**East Renfrewshire Council: Education Department**
**Practitioner Moderation Template**

| | |
|---|---|
| School Code | |
| Practitioner Code | T4 |
| Curriculum Area(s) | Numeracy and Technology |
| Level | First |
| Stage(s) | P3 |
| Specific subject (if applicable) | Volume |

Experiences and Outcomes:

**Measure**

I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units

***MNU 1-11a***

**Technology**

During practical activities and design challenges, I can estimate and measure using appropriate instruments and units.

***TECH 1-13a***

Learning Intentions:

Lesson 1: To estimate the amount an object holds, using everyday things as a guide.

Lesson 2: To begin to use standard units of measurement

Lesson 3:. To read a variety of different scales

Success Criteria:

Lesson one
I can investigate volume using non-standard units
I can estimate the volume of different everyday containers
I can compare my estimations with my measurements.

Lesson two
I can understand the need to use standard units of measurement
I can locate these on packaging
I can understand the terms litres and millilitres and how they relate to each other.

Lesson three
I can practise my measuring skills by using a variety of scales.
I can select appropriate measuring equipment to measure a given volume.
I can measure out the water for our Roman food recipe accurately.

Briefly outline the context and range of quality learning experiences that have been provided making reference to the chosen design principles.

Lesson 1

Whole class discussion of the difference between measuring volume and weight. The class were told about the need to measure accurately in order to make food for our end of topic Roman feast the next week. The children brainstormed all of the different liquids that could be measured. Next, the children were asked to work in pairs to estimate how many cups it would take to fill a variety of containers using a supporting worksheet. In pairs they examined the containers and made their predictions. Pairs were then selected to come forward and measure how many cups were necessary. As a class we decided how close a good estimate would be (green) a fair estimate (orange) and a faraway estimate (red). The children assessed their estimations and tried to identify if there was a more accurate way to measure volume rather than using cups.

Lesson 2

A number of containers to hold liquids were hidden around the classroom and the children were challenged to find them and place them in a running order from holding the least to the most. The children were given the chance to suggest why they felt one bottle would hold more liquid than another etc., whilst the more able were being encouraged to use vocabulary such as "narrow," "wide" and "deep". Once opinions had been shared, the children's attention was drawn to the litre and millilitre volume measurements printed on the containers. They were then placed in the correct order and the estimations assessed. That night for homework the children were asked to look at containers at home and bring in any bottles etc. to add independently to our volume scale.

Lesson 3

The children took turns at reading a variety of scales within an IWB TES activity. They more able also practised converting between millilitres and litres within the activity. Supporting worksheet completed. The children were then told about the morning's cooking activity where they would work in pairs to prepare stock for our Roman pottage. A number of measuring jugs of varying scales were placed in the middle of the class circle. In trios, the children examined the jugs, discussed and each selected a jug that would allow them to accurately measure the 800ml needed. The children took on role of water retriever, level checker and pourer. The various pots of pottage were then made and tasted, and the children were then able to discuss why being accurate in our water measurement was necessary.

The children were very eager to use other simple recipes and add ingredients appropriately. More cooking planned! ☺

**Practitioner Moderation Template** **Learner Evidence**

Record the range of assessment evidence that was gathered to meet the success criteria (Say, Write, Make, and Do) considering breadth, challenge and application.

SAY:
Answering and asking questions about containers and the need to measure volume.
Group discussion when forming estimations.
Making predictions and reflecting on their accuracy within introduction/plenary stage.
Reporting back on the range of containers at home that use millilitres or litres

WRITE:
Recording predictions and measurements accurately.
Reflecting on performance and identifying next steps.

MAKE:
Making the pottage successfully due to the correct volume of water in the recipe.

DO:
Exploring a variety of measuring scales within an ICT volume activity.
Completing a scale worksheet.
Predicting then sorting containers from the lowest to the highest volume.
Selecting an appropriate container for the stock in Roman pottage activity.

Did the learner successfully attain the outcomes? YES/NO

Yes, they successfully attained the outcome.

Briefly outline the oral/written feedback given to the pupil on progress and next steps, referring to the learning intention and success criteria.

The pupil selected was a very strong group 1 child and was encouraged throughout the lessons to adopt a leading role within group activities. They had very firm views when estimating and sequencing containers so was therefore asked to justify their decisions orally and to compare and contrast. The child was very astute in identifying their next steps. They assessed their own performance honestly and received oral feedback on this as well as written feedback and questioning to further challenge and extend. The learning intention from the first activity (to estimate carefully) was referenced on the corresponding worksheet. Likewise, the third learning intention (to read scales carefully) was referenced on that corresponding worksheet.

Pupil Voice:
What have you learned? How did you learn? What skills have you developed?

“I have learned to look for the volume on containers in my house. I can order the drinks containers in my classroom. I didn’t get it right the first time but now I know that it might look like a big container but a shorter one might hold more. 1.5 litres means one and a half litres. I know that there are 1000ml in a litre. I liked measuring out the water when we were making the Roman pottage. My group were very careful and measured out 800ml.”

# Learner Evidence

LESSON 1

## Investigating volume

LI—To estimate the amount an object holds and use everyday things as a guide.

| Container | My estimate of number of cups | Actual measurement using cups |
|---|---|---|
| teacher's mug | 3 cups | 3 cups |
| large bowl | 26 cups | 19 cups |
| cookie jar | 14 cups | 13 cups |
| measuring cylinder | 4 cups | 2 1/2 |


Honest assessments. You are estimating well!

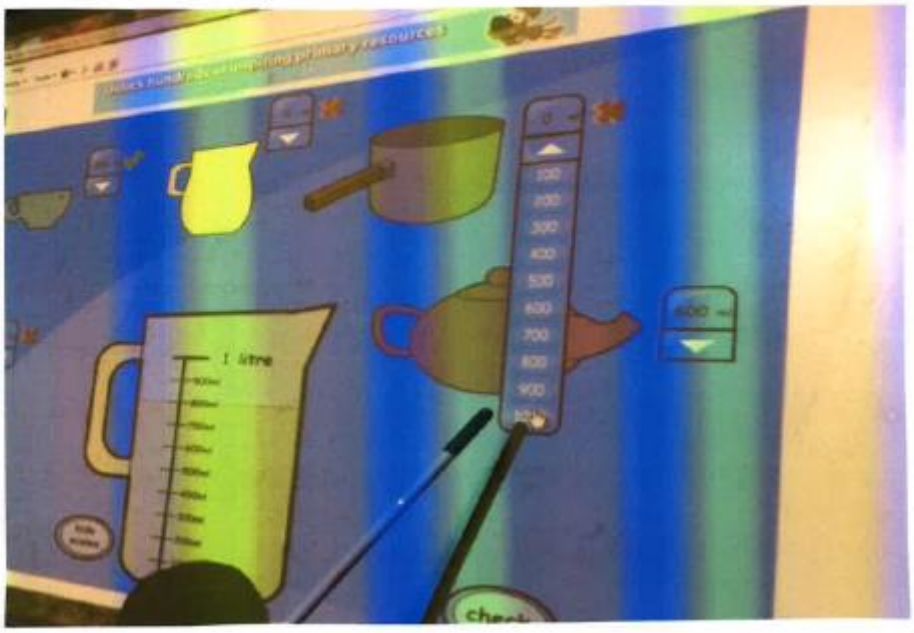
Is it easy to measure containers using cups? Explain. No, it is not easy because you may spill some. and it can take a long time to do it big containers.

Can you think of a better way? yes use measuring jug is a sensebl to use.

I agree! We will move onto this next time.

LESSON 2

LESSON 2




LESSON 3

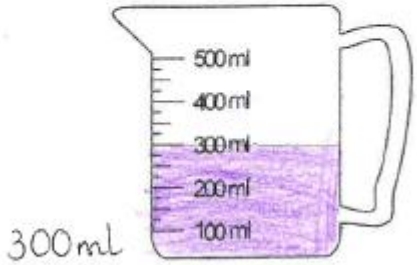
LESSON 3

# Measuring Volume

LI—To read scales and identify the unit of measurement

Look at the measuring jogs below and mark the level of water accurately using a blue pencil and ruler. Remember to look at the scale.

LESSON 3




300ml

18ml

17ml

5ml

Careful measuring of these volumes! You kept the water line level.


350ml

1ml

I can read scales carefully and I am ready to do the baking cooking.

I agree!