

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

School Code	0
Practitioner Code	013
Curriculum Area(s)	Literacy, Maths
Level	First
Stage(s)	P2
Specific subject (if applicable)	

Experiences and Outcomes:

When listening and talking with others for different purposes, I can exchange information, experiences, explanations, ideas and opinions, and clarify points by asking questions or by asking others to say more.

LIT 1-09a

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

Learning Intentions:

- To use appropriate instruments and units to measure everyday objects.
- To exchange information when listening and talking with others.
- To explain my opinions.

Success Criteria: To be discussed with the children

- I can estimate the correct length of objects with some accuracy by using non-standard units.
- I can estimate 1 metre.
- I can talk about my estimate with others.
- I can talk with others to try to explain any differences in our estimates.
- I can listen carefully to others.
- I can explain how to estimate.
- I can use a metre stick to measure accurately.
- I can explain how to use a metre stick.

Briefly outline the range of quality learning experiences that have been provided:
(Remember – Breadth, Challenge and Application)

Lesson 1: The pupils will be introduced to estimation. We will then discuss the meaning of estimation and decide that it is our best guess. The pupils will be encouraged to use their previous knowledge to make their estimation. The children will use non-standard units, (paperclips, cubes, hand spans and feet) to measure items in the classroom. Before measuring the children will record their estimates.

Lesson 2: The children will be introduced to a metre stick. In class, the children will be encouraged to share their knowledge of a metre stick. (What is it? What is it used for and who might use it?) The children will measure themselves against a metre stick in order to become familiar with the length and then use that knowledge to make estimates. The pupils will complete an activity in a group; they will organise the pictures of familiar items and group these according to size. The categories for grouping are: shorter than a metre, about a metre and longer than a metre.

Lesson 3: The children will work in pairs to estimate items in metres, around the school and give their opinions whilst exchanging information. The children will then measure the same items and discuss their results before feeding back to the group.

Record the range of assessment evidence that was gathered (Say, Write, Make, Do)

Say: To explain how to estimate.

To explain how to use a metre stick.

To talk about my estimate with others.

To talk with others to try to explain any differences in our estimates.

To give an opinion on someone else's estimate.

Write: To record estimates and actual measurements.

Do: To group items according to size.

To estimate items in metres.

To measure items in metres.

Did the learner successfully attain the outcomes? YES/NO

Briefly outline the feedback and next steps provided to the learners:

The children self-assessed using traffic lights and discussion during plenary activities. The children were encouraged to discuss how close their estimates were to the actual measurements during each activity with their partner and after each activity with their group. They were encouraged to share ideas on how to make the estimate and actual measurements closer in the future.

Next steps: To use estimation/explanation skills during activities to estimate how heavy an object is before weighing in kilograms.

Learner Evidence

Evidence

013

Lesson 1

The pupils were introduced to estimation. We discussed the meaning of estimation, completing numerous examples as a class, in pairs and individually. Together we decided that estimation was a 'best guess'. The pupils were encouraged to use their previous knowledge to make their estimations.

Using non-standard units (paperclips, cubes, hand spans, feet) the children measured a range of items in the classroom. The pupils had a choice of the unit of measure they wanted to use to complete the task, however they had all completed examples using each unit of measure, when discussion were had as to the best approach, the size difference of the items and the effect this would have on the estimates and actual lengths recorded. Before measuring the pupils made estimates of the items and recorded these on a whiteboard.



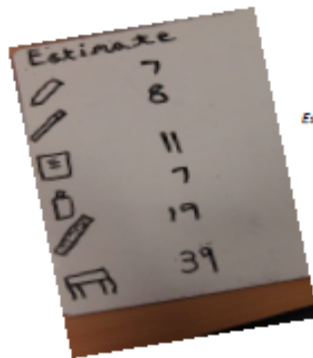
Units of measure



Teacher Voice

With your partner, choose a unit of length to measure with. Now estimate how long you think the item is and record your results.

Now measure accurately the item, using your chosen unit of measure.

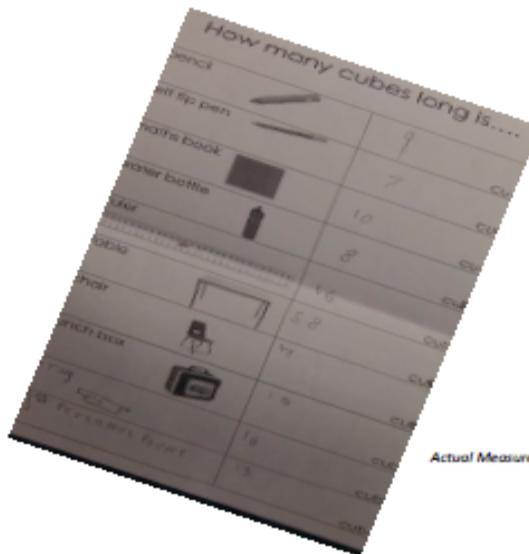


Estimates

Pupil Voice

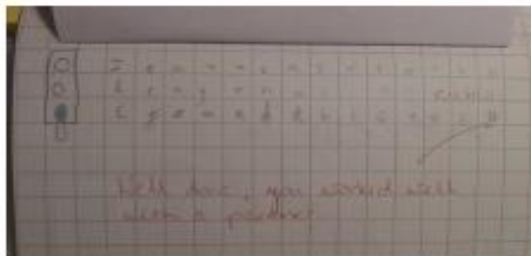
I think this will be about 11 because the pen is 8 and this is longer than the pen.

(estimating the length of the jotter)



Actual Measurements

Practical work



Pupil's self-assessment

During Plenary:

Teacher Voice

Can anyone explain what an estimate is and what we need to do in order to make an estimate?

Why is it important to know your unit of measurement?

Pupil Voice

It is a good guess but you need to know what you are measuring with first.

Because all of the units are different sizes.....it is going to be a higher number if you are measuring with paperclips than if you use your feet.

Lesson 2

The pupils were introduced to a metre stick. In class the pupils were shown a metre stick and asked to share their knowledge of it. What did they think it was, what could it be used for and who might use one of these?

To familiarise themselves with the length of a metre stick, each pupils measured themselves against the metre stick in order that they could use this knowledge when making estimates.

The pupils then looked at pictures of known items and grouped them according to size. They were organising items that were longer than a metre, shorter than a metre and about a metre.



Pupil Voice

A table is about a metre because if I was to lay down beside the table it would be about where the metre stick comes on me.



Pupil Voice

Look it comes up to my shoulders.
I thought it would come up to here.
(see left hand)

Pupil Voice

A: A football pitch is definitely longer than a metre.
B: So is a building.

Pupil Voice

Oh wait, I remember that this was about the same as the stick because we looked at the things around the class.



Lesson 3

During this lesson the children worked in pairs to estimate and make accurate measurements using the metre stick. They discussed their estimate and came up with an agreed length. Then completed the actual measurement, comparing their results.

As a class, we made estimates of various items around the school and then measured them using the metre stick. This practice gave the pupils the prior knowledge on which they could draw when completing the paired task.



Pupil Voice

A: I think the class is going to be a lot. Maybe about 20.

B: I don't think it will be as much as that as we measured the corridor with the teacher and it was 20.

A: Oh yeah, I forgot, it is smaller as that is really long.

B: Shall we put about 10.



Object	Estimate	Actual
1. Classroom	20 m	10 m
2. Desks	10 m	10 m
3. Toy units	2 m	2 m
4. Computers	1 m	1 m
5. Whiteboard	1 m	1 m

Worksheet showing estimates and actual measurements.





Learning to measure with a metre stick

Teacher Voice

Can anyone explain how we measure using a metre stick?

What kind of items might we use a metre stick to measure?

Pupil Voice

You need to lay it flat and then get your partner to put their finger at the end of it. You then put the metre stick next to their finger and count how many sticks.

You measure quite big items but not too big like the road.