

Stretch Aim: By June 2020, 85% of pupils in Room 9 at Carleton Primary School will have achieved CfE first level numeracy outcomes (baseline 36%)

Aim 1: By October 4th 2019 85% of room 9 can identify the place value* of six numbers through partition. (Baseline 37%)

**operational definition - standard place value partitioning as answer.*

Aim 2: By November 24th 2019 85% of room 9 can solve* six mixed addition and subtraction sums. (Baseline 33%)

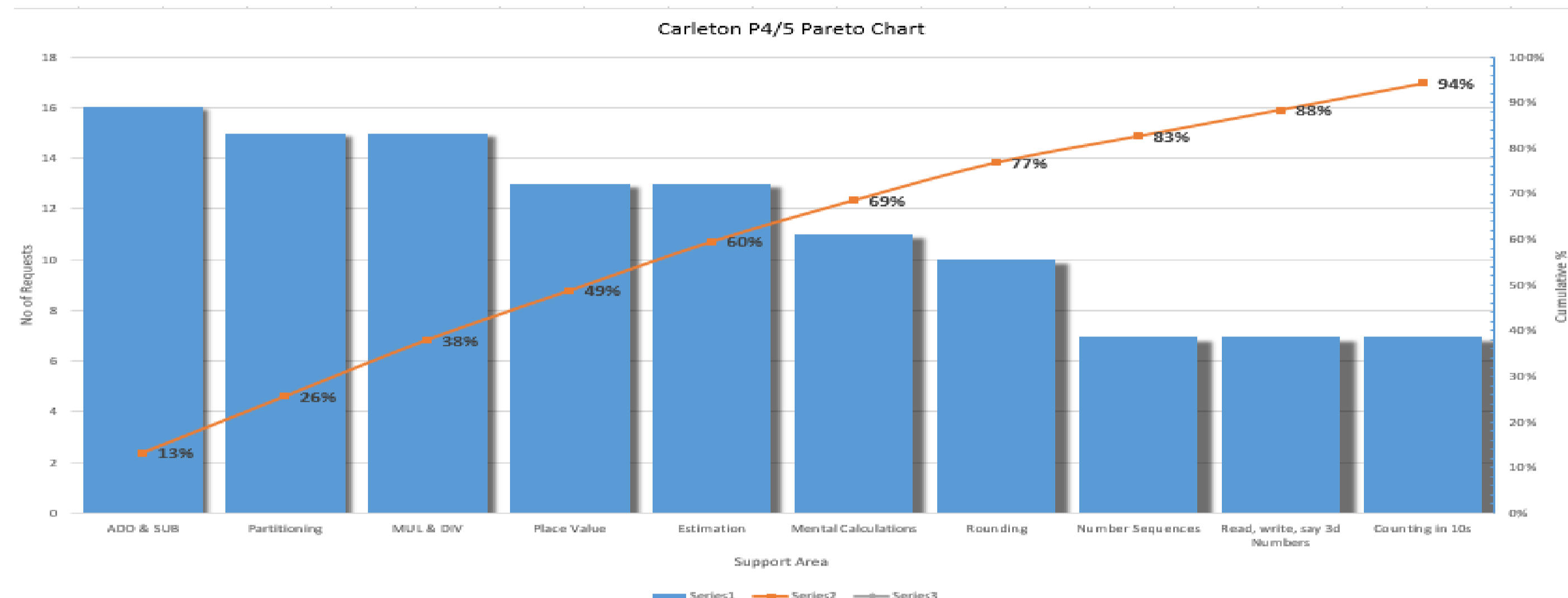
**operational definition - accurately writes sum and answer (showing their work).*

Aim3: By December 9th 2019 85% of room 9 can partition* a 2 digit and 3 digit number three different ways. (Baseline 37%)

**operational definition - standard place value accepted as an answer but remaining must be two different sums.*

Process Change

The teacher carried out conceptual numeracy baseline assessments, results were used to create a pareto chart identifying



Teachers across the cluster collaborated to develop a driver diagram unpacking our theory of change.

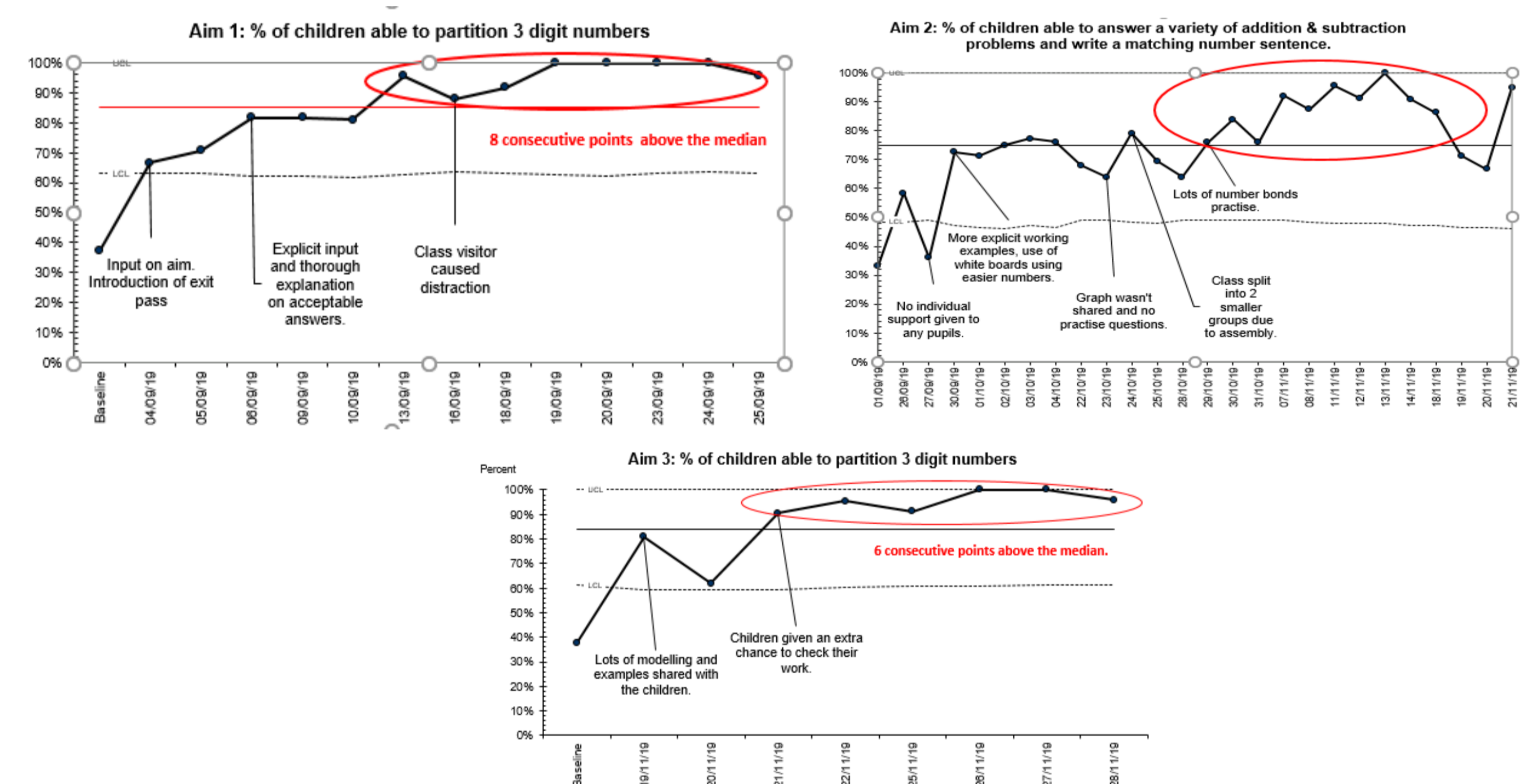
Change Ideas

- Teacher input to start numeracy topic modelling each concept with time spent on input gradually scaled back as child confidence and knowledge increases.
- Child involved in data analysis: through sharing the data with the children they would identify next steps in learning and support required.
- Using the pareto chart to navigate through key aspects of numeracy.
- Using concrete materials.
- Teacher and pupils generated success criteria together and used this to steer their learning.
- 'Exit Pass' used to assess and establish daily (where possible) routine of tracking progression of number work.

Achievements

- 100% of the class are projected to achieve CfE first level numeracy outcomes by June 2020. (Baseline 36%)
- Within 6 academic days, 100% of the class were able to understand place value using 3 digit numbers. (Baseline 37%)
- 95% of the class were able to answer a mixture of addition and subtraction word problems within 13 days. (Baseline 33%)
- Within 3 academic days, 96% of the class were able to partition 3 digit numbers in a variety of ways. (Baseline 37%)

Results



Conclusions

- Daily focus on numeracy, children generating success criteria and identifying next steps has demonstrated improvement in specific areas of numeracy.
- Sharing and analysing the data with the children has driven their motivation and enthusiasm to achieve the outcomes.
- This approach has generated excitement and momentum within the classroom, which continues to contribute to improvement gains.
- Teacher confidence in planning and delivering numeracy lessons has increased.

Next Steps

- Continue to work through numeracy aims until the completion of the project.
- Using the Mfl tools across other areas of teaching practice.

"It helps us keep track of what we are learning and find solutions in maths" (Pupil)



"Having clear structure for learning and assessment, and involving the children when identifying next steps improved attainment." (Teacher)

