

Lesson Plan Template

Date: 1/30/2020

Grade: 2nd	Subject: Mathematics
Materials: markers/colored pencils, pencils, pizza worksheet, and bar graph worksheet	Technology Needed: n/a
Instructional Strategies: <input type="checkbox"/> Direct instruction <input type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> Other (list) <input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> PBL <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Modeling	Guided Practices and Concrete Application: <input type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity... <input type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain: <input type="checkbox"/> Hands-on <input type="checkbox"/> Technology integration <input type="checkbox"/> Imitation/Repeat/Mimic
Standard 2.MD.10 Draw picture graphs and bar graphs with single-unit scales to represent data sets with up to four categories.	Universal Design for Learning Below Proficiency: Students who are below proficiency will have difficulty engaging in discussions and will have difficulty color coding the pizza and filling in the bar graph. BD will have an aide to help him in these processes. I will support other students by having them listen to others who are proficient during discussions. I will also check in with them frequently to clarify any questions and help them as needed. Above Proficiency: Students who are above proficiency will have a deeper understanding of the purpose of graphs and how to follow a key and complete a graph. In order to challenge these students, I will ask them to create a pictograph where each icon represents 2 or more toppings. Modalities/Learning Preferences: <ul style="list-style-type: none"> • Visual: Students will see the worksheets and modeling • Auditory: Students will listen to instruction • Kinesthetic: n/a • Tactile: Students will use markers/colored pencils to color the toppings on the pizza.
Objective By the end of the lesson, students will construct a bar graph by color coding and counting toppings on a pizza. Bloom's Taxonomy Cognitive Level: Applying	
Classroom Management- (grouping(s), movement/transitions, etc.) <ul style="list-style-type: none"> • Students will be seated at their desks during instruction. • Students will be working at their desks or an area around the room where they can do their jobs. • I will use callbacks as needed to regain student attention • I will use countdowns to signal transitions • I will use positive reinforcement to let students know how they should be acting. 	
Behavior Expectations- (procedures/expectations specific to the lesson, rules and expectations, etc.) <ul style="list-style-type: none"> • Students will raise their hands to answer questions or make comments. • Students will not interrupt others. • Students will use an appropriate voice level during instruction and work time. • Students will be respectful of other's personal space. 	
Minutes	Procedures
	Set-up/Prep before lesson: <ul style="list-style-type: none"> • Pizza and bar graph worksheets ready to hand out
5 minutes	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) <ul style="list-style-type: none"> • Alright second graders, it's time to do some 100th day math! • Remind students of goals for the week. • We are going to be practicing how to make a graph by using pizza! • Sadly, it's not a real pizza, but we're still going to have fun. • Do you all remember the Moby and Annie video that we watched yesterday morning? • Can some of you help remind me about what we learned from that video?
15 minutes	Explain: (teacher-led) <ul style="list-style-type: none"> • Hand out pizza and graph worksheets. • Sing "the first thing on you paper is your name" song • Okay learners, let's talk about why we graph. <ul style="list-style-type: none"> ○ We graph to make sense of information. ○ Can we tell just by looking at the pizza which topping shows up the most? <ul style="list-style-type: none"> ▪ No! ○ That's why we need to graph! It helps us make sense of information quickly!

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	<ul style="list-style-type: none"> • Let's talk about what we see on our pizza and our bar graph. • Discuss the key and what it is for (turn and talk) <ul style="list-style-type: none"> ○ Direct students to get needed colors. ○ How we use a key ○ Model ○ Note that the green and red peppers look very similar, so we need to be observant when we color code. • Discuss the bar graph. <ul style="list-style-type: none"> ○ Talk about the numbers and pictures (turn and talk) ○ Model how to color in the bar graph • What questions do you have about how to color our pizza toppings? • What questions do you have about how to graph our pizza toppings?
30 minutes	<p>Elaborate: (concrete practice/application with relevant learning task -connections from content to real-life experiences)</p> <ul style="list-style-type: none"> • Alright second graders, it's time to get to work! • You can choose to work at your desk, or you can move to a place in the room where you can be productive. <ul style="list-style-type: none"> ○ If you choose to work somewhere other than your desk, grab a clipboard to write/color on. ○ Remember, this means you need to make good choices about who you are near. ○ This is not group work, it is individual work. • When you finish your graphing, turn it in to the turn in bin. • If you finish before our math time is over, you may play some math games.
5 minutes	<p>Closure (wrap up and transition to next activity):</p> <ul style="list-style-type: none"> • At this time, we need to come back to our desks to get ready for our next activity! • While we transition back to our desks, can somebody remind me what a key is for? • What do the numbers on our bar graph tell us? • What do the pictures on our bar graph tell us? • Please be back in your seats in 10, 9, 8, etc.
<p>Formative Assessment: (linked to objective, during learning)</p> <ul style="list-style-type: none"> • Progress monitoring throughout lesson (document of student learning, data collection) <ul style="list-style-type: none"> • Student questions • Student discussions • Finished bar graphs and color-coded pizzas 	<p>Summative Assessment (linked back to standard, END of learning)</p> <p>At the end of this trimester, students will be given an assessment that tasks them with graphing information presented to them, in addition to other tasks.</p>
<p>Teacher Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</p> <p>Went well: Something that went well with this lesson was my classroom management. My students have been working hard to meet their weekly goals of not talking when others are talking and using appropriate voice levels. I had to stop to remind them of their goals a few times, and after doing so, they got back on task quickly. The majority of my students were interested in the assignment, and thus were on task. As I walked the room to answer questions and give encouragement, I had to redirect a few students to help them get back on task.</p> <p>Another thing that went well was that I let students take the lead after I was finished explaining. I tend to like things done a certain way, so being able to give that control to the students was a nice change of pace. I can tell I have grown as a teacher in this instance because the hand over of control was easy. I had instructed students to color the entire key and then move on to color the pizza. After they had the coloring done, I would give them the bar graph. When I noticed students attacking the assignment in their own way, I acknowledge that I appreciated how hard they were working and moved on.</p> <p>What Students Learned: This lesson was a refresher for my students instead of new material because they had done some graphing in first grade. From this activity, I was able to see who had a good understanding of how to create bar graph and could also see who needed help and where they needed help.</p> <p>What my students did learn is that paying attention to detail is very important. We had talked about the two kinds of peppers on the pizza being very similar, but a few students made mistakes in coloring the peppers. They called me over to tell me this, and I told them that we all make mistakes and asked them how they were going to fix it. All students decided to color over the mistake with the correct color. They did not make the same mistake twice.</p> <p>My students also learned about a what a key is. When asked about a key, a student voiced that she knew it was not a like a house key because of the video we watched the day before. We talked about what a key is for, and students picked up the importance of paying attention to the key. They pointed out the difference in the peppers before I brought it to their attention.</p>	

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Changes:

If I were to change something about this lesson, I would start with how long I taught. My students had just finished a science experiment that we did not have time to finish from the previous day. While experimenting, they had been sitting for a while. Even though they were engaged for the experiment, sitting takes a toll on students. I could see that I was starting to lose them while I was explaining the pizza graphing. Because of this, I shortened my instruction to let them get to work. I should have given students an activity break. It could have been anything from a quick stretch to a Go Noodle. Had they had a brain break and been able to move their bodies, I think they would have had better attention when I was trying to explain the pizza graphing. With their longer attention, I would have been able to teach longer, which would have clarified what to do for students who still were not quite sure of themselves.

Another change I would make to this lesson would be to do a graphing example on the board. I could have used anything interesting to my students for the data, and then we could have worked together to fill in our bar graph. I think this would have also been a huge help in eliminating misunderstandings. This also would have been a more efficient use of time instead of handing out the bar graphs as they finished their pizzas and explaining the bar graph then.

I would also change how I distributed materials for this lesson. I gave students the pizza to work on first, and then I gave them the graph after their pizza was finished. Looking back, I would have given students both at the same time. I ended up giving students who were finishing later their bar graphs because they needed to be handed in together, whether they were finished or not. This was so students would not lose their papers before their additional work time later in the day. I noticed that once these students had the bar graph with the pizza, their work pace quickened. I think this was because they could see the purpose of coloring the pizza. Also, some of these students preferred to graph as they went.


❖ See Pizza and Bar Graph Worksheets Below


Name: _____


Answer Key:

Pizza Toppings

Color Toppings: How Many?

brown 

gray 

green 

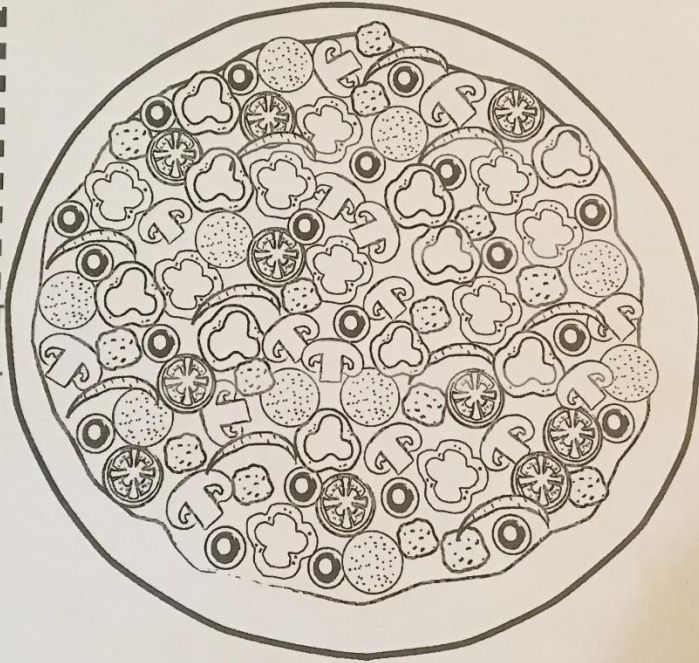
red 

black 

orange 

yellow 

purple 



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Appendix B: Bar Graph

Name: _____

Directions: Color one space for each topping.

