Learning Plan

Name: Patricia Coss-Maxwell	Age of Children: Age 5 and Kindergarten	Date: 03/05/2023
Title: Weighing Objects and Making Charts		

Learning Standards and Outcomes

Learning Standard: Be specific (begin with the State/Agency Early Learning Standards or the State K-3 Content Standards)

Washington State Early Learning and Development Guidelines (ELDG) (2012). 6. Learning about my world. Knowledge (cognition). https://www.dcyf.wa.gov/sites/default/files/pubs/EL_0015.pdf.

Child Outcome: List understandings, skills, and/or dispositions. Use the format, "The student will be able to …."

In this learning opportunity, the students will be able to:

- ✔ Learn throughout the active exploration of concrete materials.
- ✔ Understand that things are not always what they appear to be.
- ✔ Learn the heavy, heavier, heaviest, light, lighter, and lightest concepts.
- ✔ Learn that graphs and charts are powerful and versatile tools to help with data visualization, analysis, communication information, and decision-making.

Learning Experience

Describe the Learning Activity/Opportunity (specifically address how this learning opportunity will utilize everyday items and materials that could easily be found or located in a family's home or surrounding outdoor environment:

In this learning experience, the students will:

- ✔ Demonstrate knowledge of measurement concepts (weight and volume).
- ✔ Use various new and familiar tools and materials to investigate and experiment.
- ✔ Use ordinary objects to experiment and discover.
- ✔ Create simple graphs and charts that represent information using symbols and pictures.

Resources Needed (e.g., materials, etc.):

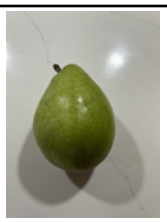
For this activity, the following materials are needed:

- ✔ Kitchen scale.
- ✔ Paper.
- ✔ Writing tools.
- ✔ Six different objects, e.g., an egg, a banana, a pear, a plate, a fork, and a straw.

Procedures:

1. ENGAGE (How will you set a purpose for the learning opportunity, focus children's thinking on the learning outcomes, connect and engage children's interests and prior learning or build interest.. what is your hook?!)

Ask the children if they want to do an activity with you. Show them the scale and ask if they know what it is used for. Allow children time to think and answer. You can add to their comments that a scale is a measuring instrument used to determine an object or substance's mass (weight). Ask them if they have one at home. Then, give children different objects and ask if they know what objects they are and what they have in common. Allow them time to think and answer. Ask the children what they can do with those objects. For example, you can say, "What can you do with an egg? Yes, you can eat it. What else? Yes, you can cook them. How can you cook them? Yes, you can make scrambled eggs. Do you eat scrambled eggs at home? Add information to their comments.
Then, you can categorize the objects. Ask the children how they would organize the things in two groups: food and tools. Then, ask them why these objects are together. Is there another object we can add here? Ask the children which item is heavy, heavier, heaviest, light, lighter, or lightest, and why? Allow them time to think and answer. Tell them you will write their responses on paper to create a chat. Ask the children if they know what a chart is. Allow them time to think and answer. Add to their answers that a chart is a graph that represents information using symbols and pictures. For instance, you can create a chart like the following one;

Child's name	Heavy	Heavier	Heaviest	Light	Lighter	Lightest
Alex						
Pat						
Fer						
Jess						

2. EXPLORE (Describe how you can actively encourage children to build their own understandings of learning outcomes)

Ask the children to predict which object is heavy, heavier, heaviest, light, lighter, and lightest. Allow children time to think and answer. Then, ask, How many of you think the straw is the lightest? How can we determine which one is the lightest? Next, invite the children to weigh the objects on the kitchen scale and compare them.






You can say, "You thought the egg was heavier than the pear. Let's check your prediction using the scale." Remind the children that the heaviest item will cause the scale to have higher numbers. Create another chart with the name of the items and their weight.

Item	Weight
Egg	2
Plate	7.2
Fork	.2
Pear	7.9
Straw	0
Banana	5.1

After weighing the objects, check the children's predictions. Then, separate the top three heavier ones from the lighter ones. Next, ask children to predict which of the three is the heaviest and which one is lightest. Encourage the children to make charts, draw pictures of the objects, and write which was the heaviest and the lightest.

3. MAKE SENSE (Describe how you will support students in communicating what they have learned and support them in figuring out what it means through further practice)

As children complete the activity, ask them to share their thoughts. Discuss how some objects are heavier or lighter than others. Also, mention that some objects can be big but at the same time light or small and at the same time heavy. Encourage the children to find other objects and weigh them and compare them. Also, you can ask the children how to make an object lighter or heavier. For example, you could put a whole unpeeled banana and then peel it or cut it in half. For instance, you could weight an unpeeled banana, peel it, cut it in half, and weigh it again.

4. CLOSE (Describe how you can bring closure, determine learning attained, and provide synthesis)

Before finishing the activity, check for understanding by asking the children the following.

- ✔ Was your prediction correct?
- ✔ How could you prove that you were correct or wrong?

- ✔ What did you learn today?
- ✔ How the chart helped you to understand which object was the heaviest or the lightest?
- ✔ Did you find an item that has the same weight?

5. FOLLOW-UP (Describe how you can build on the lesson in the future to reinforce concepts taught, as well as how you can make from student interest by following their lead)

To expand on children's knowledge, you can extend the activity by asking the children, "Which objects will float and which ones will sink and why? Help the children make connections and gather data based on their observations. You can get a container with water and prove the children's hypothesis. You can say, "do you think the egg will sink or float? Why? Support children on their explanations.

List a minimum of 3 new vocabulary words that children will develop as part of this learning plan:

1. Chart, graph, weight.
2. Heavy, heavier, and heaviest.
3. Light, lighter, and lightest.

List a minimum of 3 open-ended questions for each lesson phase that you can ask children as part of this learning plan:

1. Do you know what a scale is used for? What can you do with these objects? What else? What do these objects have in common?

2. What do these objects have in common?

3. How can we determine which object is the heaviest?

Describe why this activity is developmentally appropriate for this group of children. Be sure to clearly address each of the three components of developmentally appropriate practice (DAP)

1. age appropriate
2. individually appropriate
3. culturally appropriate

1. This activity is age appropriate because children learn through the exploration of concrete materials. It supports cognitive development in a way consistent with their development level.
2. This activity is individually appropriate because it meets children where they are. It scaffolds and promotes collaborative learning so children can learn from each other. This lesson can help students identify weight and volume and find similarities and differences between objects.

3. This activity is culturally appropriate because it considers the diverse backgrounds and experiences of the children. The lesson could be taught in another language or with objects familiar to the children. The children can get specific items related to their cultures—for example, chopsticks or tortillas.

Describe how in this activity you promote the following (please utilize specific examples and avoid overly vague generalizations or connections:

1. Promoting Analysis and Reasoning: (List specific examples of questions and/or open-ended prompts that address the following indicators of analysis and reasoning: why and/or how questions, problem solving, prediction/experimentation and/or classification/comparison) *these are pre-planned opportunities

- Analysis – What is a scale?
- Reasoning- What can you do with these objects?
- Prediction – Which object is the heaviest?
- Experimentation – How can you make an object lighter?
- Classification and comparison – What do these objects have in common?

2. Promoting Opportunities for Creating: (List specific examples of how your lesson plan provides opportunities for each of the following indicators: brainstorming, planning and/or authentic production)

- Brainstorming – The children will be able to deepen their understanding of weight and volume by being asked several open-ended questions, looking for similarities and differences, and making comparisons.
- Planning – The children will have the opportunity to plan their charts. They will decide what objects to weigh. Also, when the teacher asks the children what they learned from the activity and what they would like to learn next, children will have the opportunity to create.
- Authentic production – The children can produce ideas while experimenting with the materials. The teacher can support children's authentic production by asking them to think about the heavy, heavier, heaviest, light, lighter, and lightest objects.

3. Promoting Opportunities for Integration: (List specific examples of questions and/or open-ended prompts that address the following indicators of integration: connecting concepts, and/or integrating previous knowledge) *these are pre-planned opportunities

- Open-ended questions - Children will focus on generating solutions when they hear open-ended questions, such as How can you make an object lighter?
- Connecting concepts – Children will connect ideas when they receive information about something they know; for example, when the teacher asks, "What else can we do with this object?"
- Integrating previous knowledge – When the teacher scaffolds learning with information and questions, children will incorporate prior knowledge; for example, when the teacher asks, what do these objects have in common?

4. Promoting Opportunities for Connections to the Real World: (List specific examples of questions and/or open-ended prompts that address the following indicators of analysis and reasoning: real-world applications, and/or related to students' lives) *these are pre-planned opportunities

- ❖ Real-world applications – Children will connect concepts to the real world when the teacher asks what can you do with these objects?
- ❖ Related to students' lives – Children will relate the learned concepts when the teacher asks, do you eat scrambled eggs at home?

I certify that the lesson I am submitting does not utilize a worksheet or rote learning experience. My lesson is focusing on promoting concept development through high quality interactions and everyday materials easily obtained in a family's home or surrounding outdoor environment. The outcome of my lesson is not a "cookie cutter" product.

__X__ Yes

____ No