

East Renfrewshire Council: Education Department Practitioner Moderation Template

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.

Practitioner Code	F41
Curriculum Area(s)	Numeracy and Mathematics
Level	First
Stage(s)	P3

Experiences and Outcomes:

I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. **MNU 1-20a**

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

Learning Intentions:

Learning Intention 1

To explore a variety of ways in which data is presented

Learning Intention 2

To use addition and subtraction to solve problems

Learning Intention 3

To ask and answer questions about data

Learning Intention 4

To use the mental strategies I have developed.

Success Criteria:

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

SC 1

- I can identify different types of graphs, charts, tables and diagrams.
- I can *extract/select* information from different types of graphs, charts, tables and diagrams.
- I can read scales, labels and headings to help me understand data.

SC 2

- I can identify the language of addition (add, sum of, plus, total, more than, altogether) and subtraction (subtract, take away, minus, less than, difference between, how many more than?)
- I can use this language to help me know which calculation to do.

SC 3

- I can create questions using my knowledge of addition/subtraction language and bar graphs.

- I can identify information from the data to create an addition/subtraction calculation.
- I can use mental strategies to solve addition/subtraction calculations.

SC 4

- I can use mental strategies to solve addition/subtraction calculations.
(Children to negotiate further this SC)

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**.

Pupils will explore through discussion the different ways data is presented (bar graphs, pictograms, tally charts, tables and Venn and Carroll diagrams.) Pupils will discuss each type of data and will be asked to select/extract information from each.

Pupils will explore bar graphs and how to interpret scales, labels and headings accurately. The pupils will sort smarties into colours and record the different colours in a tally chart and bar graph. Pupils will be asked to answer questions based on the bar graphs. Pupils will work with a partner to answer the questions and explain their mental strategies to the rest of the group. Pupils will be given information to sort and create a bar graph to apply what they have learned.

Pupils will identify the language of addition and subtraction by creating a “key” of all of the addition and subtraction language. Pupils will participate in a treasure hunt to answer questions about bar graphs which require them to either solve it mentally or create an addition/subtraction calculation. This will enable them to transfer their skills.

Pupils will gather information by asking the class to vote for their favourite subject and colour. Pupils will then be asked to create a bar graph with their findings. Pupils will then be challenged to create and solve mixed addition and subtraction examples about the bar graph, expanding their addition and subtraction knowledge.

Record the planned assessment that will be gathered to meet the success criteria (Say, Write, Make, and Do) considering **breadth, challenge and application**.

SAY

- Pupils will state different ways to present data and information.
- Pupils will be able to identify different language for addition and subtraction

WRITE

- Pupils will select information from a bar graph and answer questions
- Pupils will create questions for a bar graph with a partner
- Pupils will record information in the form of tally charts and bar graphs
- Pupils will create a “key” of addition and subtraction language with a partner

DO

- Pupils will participate in a classroom treasure hunt to answer data handling questions
- Pupils will select and extract data from graphs
- Pupils will sort information to create a bar graph

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

Jotter Verbal Feedback- Well done X you have managed to use a variety of addition and subtraction language. I really liked your “what is the difference of P.E and Art” question.

All other written feedback – see evidence

Next Steps given to learner X were to develop your subtraction language. I suggested this was done through more examples of word problems. In addition I suggested to create questions for different types of graphs to broaden their knowledge.

Pupil Voice:

What have you learned? How did you learn? What skills have you developed?

“We learned about the different ways to show data.” “We looked at Venn Diagrams, tally charts, pictograms and bar graphs.”

“We looked at different ways to show data.” “We used a smartie packet and we had to sort the colours and write it as tally marks. We had to count each colour and colour in the bar graph. We had to put labels on the graph. I liked colouring in the graph.”

“We had to write the language for add and subtract. I think the adding one was easier.”
“We did a treasure hunt with different graphs questions. I liked trying to find them all.”

“We asked our class to vote for their favourite subject. We had to make a bar graph.”
“Then we made different questions for a partner about the graph. I liked making the questions hard.”

See evidence

Did the learner successfully attain the outcomes?

YES/NO

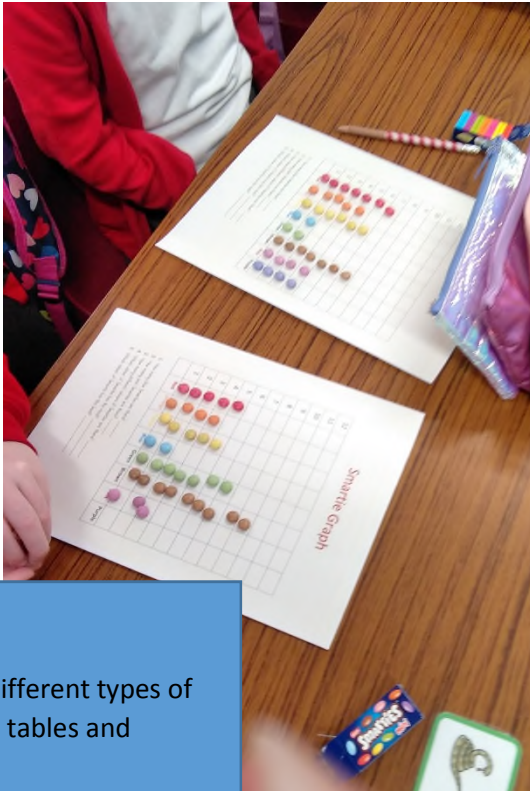
Lesson 1

L.I 1 – to explore a variety of ways in which data is presented.

Learning Experience – Pupils discussed the ways to collect data. Pupils explored the different ways of presenting data such as bar graphs, pictograms, tally charts, tables, Venn and Carroll diagrams.

Pupils were asked to select and extract information from the various graphs.

The pupils then used Smarties to sort into colours and represent their findings as a tally chart and bar graph.



S.C -

I can identify different types of graphs, charts, tables and diagrams.

I can extract/select information from different types of graphs, charts, tables and diagrams.

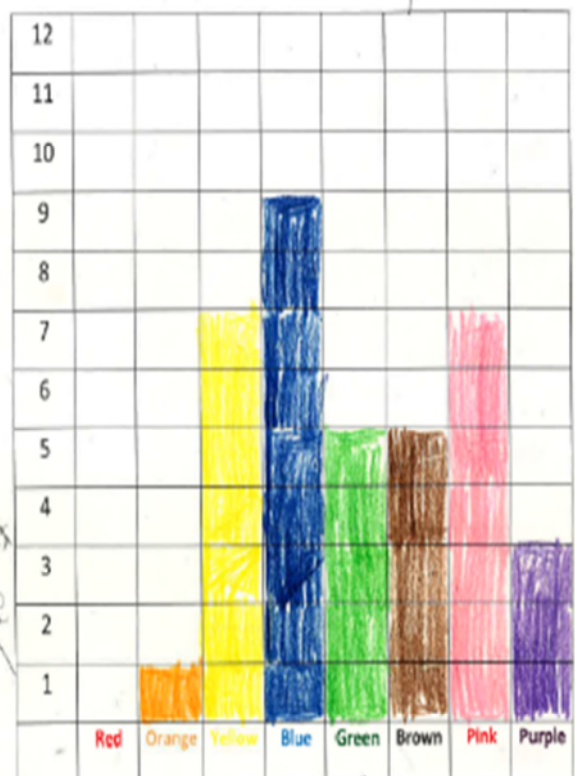
I can read scales. Labels and headings to help me understand data.

Pupil Voice

"We learned about different ways to show data. We looked at Venn Diagrams, tally charts, pictograms and bar graphs."

"We used Smarties and had to sort the colours and wrote it as tally marks. We counted the colours and coloured in the bar graph. I liked colouring in the graph."

Smartie Graph



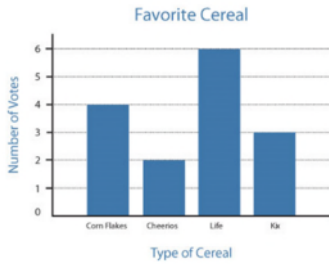
1. How many blue Smarties are there? 9
2. How many pink Smarties are there? 7
3. How many different colours of Smarties are there? 8
4. Which colour of Smartie has the most? Blue
5. Which colour of Smartie has the least? Red

Great work!
You can extract information from a bar graph to answer questions

Lesson 2

L.1.2 – to use addition and subtraction to solve problems

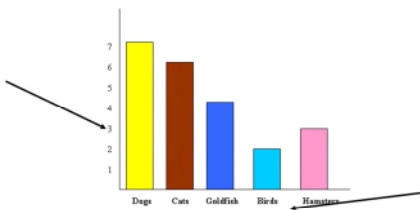
Question 14



What is the difference between the number of votes for Life cereal and Cheerios?

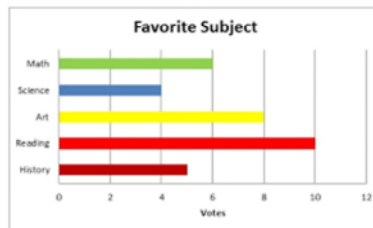
Question 9

Pet Survey



What could be suitable labels for the bar graph?

Question 11



How many more children preferred Art than History?

Learning Experience – Pupils worked with a partner to write down as many “key” addition and subtraction words.

Pupils then participated in a treasure hunt around the classroom to apply their knowledge of addition and subtraction to answer different graph questions. Pupils were required to use their mental strategies to solve the problems.

Following the task, the pupils discussed different strategies to solve the problems and shared with the group.

Pupil Voice

We did a treasure hunt with different graph questions. I liked trying to find them all.

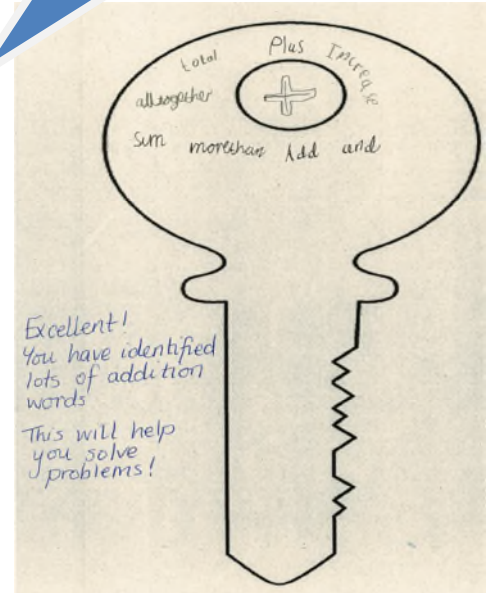
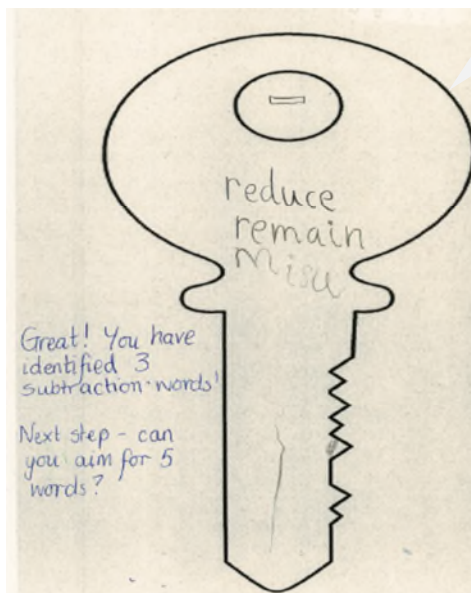
Pupil Voice

We wrote all the language for add and subtract. I think the adding one was easier.

S.C

I can identify the language of addition (add, sum of, plus, total, more than, altogether) and subtraction (subtract, take away, minus, less than, difference between, how many more than?)

I can use this language to help me know which calculation to do.



Lesson 3

L.I 3 - To ask and answer questions about data

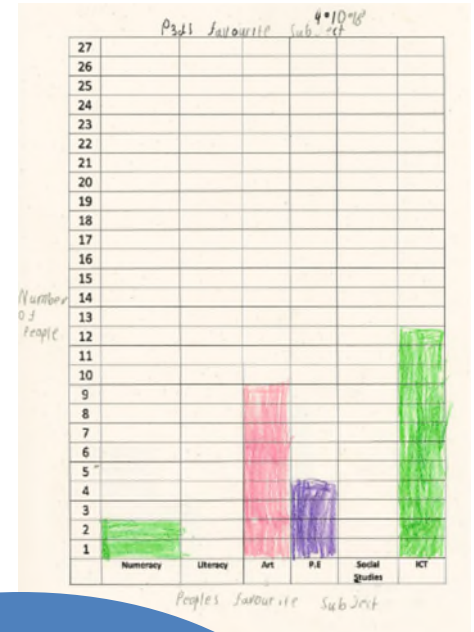
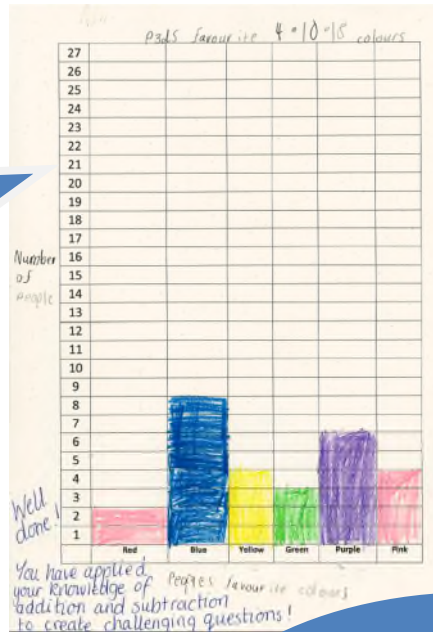
L.I 4 - to use the mental strategies I have developed.

Learning Experience – The pupils asked the class to vote for their favourite subject and favourite colour. They then created a bar graph with their findings.

Following this, the pupils created and asked questions about the graph. The pupils applied their knowledge of addition and subtraction language to create challenging questions for a partner.

Pupil Voice

We asked our class to vote for their favourite subject and colour. We had to make a bar graph.



S.C

I can create questions using my knowledge of addition/subtraction language and bar graphs.

I can identify information from the data to create an addition/subtraction calculation.

I can use mental strategies to solve addition/subtraction calculations.

Pupil Voice

Then we made different questions for a partner about the graph. I liked making the questions hard.

Graph Questions 10%
1) How much people chose ICT? 12
2) What is Art and maths all together? 12
3) What is the total of yellow and Purple? 10

Pupil Voice – Strategies

I can count on and back from a number.

I used my number bonds.

4) What is the sum of Blue and pink? 12
5) What is the difference of P.E and Art? 5
✓ Fantastic questions!

Verbal feedback given.