**Name\_Allyx Pfeifer\_\_\_\_**

**Lesson Plan Template**

**Learning Segment Focus\_\_Line Plots\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Lesson \_\_\_1\_\_of\_\_\_1\_\_ Topic \_Measurement and Data\_\_\_Date\_\_\_April 13\_\_\_\_\_ Grade\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Outcomes**

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| Specific learning **objectives** for this lesson. | Students will be able to use operation son fractions to solve real world problems and will be able to create a visual of that information using line plots.  |
| Justify how learning tasks are appropriate using examples of **students’ prior academic learning**. | In previous years, students have learned to organize and show distinct types of data using line plots. This lesson will branch off from that understanding and will incorporate fractions to represent data.  |
| Justify how learning tasks are appropriate using examples of **students’ personal, cultural, linguistic, or community assets**. | Students have background knowledge of making line plots and representing data. Students also have background using operations to solve problems with fractions.   |

**State Academic Content Standards**

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| List the **state academic content standards** with which this lesson is aligned. Include abbreviation, number & text of the standard(s).  | R.Math.Content.5.MD.B.2 • Make a line plot to display a data set of measurements infractions of a unit (1/2, 1/4, 1/8) • Use operations on fractions for this grade to solve problems involving information presented in line plots  |

**Key Vocabulary**

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| What **vocabulary terms/content specific terminology** must be addressed for students to master the content? | **Data (***datos***), measurement (***medición***), line (***línea)***, graph (***grafico)***, plot (***gráfico***), interval (***intervalo***)** |

**Academic Language Support**

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| What are the **Academic Language Function(s)** (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan?What planned **Academic Language Supports** will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three **Academic Language Demands (vocabulary, syntax, and discourse)?** | Students will have access to graphics for key terms. Students will have a printed-out line plot labeled for them Students will have their table partner as peer academic language support Visuals will be provided for each unit as well as size comparison graphics for fractions The vocabulary will be posted on the wall with cognates.   |

**Materials**

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| Materials needed by the teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.) |  Paper, pens, large butcher paper. Smart board, print outs of line plots and graphics, white board, dry erase markers, rulers, fraction cards, objects the size of fractions, pictures of related fractions sizes.   |
| Materials needed by **students** for this lesson. (computers, journals, textbook, etc.) | Paper, pencils, math textbook  |

**Lesson Timeline with Instructional Strategies & Learning Tasks**

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| **Amount of Time** | **Teaching & Learning Activities (This should be a BULLETED LIST)** | **Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)** |
|  | **Introduction**:  | At the beginning of class, the teacher will be passing out materials such as the fraction card that are labeled with several different fractions and the printed line plots for students who need access to this information. Teacher will also have a video playing that brings a fun introduction to the topic we will be learning about today. (Fractions on a line plot by numberocks) Students will be coming in, getting seated, and watching the video on the smart board.  Before class, teacher will hang large butcher paper across white board and will draw straight line across, with zero clearly labeled.    |
|  | **Instruction:** | * To start the lesson, teacher will ask all students to look over and examine the fraction they were handed, the students will also tell the teacher one at a time a statement about the size of their fraction. For example, if their fraction is ½, the students could say something like, this is half of the whole. Once they know their fraction and can realize it’s actual size, the teacher will move on to the next step.
* The teacher will then instruct the students to get into groups with their table (no more than 3 to a group). When the students are in their groups, the teacher will instruct each group to compare their fractions. Teacher will also ask the students to put each fraction in order from least to greatest.
* After the students have placed all three fractions in numerical order, teacher will instruct the students to plot each fraction on the line plot, where they think, each should go relating to zero. After each group has placed their fractions on the line plot, teacher will ask everyone to double check each fraction, thinking about the actual size of each making sure each fraction is in the correct place.

To check for understanding and arrive at generalizations for the lesson, teacher will guide discussion with the entire class through this set of questions: 1. look closely at all the fractions and heights on the board, how do the fractions compare to each other?
2. Look at the line plot, what are some specific qualities that make this a line plot and not another type of graph?
3. How does using a line plot make the information clear and understandable?
4. Does the line plot make it easy to see which fraction is the largest? Smallest? Exactly half?

With students' answers, teacher will form 2 example generalizations, carefully explaining how to form this and how to write one.  Exit Ticket: Teacher will have each student write 4 of their own generalizations to turn into the teacher by the end of class.  Students will also create a line plot on geogebra |
|  | **Closure:**  | In closing, the teacher will open discussion for what other information would be well represented by using line plots? Teacher will ask the students to write down their answers and give to teacher on the way out.  |

**Technology Integration**

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| Provide your **rationale** for your technology choices that accurately reflects those choices within your teaching context. **Identify** what technology(s) you are using as part of your lesson plan. **Describe** how the use of technology aligns to your learning objectives, content standards, and central focus. **Explain** how technology-based instructional strategies are essential to students accomplishing the learning objectives (beyond what could be accomplished without using the technology). **Specify** how the technology selections meet or exceed the needs/strengths of all students**. Justify the “fit”** of chosen technologies, showing how the content, instructional strategies, and technology “fit” together. | **My two technologies for this lesson plan are Geogebra and my smart board.** **I will use my board for video watching through the lesson. I will use the app on my IPads for students to form their own line plots and play around with shapes as review from lesson 2. Students will be able to use operation son fractions to solve real world problems and will be able to create a visual of that information using line plots.** |

**Accommodations/Modifications**

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| How might I **modify** instruction for:*Remediation?**Intervention?**IEP/504?**LEP/ESL?*(All students who have plans mandated by federal and state law.) | Students will be able to use peers as academic language support. Students will have access to their vocabulary and cognates. Independent practice can be limited for students who need it.  E SL students will be put in groups with students who are advanced in English. Teacher will supply large printed notes, instructions, and highlights examples.  |

**Differentiation**

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| How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) **to ensure all student needs are met?**(All students who are not on specific plans mandated by federal and state law.) | Teacher will provide contextualized material to all students to need it, or appear to be struggling throughout the lesson. These materials will be real life objects that are the same size as their fractions, as well as pictures of the fraction lengths in relation to another object.   |

**Assessments: Formative and/or Summative**

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| Describe the **tools/procedures** that will be used in this lesson to monitor students’ learning of the lesson objective(s) (include type of assessment & what is assessed).  | ☐ Formative /☐ Summative | Students will tell teacher what their fraction size compares to in real life size statements  |
| ☐ Formative /☐ Summative | Students will place their fractions on the line plot  |
| ☐ Formative /☐ Summative | Exit Ticket consisting of 4 generalizations.    |

**Research/Theory**

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| Explain **connections to theories and/or researc**h (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using **principles of the connected theories and/or research.** | **The inductive model (Hilda Taba) was chosen for this lesson because as students move from brainstorming the sizes of fractions to generations about the line plots itself, students create a better understanding. This creates a bridge between the students' background knowledge of fractions and line plots.**  |

**Lesson Reflection/Evaluation**

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| What went **well**?What **changes** should be made?How will I **use assessment data** for next steps? | *TO BE FILLED IN AFTER TEACHING* |

Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

\*adapted from: <http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us>; <http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx>; <http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx>;<https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx>