Regional Improvement Collaborative: West Partnership
Practitioner Moderation Template (PMT)

Prior to the moderation exercise, please complete the following information and submit it to your facilitator with assessment evidence from one learner that you judge to have successfully attained the Es and Os.

Evidence Code	L9
Curriculum Area(s)	NUMERACY
Level	First
Stage(s)	P3

Planning

Experiences and Outcomes (highlight the relevant aspects of each E and O)**:**

- **Experiences and Outcomes**

MNU 1-11a
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 1-01a
I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate.

MNU 1-03a
I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed.

Learning Intentions:

Lesson 1: **to use everyday objects and a range of measuring instruments to measure length.**
Lesson 2: **to use a ruler to measure and draw lines of a given length.**

Lesson 3: **to measure lengths in cm and m.**

Lesson 4: **to estimate, measure and record lengths.**

Assessment

Benchmarks:
Uses knowledge of everyday objects to provide reasonable estimates of **length**, height, weight and capacity.

Makes accurate use of a range of instruments including **rulers, metre sticks**, digital scales and measuring jugs when measuring **length, height**, weight, mass and capacity using the most appropriate instrument for the task.

Record measurements of length, height, weight, mass and capacity using the appropriate standard units, for example, millimetres (mm), **centimetres (cm)**, grams (g), kilograms (kg), millimetres (ml), litres (l). **Compares the measure with the estimate.**

Uses **different strategies** to estimate an answer to a calculation or problem.

Checks the **reasonableness of calculations by comparing the final solution with the estimate.**

Success Criteria: *Please list SC and give brief detail on how learners were involved in their creation.*

As a plenary at the end of each lesson, learners gave feedback on their learning and shared the next steps. These were used to create the success criteria for the next lesson. Learners also looked at examples of What A Good One Looks Like (WAGOLL) which they used to help create Success Criteria.

Lesson 1:

- I can discuss vocabulary related to measure.
- I can explore different ways to measure objects.
- I can discuss which way gives the most accurate reading.
- I can complete tasks using the appropriate voice level.

Lesson 2:

- I can use a ruler to draw a straight line.
- I can make sure I line the ruler up with the grid on my paper.
- I can use a ruler to draw lines of a given length.
- I can use a ruler to measure lines to the nearest centimetre.

Lesson 3:

- I start measuring from the edge of the ruler.
- I use counting on skills to find the length of a line.
- I record my answer in cm/m.
- I can estimate the length of a line and justify my answer.

Lesson 4:

- I can estimate lengths using the correct measurement.
- I can start measuring from the edge of a ruler (Ocm).
- I can use counting on skills.
- I can record my answer in cm/m.
- I can complete tasks using the appropriate voice level.

Briefly outline the context and range of quality **learning experiences** that have been planned making reference to the chosen **design principles**. Make specific reference to **breadth, challenge & application**.

Class worked on the novel Flat Stanley and incorporated this into their learning across the curriculum. The class explored Measure to help them investigate the length of different Flat Stanleys.

Lesson 1:

Learners were introduced to the topic of Measure using a short video as a hook (Topsy and Tim Measurement). This stimulated discussion and from this the class generated their thoughts and key words about the topic. This enabled me to gauge prior knowledge.

Three activity stations were planned to engage and stimulate discussion on the topic.

Activity 1: Using cubes to measure length/width/height of pictures.

Activity 2: Using ruler/metre sticks to measure lengths of string, straws etc?

Activity 3: Using a ruler: paper/pencils rulers – observe competencies.

These activities were planned to offer a range of ways for learners to apply knowledge.

See Appendix for photographic examples of activities.

Lesson 2:

Lesson starter – Discussion with a partner. What would you use to measure, a toy bus/ real bus/ pencil case, the corridor? And why???

Would you use a ruler or a metre stick to measure: the length of the classroom. the length of a page of a book. the length of a toy bus. the length of a real bus.	Show metre stick and ruler. Discuss centimetres and metres. Count in 10s forwards and backwards on the metre stick. Do this several times. Then count in 5s. (Links with SEAL planner).

Measuring activities in jotter - modelled by teacher under visualiser– pupils to follow step by step (in jotters). **(Differentiation – pages prepared for Star Maths group and two other pupils).** Complete square/ rectangle as modelled by teacher. Keep referring back to SC – lining ruler up. Starting on corner of box. Then pupils draw lines of various lengths as given on board. Teacher modelled using counting on skill to ensure lines were the correct length allowing for application on number skills.

(This activity follows on from skill development in Lesson 1 (using a ruler to measure) transferring the skill to drawing lines of set lengths, giving learners opportunity to apply prevously leanred skills.)

Once completed as a class, challenge was given to pupils to draw their own square/ rectangle using knowledge of 2D shape properties and measure skills.

Lesson 3:

Re-cap from Lesson 2.

What does the word 'estimate' mean? Let's estimate the length of the following classroom objects – whiteboard remote, jotter, table. What unit of measure would it be sensible to use for each? Discuss estimates.

Pupils work in groups and rotate round 3 measure tasks to consolidate learning from previous lessons. Groups to be mixed ability. Each child has worksheets to record their learning. (pictured below). Direct questioning as groups rotate to verbally assess learning.

Learning intention: to measure lengths in cm and m   Name_____

Measure task 1

Using a ruler, draw a straight line to join the dots below.

·   ·

Now measure the line and record the measurement in centimetres (cm) in the box.

Using a ruler, draw a straight line to join the dots below.

· |

Now measure the line and record the measurement in centimetres (cm) in the box.

Success Criteria: - I start measuring from the edge of the ruler.   – I use counting on skills to find the length of a line.
                  - I record my answer in cm/m.   – I can estimate the length of a line and justify my answer.

Learning intention: to measure lengths in cm and m   Name_____

Measure task 2
Learning intention: to measure lengths in cm and m

Using a metre stick, measure the length of the lines on Mrs McLean's teaching table. Record the answers in the box. THINK!!! Will you record the answer in cm or m?
                                    Line 1   Line 2

Now measure the line on the glass window beside the Sacred Space.
It is longer than a metre. What will you use to measure it?
Record your answer using metres/centimetres.

Success Criteria: - I start measuring from the edge of the ruler.   – I use counting on skills to find the length of a line.
                  - I record my answer in cm/m.   – I can estimate the length of a line and justify my answer.

Learning intention: to measure lengths in cm and m   Name_____

Measure task 3
Learning intention: to measure lengths in cm and m

Look at the line below. Estimate the length of the line. Write your estimation in box 1.

Measure the line using a ruler and write the answer in box 2. How accurate was your answer?

Box 1   Box 2

_____

Look at the line on the whiteboard. Estimate the length of the line. Write your estimation in box 3.

Measure the line using a ruler and write the answer in box 4. How accurate was your answer?

Box 1   Box 2

Success Criteria: - I start measuring from the edge of the ruler.   – I use counting on skills to find the length of a line.
                  - I record my answer in cm/m.   – I can estimate the length of a line and justify my answer.

PLENARY - After completing tasks, pupils self assess their work against each of the Success Criteria (on front of lesson worksheets) using traffic light colours.

Lesson 4:

Starter – display images of different rulers. Do you notice anything about these rulers (not all start at zero/ different markings etc). Discuss.
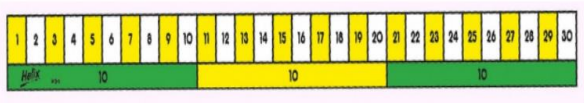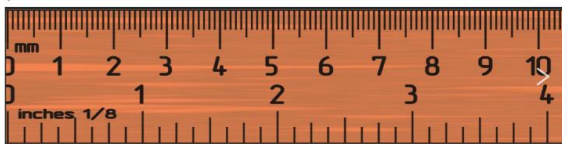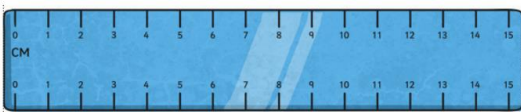
Learning activity context – Because he his flat, Flat Stanley is able to get through spaces most other children cannot but today we need to use our measuring skills to decide which of our Flat Stanleys can fit through a door that is 15cm high.

Pupils were first given a sheet with 4 different size of Stanleys. They were then asked to estimate the size of each and then put this estimate in a 'safe box' at the front of the class. After this they were given a ruler and asked to measure and reord the length of each of 4 Stanleys. Then pupils decide which would fit through the door. This allowed for application of skills as well as encouraging pupils to use problem solving skills to determine an answer. Use questioning to ensure understanding (see below).
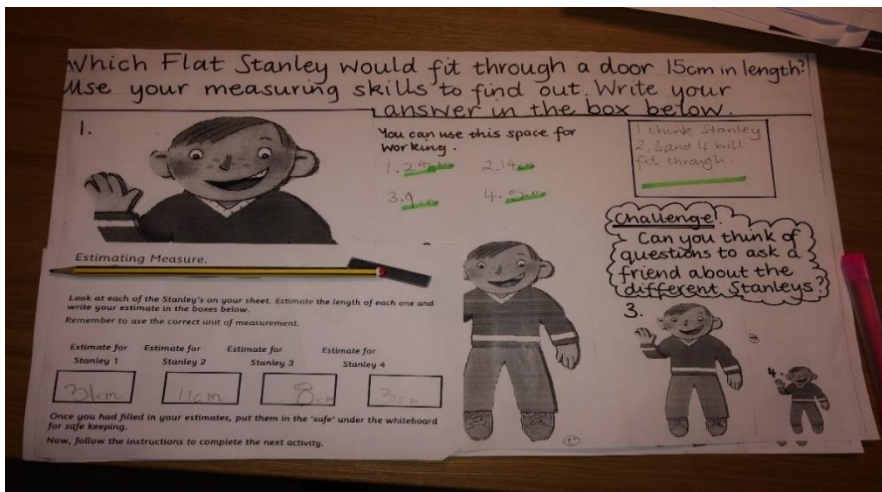
Assessment task given. At the end of the task pupils were able to test moving their chosen Stanley through a '15 cm door'.

Record the planned assessment that will be gathered to meet the success criteria considering **breadth, challenge and application**.

A range of assessments were carried out during the planned lessons. Teacher observation and dialogue enabled teacher – pupil/ pupil – teacher feedback which enabled planning to be adapted responsively. Planned questioning allowed for differentiation

Why did you chose the ruler to measure the piece of string? Why did you not use the metre stick?

What does the word 'estimate' mean? Let's estimate the length of the following classroom objects – whiteboard remote, jotter, table. What unit of measure would it be sensible to use for each?

Which Flat Stanley will fit through the door? How do you know that? How did you measure the height? Why would this other Flat Stanley not fit through the door? Challenge – would more than one Flat Stanley fit though the door – why?

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

Throughout the block of learning 'in the moment feedback' was given to learners to allow them to move their learning forward. Class highlighting code was also used thoughout - 'good to be green' and 'pink stop and think'.
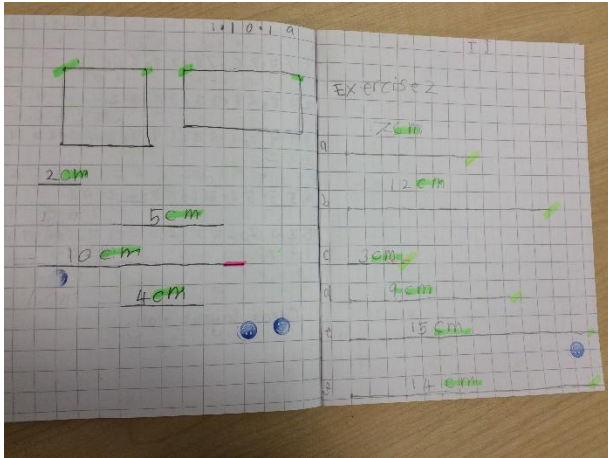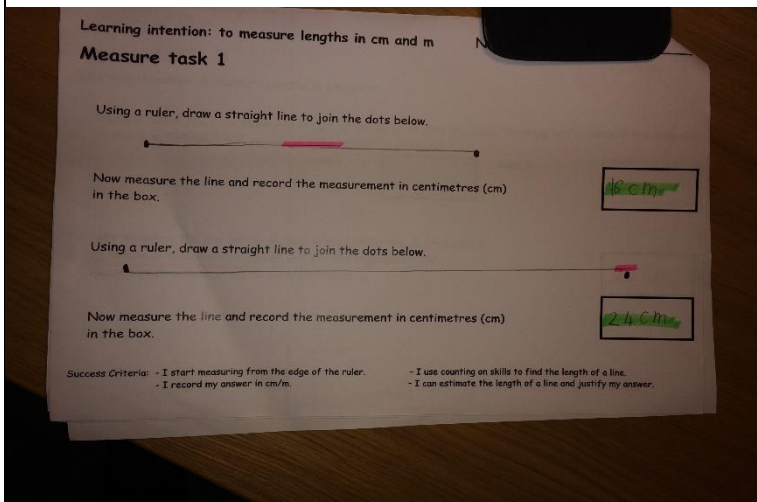

Lesson 2

Teacher feedback

'You have followed instructions to complete the square and rectangle'.

'You have drawn lines accurately, starting at the corner of the box'.

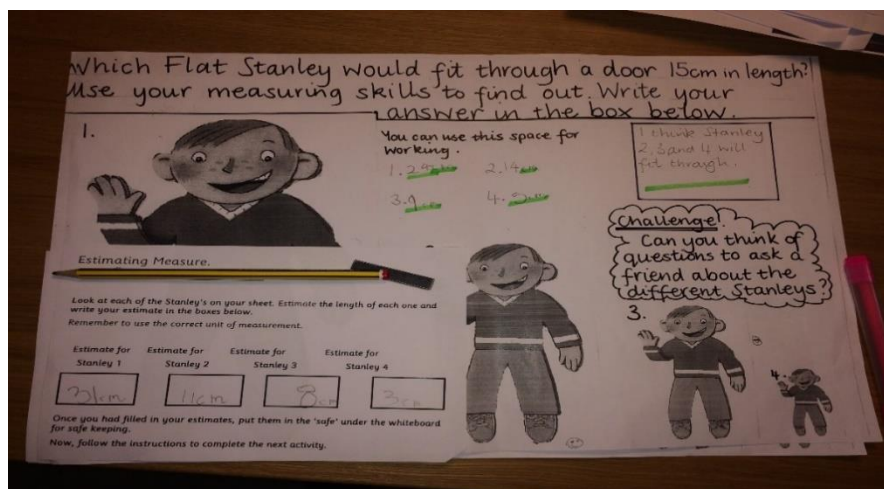*' Next time, try to keep pencil against the ruler to make sure the lines are straight'.*

Lesson 3

' You have used your counting on skills to find the length of the line'.

' You have recorded your measurements accurately using the correct unit of measure (cm)'

'Next time, take care to line the ruler up carefully to make sure you draw a straight line from one point to another'.

Lesson 4

Feedback highlighting code used following discussion using hinge question detailed above. Learner stated (on page) Flat Stanley " 2 would fit through door as he was smaller than 15cm – he was 11cm." When questioned further by teacher learner was able to state that 3 and 4 would also fit through as they were also less than 15cm in height.

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

Views were gathered as part of a plenary session.

HINGE QUESTION – What do you know now about measure that you didn't know before?

" I can measure using cm"   "I can measure using m"

" I know how to measure accurately"   " I am more confident in estimating a length.'
 " I know that when I am measuring using a ruler I start at 0 "

Did the learner successfully attain the outcomes?   YES

- Understands concept 'to estimate'.
- Used a ruler to accurately measure the different heights and recorded this in working space. Learner used appropriate units of measure.
- Learner was able to give a verbal answer which was scribed by teacher.
- Learner was also able to create questions to ask shoulder partner.

Appendix

Lesson 1

Teacher feedback –

"I like how you are lining your ruler along the line. Remember to keep the ruler still as you draw the line".

" Do you always need to start counting from 0 in 1s? Could you count in 10s then 1s?"