- scavenger hunt/ drone flying to capture bird's eye view of the reclaimed land.

2:15- load buses and head to school

Students will complete a reflection of the outdoor classrooms when they return to school.

This is a copy of our daily schedule for the activities on reclaimed land (outdoor learning).

This sample is a reflection/questioning activity that students answered after class on reclaimed land. This showed that students understood what the land was and how it impacted our economy and region as well as the benefits of what the resource was utilized to be.

01-08-18

16

Date

# Outdoor Classroom Reclaimed Mining Land

1) List three historical landmarks that you saw on your trip to the reclaimed site.

Historical Place	Impact on our area
Henry Ford home	Ford used to mine coal in our area for coal to be used for steel for his Ford cars
Coal camp homes	Where miners lived to be closer to the mine
Company Store	Where Miners bought what they needed

2) Identify what the land was used for before it was turned into a community park and fishing pond?

An old coal slurry pond, (gold)

3) Describe what you think the land was like when it was a mining site? How would it impact the community as a mine?

lots of coal piles
rocky
lots of coal
mine stuff

4) DESCRIBE what the land looks like now? How does it impact the community now?

grassy
nice
benches
play area.
log cabin
pond

5) If you were in charge of reclaiming this land, what would you have used it for? How would your idea impact the economy?

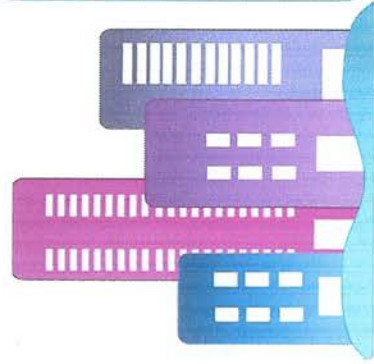
Southside Shopping Mall. (but better!)

## City Comparisons

After watching the YouTube Video, "Building a Future on Reclaimed Land". Use the questionnaire sent to 3<sup>rd</sup> grade classrooms across the world to compare the city to our community. What are some things that the bigger city has that we don't that could help our area to prosper in the future?

Tourism

more hotels  
than any other  
Place



lots of service  
Jobs

01-08-18

This is an individual city comparison sheet that students used to brainstorm ideas after working in their groups and watching the video, "Building a future on reclaimed land".



## *There's No Place Like Home*

### Bringing and Keeping Jobs in Eastern Kentucky

Please complete this short survey and help our school to answer some tough questions and help us problem solve so we can find ways to provide opportunities and jobs in our future market.

What are some specific industries that you would like to see come to Kentucky?	
What kind of jobs do we currently have in our state?	
How could we build on those jobs and keep them in our state?	
What businesses have you seen while visiting other areas that you think would be successful and bring jobs to our area too?	

This is a survey that the STLP team (in collaboration with our class) used to collect ideas of how to utilize the resources from coal to build up the jobs in our state. The STLP team consist of students from our grade as well as a couple of other grades and they decided to present, "No Place Like Home" to spread awareness of the issues we are facing in hopes to develop ways resolve those issues and build our economy back up.

Thank You [redacted] maire in effort to learn more about other cities.  
 We are a [redacted] This is a questionnaire that we sent to cities [redacted] which we are  
 looking at [redacted] around the United States to get a closer look [redacted] unfortunate downfall of the coal industry in  
 our area. [redacted] at the types of things they have that build [redacted] other cities around the world. We are very  
 excited to [redacted] their city up. This was used in a city  
 comparison as we looked at ideas that could  
 work for our state as well.

"A Little a [redacted]

We are lo [redacted]

We c [redacted]  
 decrease [redacted]

Coal was [redacted]

Our area is known for:

The Coalfields: [redacted] part of the Central Appalachian bituminous coalfield.

We are known to have a rich musical heritage and are the home to several country music stars including Loretta Lynn, Patty Loveless, and Billy Ray Cyrus.

The closest major city to us is [redacted] with a population of 7,106. (About 20 minutes away)

Fun Facts: We live in a small remote area where there are no traffic lights, no interstates, and no Wal-Mart stores locally. ☺ The only store we have within our community is a Family Dollar and a family owned gas station.

Help us to discover your city:

1. What state/city do you live in?

We are located in Chicago, Illinois. We are in the northeast corner of the state along Lake Michigan. Our school is on the northwest side of the city, located about 20 minutes from downtown.

2. Our state is known for the coalfields, what is your state (or area) known for?

Whenever people think about Chicago, they think sports! We're still celebrating the recent Chicago Cubs World Series Victory, and who could forget the Chicago Bulls led by Michael Jordan in the 90s! The Willis (formerly Sears) Tower was the tallest building in the world for a very long time. We also have great restaurants, theaters, and museums – The Field Museum (Natural History), Museum of Science and Industry, Shedd Aquarium, Adler Planetarium, National Museum of Mexican Art, and many more!

Rural Illinois is known for growing corn, soybeans, and wheat.

01-08-18

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This is a print out from a survey collected using social media. We were able to survey 1,000 classrooms in our grade across the U.S. to see how many felt that their city was impacted by coal. We were astounded that only 297 of them felt that coal played a role in their daily lives. We collaborated with the STLP team to breakdown the results and see which results came from which states. We used a map and sticker dots to code this activity.

from all 50 states. Our are collecting data. Do you omy? After you choose your ou reside in. Thank You Very

<input type="checkbox"/> no	
<input type="checkbox"/> yes	
<input type="checkbox"/> Texas	+81
<input type="checkbox"/> Florida	+66
<input type="checkbox"/> California	+46
<input type="checkbox"/> Ohio	+38
<input type="checkbox"/> North Carolina	+33
<input type="checkbox"/> Kentucky	+32
<input type="checkbox"/> Illinois	+26
<input type="checkbox"/> Indiana	+23
<input type="checkbox"/> New York	+22
<input type="checkbox"/> Georgia	+22
<input type="checkbox"/> Pa.	+21
<input type="checkbox"/> Missouri	+18
<input type="checkbox"/> Tennessee	+18
<input type="checkbox"/> Virginia	+17
<input type="checkbox"/> West Virginia	+16
<input type="checkbox"/> Oklahoma	+16
<input type="checkbox"/> Michigan	+15
<input type="checkbox"/> Arkansas	+15
<input type="checkbox"/> Arizona	+15
<input type="checkbox"/> South Carolina	+14
<input type="checkbox"/> Maryland	+13
<input type="checkbox"/> New Jersey	+13

749  
297

33

Pink  
yellow

<input type="checkbox"/> Iowa	+12
<input type="checkbox"/> Washington	+12
<input type="checkbox"/> Louisiana	+11
<input type="checkbox"/> Utah	+11
<input type="checkbox"/> Alabama	+11
<input type="checkbox"/> Wisconsin	+11
<input type="checkbox"/> Kansas	+11
<input type="checkbox"/> Nevada	+10
<input type="checkbox"/> North Dakota	+10
<input type="checkbox"/> Oklahoma	+8
<input type="checkbox"/> Massachusetts	+8
<input type="checkbox"/> Minnesota	+8
<input type="checkbox"/> Oregon	+8
<input type="checkbox"/> New Mexico	+7
<input type="checkbox"/> Colorado	+7
<input type="checkbox"/> Idaho	+7
<input type="checkbox"/> Wyoming	+7
<input type="checkbox"/> Montana	+6
<input type="checkbox"/> West Virginia	+6
<input type="checkbox"/> Maine	+6
<input type="checkbox"/> Virginia	+5
<input type="checkbox"/> Connecticut	+4
<input type="checkbox"/> Rhode Island	+4
<input type="checkbox"/> Mississippi	+3
<input type="checkbox"/> NH	+3
<input type="checkbox"/> Nebraska	+3
<input type="checkbox"/> South Dakota	+3
<input type="checkbox"/> New Hampshire	+2
<input type="checkbox"/> Vermont	+1
<input type="checkbox"/> Alaska	+1
<input type="checkbox"/> Delaware	+1

Add an option... Hawaii

January 26, 2018

Class,

My name is [redacted] I go to school in [redacted] Arkansas. Our class is participating in a Social Studies project. The idea is to write to a [redacted] class in another city or state to learn about [redacted] classes, schools, and communities across America.

Please look at our questions, fill out the questionnaire and mail it back as soon as you can. Thank you for helping us out with our project. I cannot wait to hear about your school, city and state.

Sincerely,

Please mail to

This activity is a part of the great mail race where we signed up with other classrooms in our grade level across the U.S. in effort to learn more about their cities and to share about our own. This is such an important activities from my students because many of them will never have the opportunity to visit these cities so we are bringing pieces of each city into our classroom through social media and "snail mail" too!

Studies project on Communities. Please fill out the information on as you can.

This is part of our great mail race. Instead of asking the questions in this letter we are responding back to another school and utilizing the opportunity to teach them a little about coal and what it means to our state.

School colors? red and blue

door of your school? Mountains-We are "Fields". We have mined these mountains for over a hundred years.

What grades are in your school? around 200

How many students are in your school? 200

How many students are in your class? 33 in our grade.

What months does your school begin and end? Aug. - June

How long is your school day? 7 hrs. From 8:00 to 3:00

Do third graders change classes? If yes, for what subjects? yes; Math/science - reading/Social Studies.

About your city and state

What major landforms or waterways are in your area? The Appalachian Plateau heavily forested with trees/mountains.

What is the weather like? relatively humid warm rainy Summers Moderate cold-snowy winter

Describe your community. Circle one Urban Suburban Rural

What is the population of your city? 2,825

What large cities do you live close to? [redacted]

What are somethings your community does together? Our community works together in recovering from loss of coal jobs and in building a sustainable economy.

If we came to your city where would you suggest we visit? We are a "coal town" so I would say to drive by Harris Ford's home and see coal mines and coal camp houses, to get a look at our heritage!

If we came to your state where would you suggest we visit? Ky. has some wonderful parks; one nearby built on reclaimed mine land!

Dear \_\_\_\_\_,

We are so excited to be a part of a "Great Mail Race". We enjoyed completing the questionnaire and sharing our coal heritage and the importance of coal here in the "Coal Fields". Our way of living has always been and continues to be centered on coal. Times have changed in our area and we have experienced a loss of coal related jobs which has in turn had us looking at ways to utilize the reclaimed mining land and resources from coal to build up our economy. Your letter came at the perfect time as we have been busy reflecting on the importance of coal and where that will take us here in our area in the future. We would love to hear back from your classroom about your local economy and things that you enjoy about your city!

We have been busy sending out questionnaires to learn about cities around the world and have been comparing those to our city using a giant map that we have on our bulletin board. Please help us out by completing our questionnaire and returning it to us. We will mark a sticker for your hometown to show our communication. We love our history and heritage and know that our fathers and grandfathers have enjoyed mining it. However, we look forward to finding new ideas from your city that we too could use.

We are Thankful for the resources that coal has provided us with and know that with the right involvement and participation that we see our community overcome the current issues of job shortages to move forward and progress!

Sincerely,

\_\_\_\_\_

# Area and Perimeter Business Blueprints

01-08-18



Your task is to design your new business on this piece of reclaimed land. Use graph paper to make your business.

Building: Area <u>100</u> Sq. ft.	Perimeter: <u>40</u> ft.
Parking space: <u>70</u> Sq. ft.	Perimeter: <u>38</u> ft.
Sign: <u>54</u> Sq. ft.	Perimeter: <u>42</u> ft.
Entrance door: <u>9</u> sq. ft.	Perimeter: <u>12</u> ft.
Area of <u>walk</u> <u>10</u> sq. ft.	Perimeter: <u>14</u> ft.
Area of _____ : _____ sq. ft.	Perimeter: _____ ft.
Area of _____ : _____ sq. ft.	Perimeter: _____ ft.

This is an additional activity that we did when we were discussing how so many business had closed and that so many buildings were vacant in our area we had the idea to pretend that we were putting our business into the vacant building across the street that we can see how the classroom window. Students used area and perimeter to design their blueprints. (We did pretend businesses on market day and this allowed them to connect to the real world!) We discussed the advantages to us and the impact to our economy by having our business in that location.

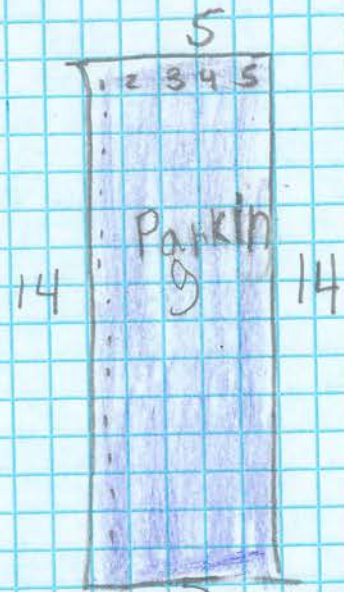
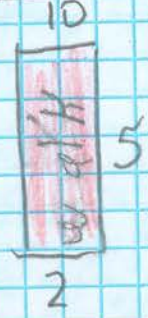
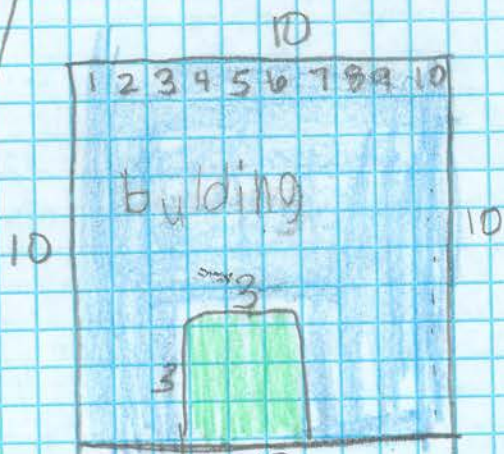


$$10 \times 3 = 30$$

$$8 \times 3 = 24$$

$$30 + 24 = 54$$

24



$$10 \times 5 = 50$$

$$4 \times 5 = 20$$

$$20 + 50 = 70$$

SCHOOL SUPPLY  
STORE

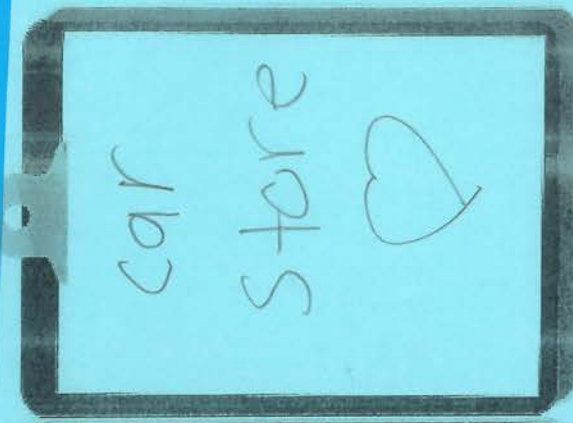
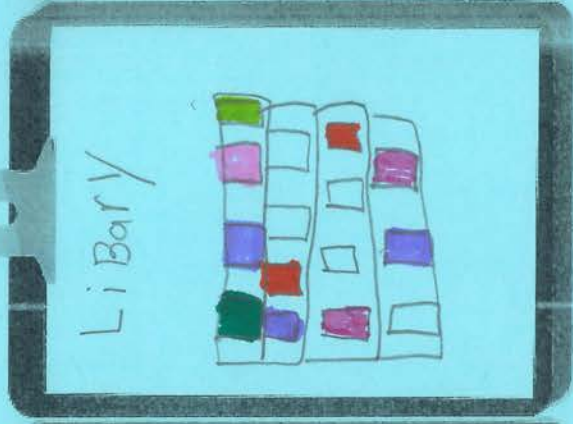
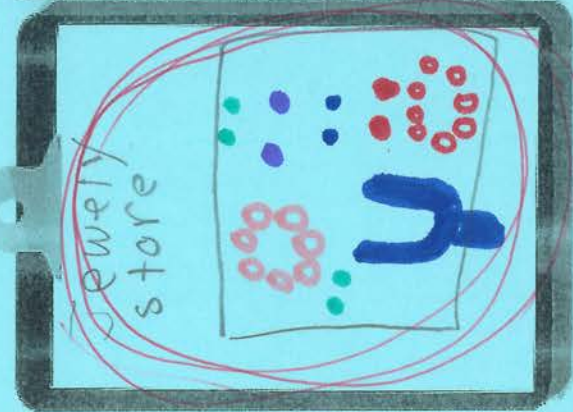


# Business Brainstorm

Brainstorm business ideas with your partners. Ask your partners, "Do we want this service?" Be a good listener. Write everyone's ideas on the clipboard.

Learn

01-08-18



Once your group agrees on a good or service, color in the clipboard with the winning idea.

000

This sample is our brainstorming for our small businesses. Students looked at how their interest, hobbies, and talents can help them to open a small business and impact the future economy of their region. They brainstormed ideas and then circled the one that they felt was the best choice for them.

Welcome to Market Economy Day!

Growing our Future Sustainable Economy

Utilizing Reclaimed  
Land

Thank You for shopping with us!  
Please  
take a moment to complete the  
customer satisfaction survey 😊

01-08-18

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This is a sign showcased at our Market Economy Day where students opened their small businesses for the staff, faculty, and STLP students.

Sample

# Small Business Start- Up Fees

\$10.00 Start up

- Storefront on reclaimed land:
- Front Location: \$5 \_\_\_\_\_
- Middle Location: \$3 \$3
- Back Location: \$2 \_\_\_\_\_
- Billboard Advertisement Space on reclaimed land: \$3 \$3
- Advertisement within the community \$2 \_\_\_\_\_
- IPad Commercial - \$3 \_\_\_\_\_
- Electricity and Water - \$1 each \$1
- Business start-up tax \$1 \$1
- Employee \$1 each \$1

\$9.00

This is an example of the small business start-up fees. All students were given \$10 to start up their business. They had to apply critical thinking skills to decide what to buy that would most benefit their business including advertisements, land space in different areas of the reclaimed land, taxes, and employees.

01-08-18

# Hometown Auto

We will give you a deal on a new set of wheels !



This is a sign used at one of the small businesses. Each business had a sign to advertise their products.

This is a receipt that one of the students used as he sold his products. I think he grew to appreciate technology after trying to hand-write all of these 😊.

780754

DATE

NAME

ADDRESS

CITY, STATE, ZIP

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MOSE. RETD.	PAID OUT	
QUAN.	DESCRIPTION					PRICE	AMOUNT
1	1					1.00	
2	1					2.00	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

TAX 000

TOTAL 300

RECEIVED BY

KEEP THIS SLIP FOR REFERENCE

A-24705W  
T-46901

01-11

## My Day - Student Reflection

These are market day reflections from students. The reflections demonstrate the knowledge that each student has about the impact of coal on their business and the importance of Market Day in general.

What day business?

dogs, frogs and turtles.

What is the impact of your business on the reclaimed land?

front.

How does your business help the local economy?

need employees. I would need supplies that I would buy for my business so that I can create more

4. How does coal play a role in your business?

coal gives us electricity that I need for lights and equipment for the pet.

5. What type of qualities/skills did you need to have to run your business?

Good experience with animals, organized, leadership, be a good manager, be polite, be good at math to count stock.

6. How much money did you make by operating your small business for one hour?

47.00 in one hour.

7. We began with \$10 to start up the businesses. How much was your start-up cost and what did that include?

\$3.00 land 4.00 tax  
\$5.00 commercial 1.00 power and water  
2.00 sign

8. How would this entrepreneurial experience impact your decisions for your future career?

It makes me want to open a business because owning a business was really fun.

9. What did you love about Market Economy Day?

How nice the people were.

10. What did you learn from Market Economy Day?

When I first opened my business I was nervous, but after a few minutes I was used to it. I learned that you have to be polite, smile supply and demand, and most of all how to greet someone.

# Market Economy Day - Student Reflection

1. What was your market day business?

liverstock

2. Where was the location of your business on the reclaimed land?

In the front.

3. How would your business help the local economy?

My business gives milk and eggs and meat so it supplies other businesses. I would pay taxes to help my economy.

4. How does coal play a role in your business?

It is on reclaimed land and all the animals that I'm selling used to live on mountains that is now reclaimed land.

5. What type of qualities/skills did you need to have to run your business?

good leader ship, nice to my customers, manners, addition and subtraction for counting money.

6. How much money did you make by operating your small business for one hour?

\$ 59.00 in one hour.

7. We began with \$10 to start up the businesses. How much was your start-up cost and what did that include?

7.00 for my land, business, tax, employee, water and electricity.

8. How would this entrepreneurial experience impact your decisions for your future career?

To be nice to people and I want to be a worker at a store so this let me see that could own a store.

9. What did you love about Market Economy Day?

It was fun meeting new people and sell stuff to them.

10. What did you learn from Market Economy Day?

How to sell my product.

The next couple pages are samples of customer feedback surveys taken by faculty and staff that shopped at our market day event.

01-08-18

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Thank you for taking your time to shop with us and help us to appreciate you helping our small businesses in hopes to create a sustainable local economy. Please answer the following questions.

1. Which shop did you feel could be a store in our community?  
Dirt Works Shop

2. Did our business owners demonstrate business and leadership skills?

2. Did our business owners demonstrate business and leadership skills?

The pottery shop was quiet profession and showed interest in the customers of his story.

3. Leave us a comment on your shopping experience...

I really loved shopping at all the shops. They were all very professional.

Customer Satisfaction Survey – Thank You for taking your time to shop with us and help us to experience being an entrepreneur. We appreciate you helping our small businesses in hopes to create a sustainable local economy. Please answer the following questions.

1. Which shop did you feel could be a store in our community?

Dirt Works that sold gravel, sand and top soil.

2. Did our business owners demonstrate business and leadership skills?

Yes I feel they were very professional.

3. Leave us a comment on your shopping experience...

Very friendly and anxious to help the customer.



Customer Satisfaction Survey – Thank You for taking your time to shop with us and help us to experience being an entrepreneur. We appreciate you helping our small businesses in hopes to create a sustainable local economy. Please answer the following questions.

1. Which shop did you feel could be a store in our community?

The Pottery Place and the sand and gravel would be good for any community

2. Did our business owners demonstrate business and leadership skills?

The store owners were friendly and informative

3. Leave us a comment on your shopping experience...

My shopping experience was awesome  
I would shop there again

Customer Satisfaction Survey – Thank You for taking your time to shop with us and help us to experience being an entrepreneur. We appreciate you helping our small businesses in hopes to create a sustainable local economy. Please answer the following questions.

1. Which shop did you feel could be a store in our community?

Sporting Goods Store

2. Did our business owners demonstrate business and leadership skills?

yes they explained things greatly to promote sales

3. Leave us a comment on your shopping experience...

I loved shopping at all the different places. They did a great job. They were polite and eager to sell the items.

Customer Satisfaction Survey – Thank You for taking your time to shop with us and help us to experience being an entrepreneur. We appreciate you helping our small businesses in hopes to create a sustainable local economy. Please answer the following questions.

1. Which shop did you feel could be a store in our community?

Clay Time Pottery

2. Did our business owners demonstrate business and leadership skills?

Yes very informational and knowledgeable to his product.

3. Leave us a comment on your shopping experience...

It was a great experience really enjoyed it. I feel the kids learned a lot.

Customer Satisfaction Survey – Thank You for taking your time to shop with us and help us to experience being an entrepreneur. We appreciate you helping our small businesses in hopes to create a sustainable local economy. Please answer the following questions.

1. Which shop did you feel could be a store in our community?

Auto Dealership  
Jewelry  
Stone/Dirt Works etc.

2. Did our business owners demonstrate business and leadership skills?

Yes. The students all greeted me and tried to sell me their good or service.

3. Leave us a comment on your shopping experience...

Love this real world experience for our

This is a sample of the bags that were given to the shoppers and the money used for the Market Economy Day.

**MARKET  
ECONOMY  
DAY**

**BIG** plans  
for **Small  
Businesses**

**TO GROW  
OUR FUTURE  
SUSTAINABLE  
ECONOMY**



01-08-18

25

This is a student sample from his business. He sold modular houses on reclaimed land. He also had floorplans available to look at during the event 😊

# Reclaimed Real Estate

Putting your dream home on reclaimed land! Let us get you into the home of your dreams!





copyright © 2007 A Vision In Design, LLC

1200 sq.ft. FIRST FLOOR  
248 sq.ft. PORCH AREAS

All Rights Reserved. This plan is copyrighted and cannot be duplicated, modified, or sold in any form without written consent from A Vision In Design, LLC.

Poster advertising your good or service.

This is your rough draft.

Include these 3 things:

- 1. The name of your business
- 2. The cost of your good or service
- A picture representing your good or service

This is a sample brainstorm of a student's advertisement for their business.



Colors dark red

White supplies Last!

Colors, blue, yellow, Green!

Normal



\$1.00

WOW!

Alka dot



\$2.00

WOW!

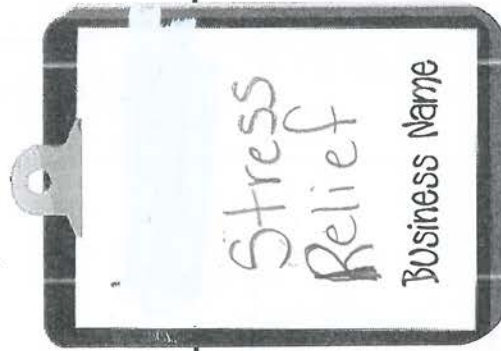
# Business Planning Page

Are you providing a good or service?

good

How will you make your good or service?  
or How will you provide your service?  
write at least 2 sentences giving details.

The balls will relieve stress.  
I used flour and balloons.



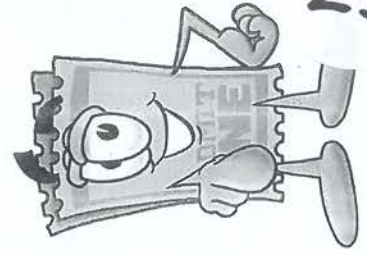
Water X  
electricity X  
balloons ✓  
flour ✓

What materials or supplies will you need?

\$1 plain  
\$2 Poika dot

How much will it cost?

Much money.



This is a sample business plan to prepare the student for their market day business. We discussed supply and demand and they had to set a price. They also had to think of a name for their business and list the things they would need to run their business successfully.

01-08-18

26

Studenttreasures PUBLISHING

# Our Classroom is Publishing a Book!

Building Good Character

We are now published authors and our books can be used even after our unit's end to help educate others about the importance of our home and how we can use the resources provided by coal to move forward and progress in the future!

100% Satisfaction Guaranteed

... your child's work will be featured in a book! This will be a treasured keepsake in my home to come!

... use copies of this one-of-a-kind book. Order now and

... hardbound copy of this book, but only if I get your order confirmation if you check "No."

... in our classroom endeavors.

... for my child's classbook. I understand that if I am in error, I will return any copies for a full refund.

Order now and shipping & handling is FREE!

## 1 Place Your Order

### Softcover Books

Softcover books feature full-color printing and a glossy 8.5"x11" softcover.

X \$19.95 USD EACH =

Top Parent Pick

### Standard Hardbound Books

Standard hardbound books feature full-color printing and a glossy 8.5"x11" hardcover.

X \$24.95 USD EACH =

### Deluxe Hardbound Books

Deluxe hardbound books feature an 8.5"x11" matte cover for a sophisticated, smudge-resistant finish and are bound with thicker, more durable cerulean blue end sheets.

X \$27.95 USD EACH =

TOTAL AMOUNT DUE =

## 2 Choose Your Method of Payment

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**Student  
reflection  
samples and  
analysis of unit**

## Mountains and Power Critical Thinking Activity –CEDAR UNIT 2018

1. The article tells valuable resources that the mountains provide in other areas. What is a valuable resource that our local mountains have provided us with?

Coal

2. How did the resource above help to establish our community years ago?

Coal helped to bring people to our community. This made a need for schools, houses, stores, and railroads.

3. In what ways has the resource above impacted your personal life?

Coal has gave me electricity and made my community a better place to live.

4. The article discusses things that the mountains have made possible. What are some things that the mountains have made possible for our community?

The mountains made many coal jobs for our community. It also gave us coal that we use to make things that we need.

# Mountains and Power

This text is adapted from an original work of the Core Knowledge Foundation.

Mountains are amazing formations. Not only can they be incredibly beautiful, but they can also provide us with valuable resources.

Take mountain streams, for example. They are valuable not only as sources of water but also as sources of power. As streams and rivers travel downhill, they sometimes form waterfalls. The currents of the waterfalls can be used to make power. Hundreds of years ago, people used the force of the falling water to turn waterwheels. The waterwheels powered machinery. Some machinery ground grain or wove cloth. Today, water gives power to huge generators that make electricity.

Today, when there is no waterfall, people sometimes build a dam to hold back the water in a river. When the water behind the dam is released, it flows downstream rapidly. It has as much or more force than water going over a waterfall. This running water turns huge generators in hydroelectric plants that make electricity. Mountains make this possible.



*A large hydroelectric plant at the base of Hoover Dam on the Nevada/Arizona border.*

# Open Response (Short Answer)- Essential Question # 2

- A. Identify at least two problems that you think our local area / economy is facing.
- B. Identify at least two local resources that will help us to overcome some of the issues that you feel our area is facing .

A. Two problems are coal mines have shut down and there are less jobs in our state.

B. Two resources that we have are reclaimed land to put factories on and we have coal mines to work in the factories

01-08-18

EQ2

# Open Response (Short Answer) – Essential

## Question #3

Coal has always played an important role in our community and will continue to do so in years to come. However with alternative energy and competitive energy sources it is important for us to look at how we can help to build a future sustainable economy.

- A. Explain how you can use your personal interest, talents, and hobbies in combination with the resources that coal has provided us with to fuel a brighter future for our local economy.

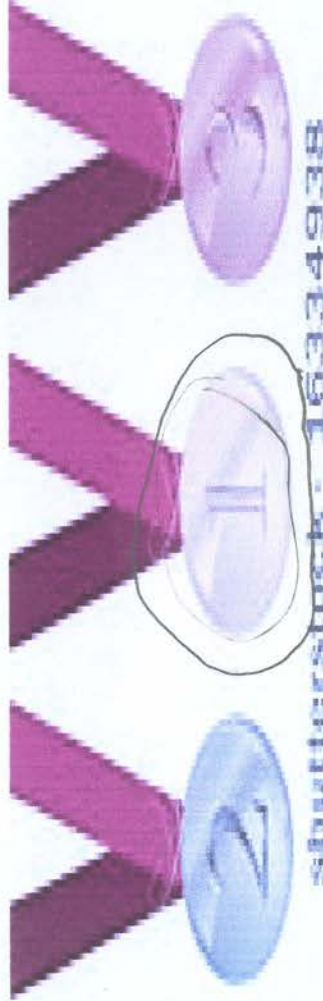
A. I like to be creative and I could use that talent to open up a business on reclaimed land in my area. that would give people more jobs and more money. My business would need things made from coal like electricity.

# RATE OUR UNIT As We reach the



# Finish Line...

Directions: Circle the medal that BEST rates our CEDAR unit!



If you chose:

1. Gold: Why do you think we had a gold unit?

because we learned a lot about coal and we answered all of the questions.

2. Silver: What made this unit a silver?

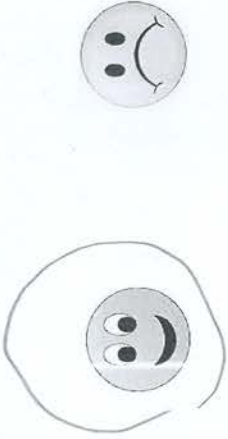
What did it need to be a gold? \_\_\_\_\_

3. Bronze: What made this unit a bronze?

What are two things that we could do differently to make it a gold? \_\_\_\_\_

End Of Unit  
Student Voice Survey

I did my very best on all the coal unit activities:



My teacher gave me chances to look at my learning and fix things



I helped my teacher to think of fun activities for us to do



I had to think outside the box on some of the activities.

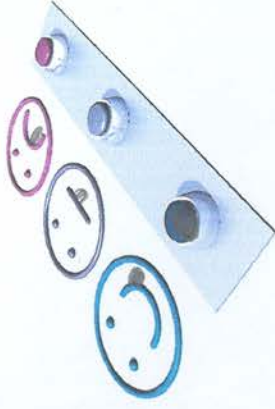


My favorite activity was: having class on a reclaimed land.

The activity that I did my best on was: market day

The activity that I needed to work on was area and perimeter buisness.

Overall I would give myself a 5 on our coal unit.      ⑤      4      3      2      1      0



# End of Unit FEEDBACK...

- I understood the learning goals for our unit? 😊
- I understood the learning targets "I Can" statements for the unit? 😊
- I had choices in how we were going to reach our learning goals? 😊
- I had fun while learning about coal? 😊

• My favorite part of the unit was:

Our favorite part was THE MARKET DAY

• I would change the following about the unit:

We would like to continue Market Day So Coal Miners Can Come In.



## Video Reflection ...

- After watching the YouTube Video, "Building a Future on Reclaimed Land". Write three new facts that you discovered that we could use to help overcome current issues and build a future sustainable economy.

1. Since the reclaimed land has been built there has been more animals
2. The reclaimed land bring in ATV tracks.
3. Reclaimed coal lands provides new opportunities for recreation.

# End of Unit Reflection How Does Coal Drive Your...



People came to my area  
to mine coal. Coal gave  
my area jobs.

Coal has provided  
resources like  
reclaimed land that  
we can build parks,  
factories and airports  
to help our community.

Coal is used  
for our electricity  
and if it  
was not for coal we  
would not have the things  
we use in our class.



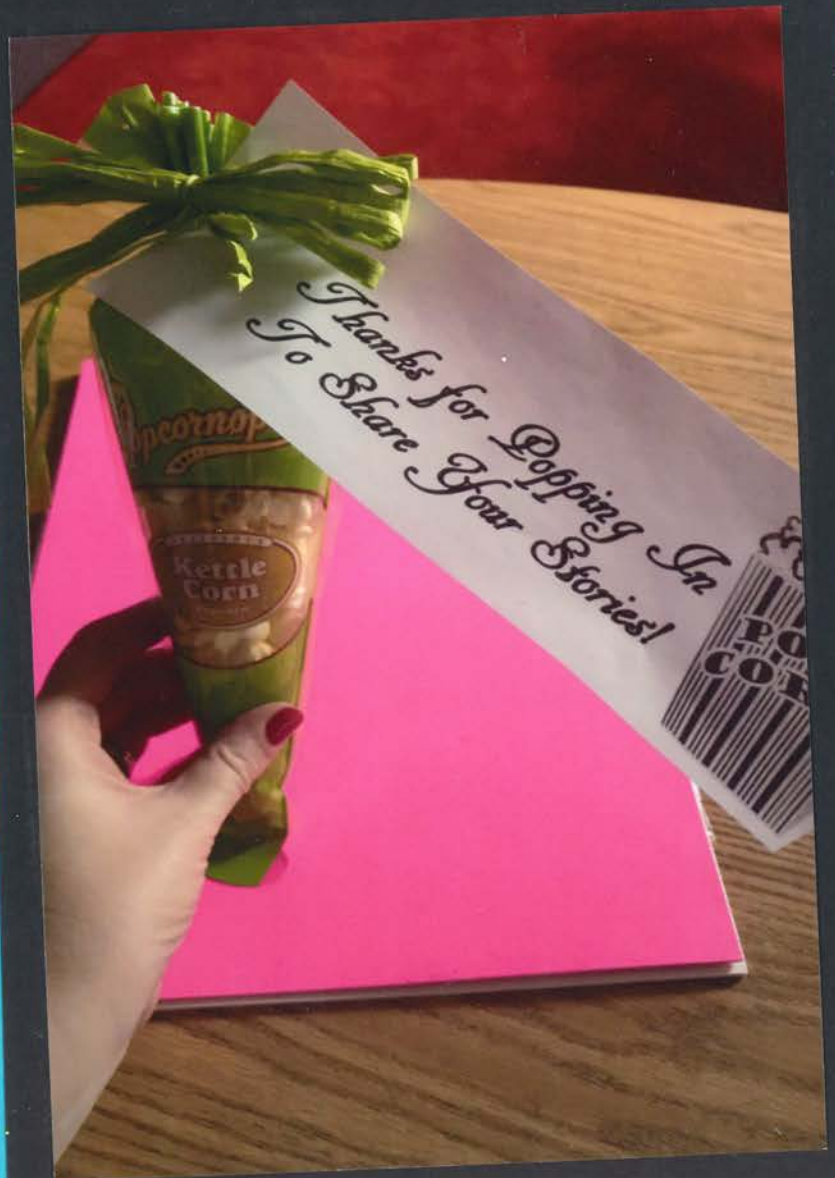
**Thank You for  
reviewing our  
unit! We hope  
you enjoyed!**

01-08-18



We had so much fun digging into our past to see how coal had impacted us, determining current issues, and seeing how we can take control to build a future sustainable economy thanks to a strong foundation of coal!

We were thankful to all the guest that "popped" in to make our unit the success that it was!

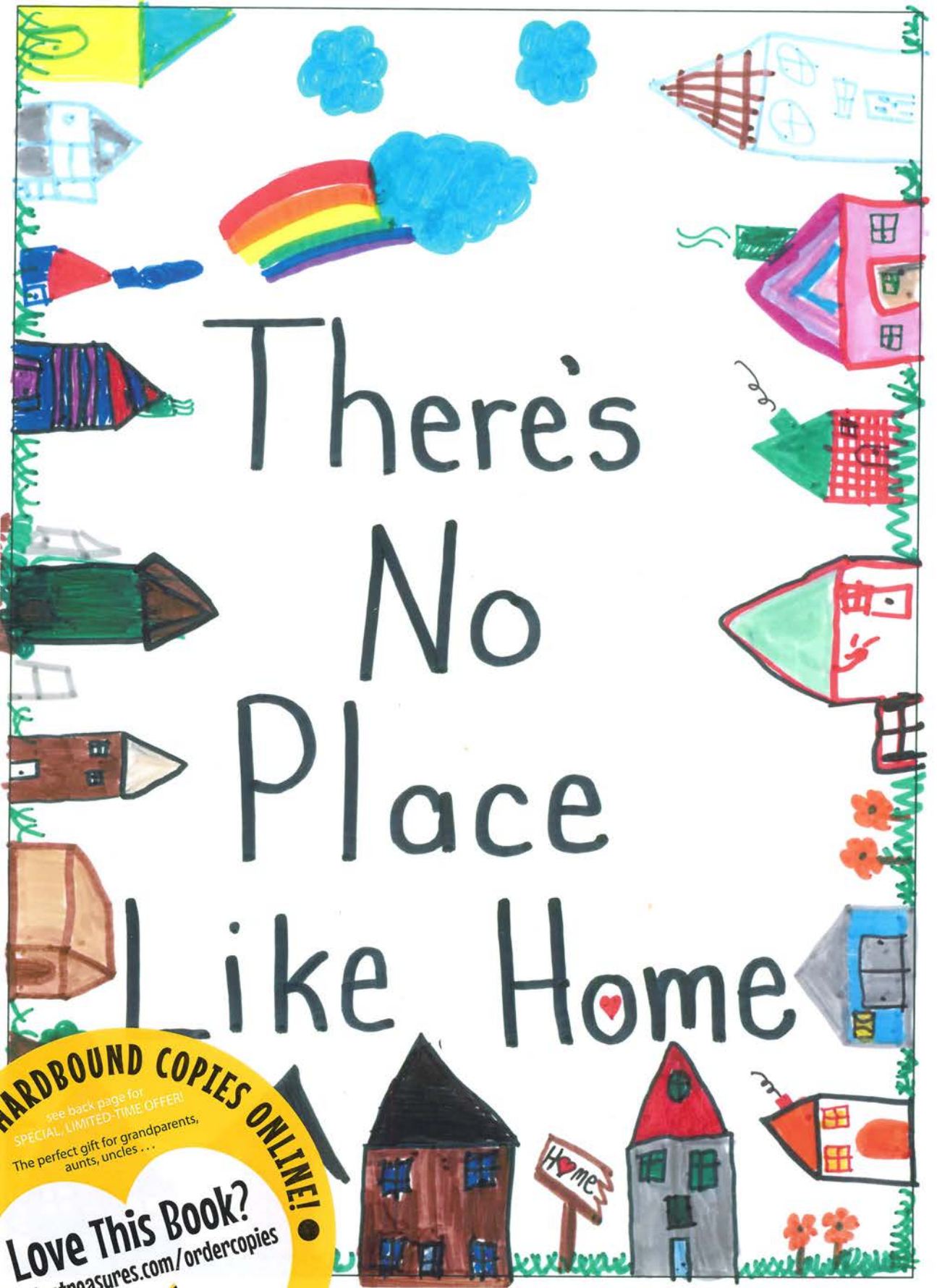


# ALL ABOUT COAL



American Coal  
Foundation

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There's  
No Place  
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Home

BY

Class

DEDICATED TO

A future Sustainable Economy  
built on a foundation of coal.



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To many people, a home is built of boards and beams. To our class, a home is built of love and dreams. Our home is a place built up from coal and dreams of prosperity from those long ago. Our ancestors made a discovery many years back, embedded in our mountains were coal seams of black. News of the black gold quickly traveled around, as men came from everywhere and built up our town. They built not only their family a home but a town that would continue long after the coal would be gone. Even with changes, we continue to mine today but now must look at our home in a different way.



We think of our homes in many different ways. However, home is a place that we all want to stay. Coal has built our foundation sturdy and strong. It has provided us resources as we go along. So as you turn the pages of our little book, read what home means to each of us to get a closer look.



Home is where I live.  
It is where my family  
and friends are. Home is a  
Place that provides food, shelter,  
and all the things that I  
need. Home is more than  
it seems. It is a place in  
Kentucky that I will  
always love.

# Home

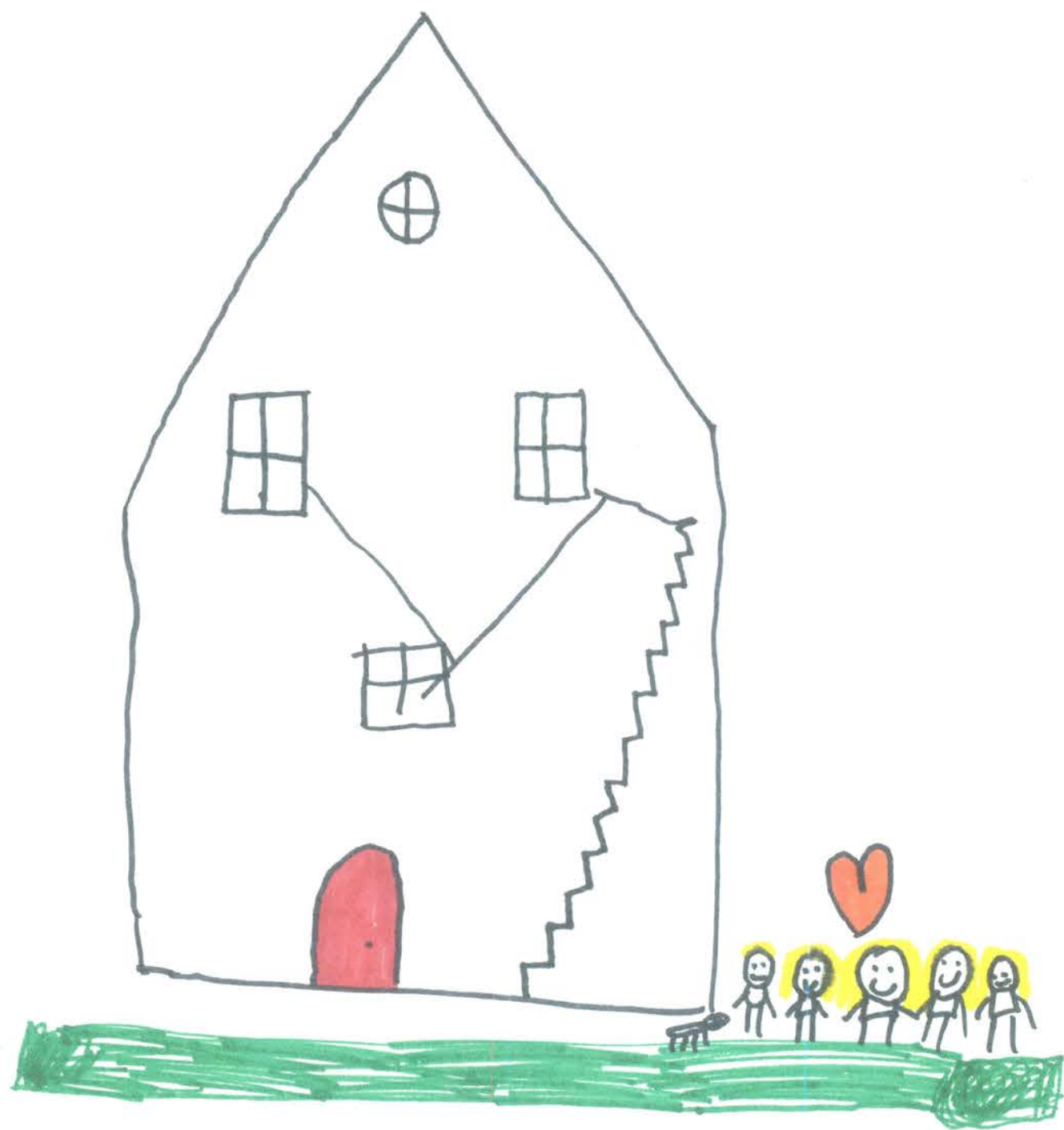


Home is memories of playing with my cousins. It is a place that I love and wouldn't want it to be destroyed. Home is a place that I can't put into words. Home is priceless.

# Home



Home is a Big house where my mom, dad, baby brother, teen sister, and I live. Home is a place that gives shelter, and protects me. Home is a place that has a lot of people. Home is a special place.



Home is my Shelter. It is my happy place.  
Coal helps to give my home light!  
Home is a winding road in between  
mountains. Home is more than a house,  
It is family. It is love, it is fun with  
four girls and my dad and my dog.

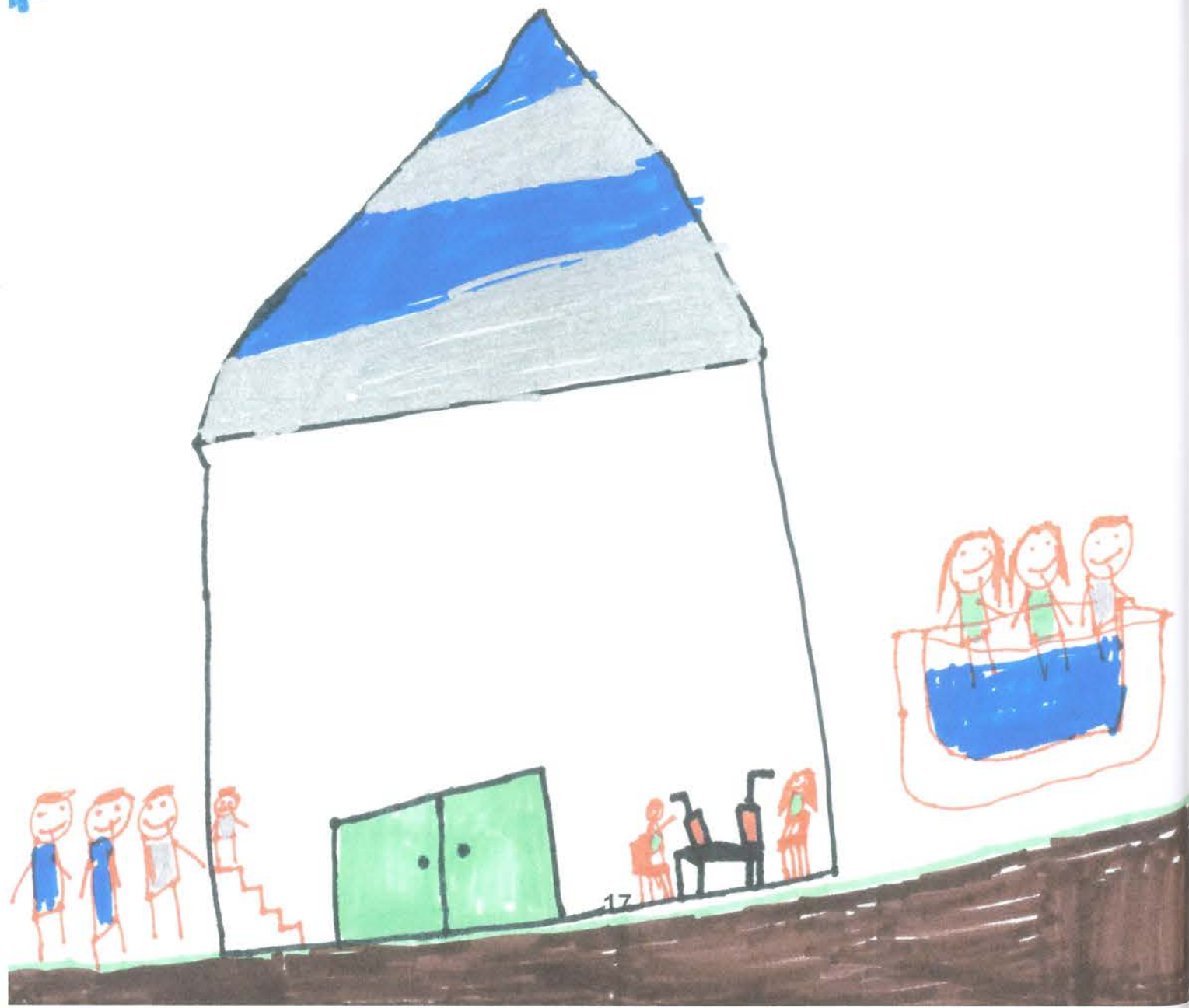
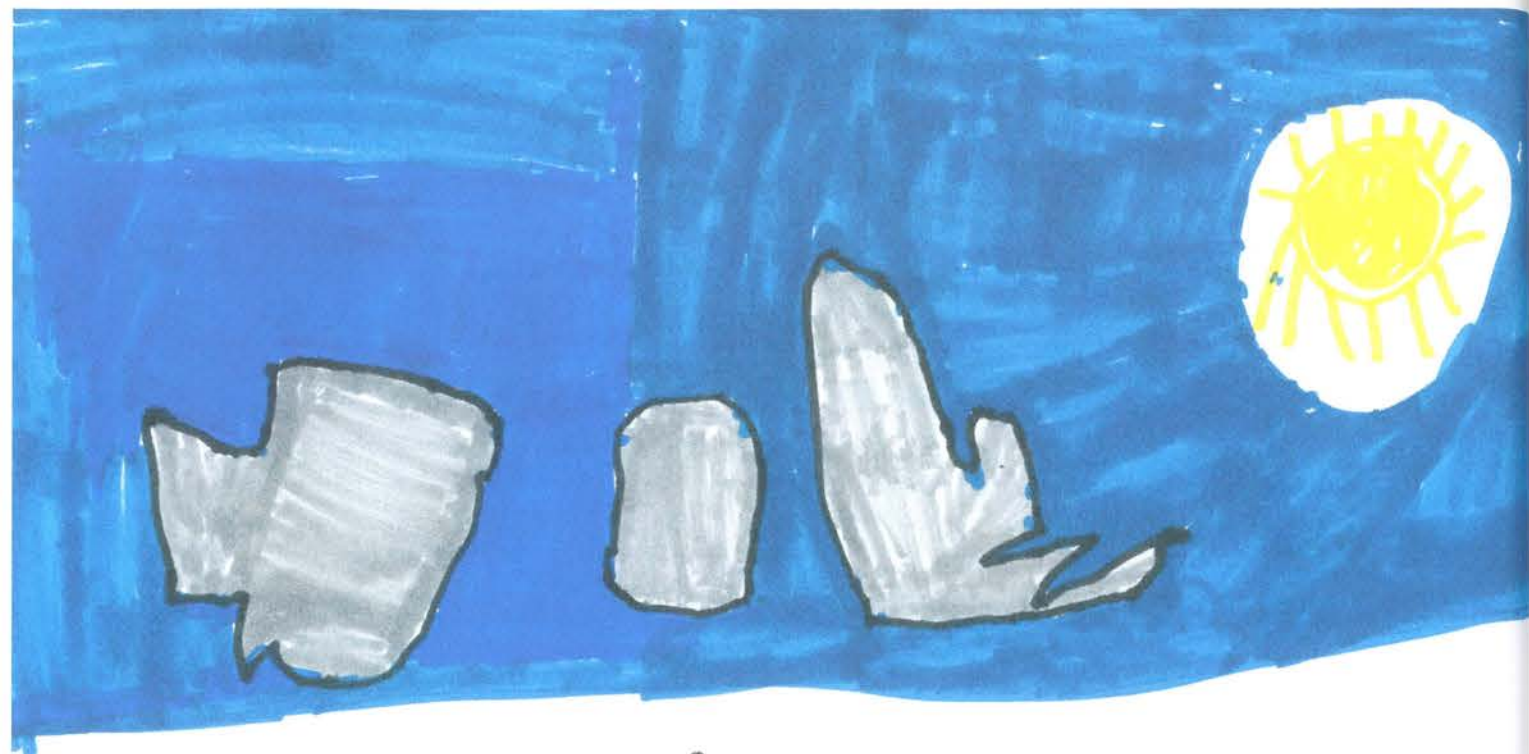


Home is a place where my family lives. Home is special. It is a place where I feel safe. Home is a place to play outside and pass my ball around. Home has everything I need like food and selters. My parents work hard to make my home the best place to live.



Home is a place that keeps me dry. It is my shelter. Home is much more than a shelter. It is a beautiful place. It is a place where I can spend time with my family.

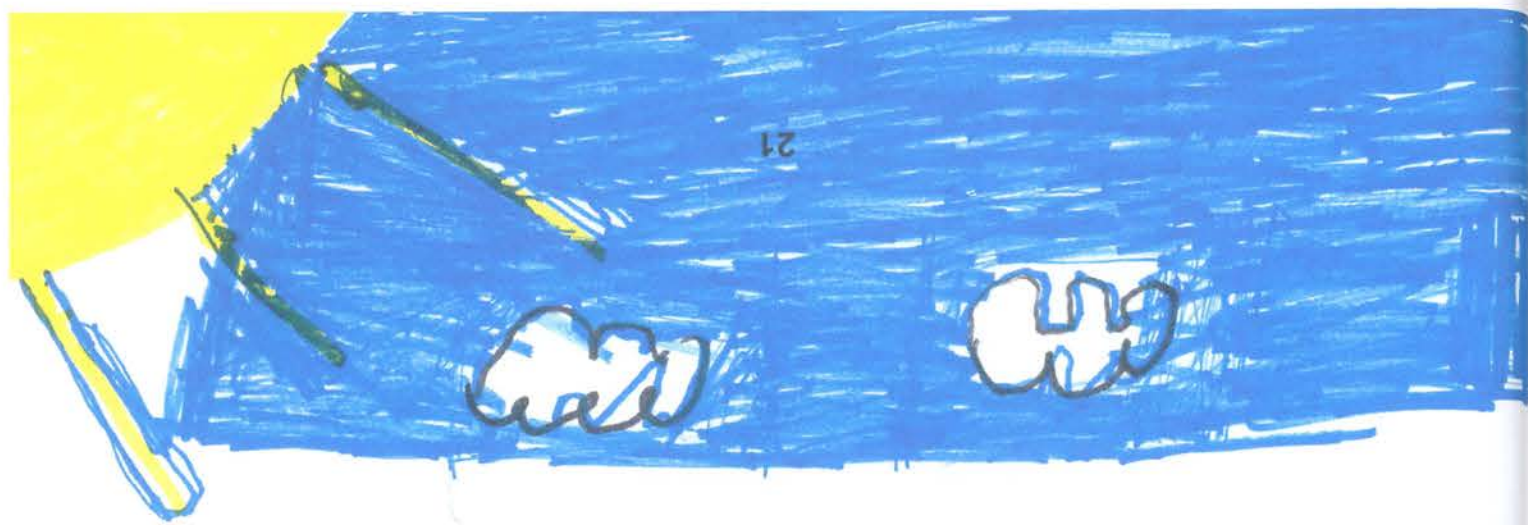




Home is a place to play.  
It is a big yard to run  
in. home keeps us warm.  
It gives us a place where  
we can all be together.  
Home is Kentucky, a place  
full of mountains that has  
gave us coal for a very  
long time. Home is where  
i live and where I love.



Home is somewhere that I wish I could be  
everyday. Home is a place with food, a bed, and  
a bible. Most of all home is where my family  
is. My Mom cooks, cleans and works. My  
Daddy mows the lawn and is our Meteorologist.  
My brother makes my home fun. My family  
makes my home special because they  
love me.



Home is...  
a couch,  
a bed,  
a roof over my head.

A fridge full of food,  
a t.v.  
and a safe  
place to be!



Home is a place that keeps me safe. Home is a place to sleep, having food to eat, and shelter to keep me warm. Home is a place to play. A neighborhood that is safe. Home is having fun with my family. Home is Kentucky. Home is having a school I like with friends there. Really, there is no place like home!



HOME is safe and quiet, IT is warm and comfy HOME is in the country where everyone is friendly HOME is riding my bike outside and watching movies with my sister HOME is a place that I love and want to take care of it so that i can live there the rest of my life.



Home is family, a shelter, and friends. Home is a place where there are lots of mountains with stories to tell. Home is an old mine with coal near it. That one had miners. Home is war with my sisters. Home is warm, safe, happy, and has food, water, I Love home. Home is a place where I always want to be.



Home is the best  
place ever. It has  
video games, electricity,  
and a place for me to learn.  
Home is a shelter that  
protects me from storms.  
Home is Kentucky, a  
very special place!



Home is a special place to me.  
It is where I can work with my  
poppa. He teaches me how to chop  
wood, raise a garden, and  
farm. Home is a place where I  
play with my dog Yeller. Home  
is playing with cousins,  
and riding four wheelers in the  
mountains. Home is a place that  
I love.





Home is my castle.  
Home is where I sleep.  
Home is close to a coal  
mine that is getting ready  
to open again. Home is a  
place where I can have  
fun. Home is dirt bike  
riding to the strip mines  
where you can see coal  
mining equipment. Home  
is a beautiful and wild  
place.



There's  
No  
Place Like



Our  
Home!

Home is all of the things listed above; but some times home may need a little more love. We have lost some coal jobs and had friends move away. However; we can work together to make a brighter day. We can use our interest and talents together with resources from coal, like reclaimed land to get to our goal. So no matter what the future holds or where we may roam; we will always know there's no place like "our" home!