

**Stretch Aim: By June 2020, 85% P4 pupils at Thornton Primary School will have achieved CfE first level numeracy outcomes (baseline 0%).**

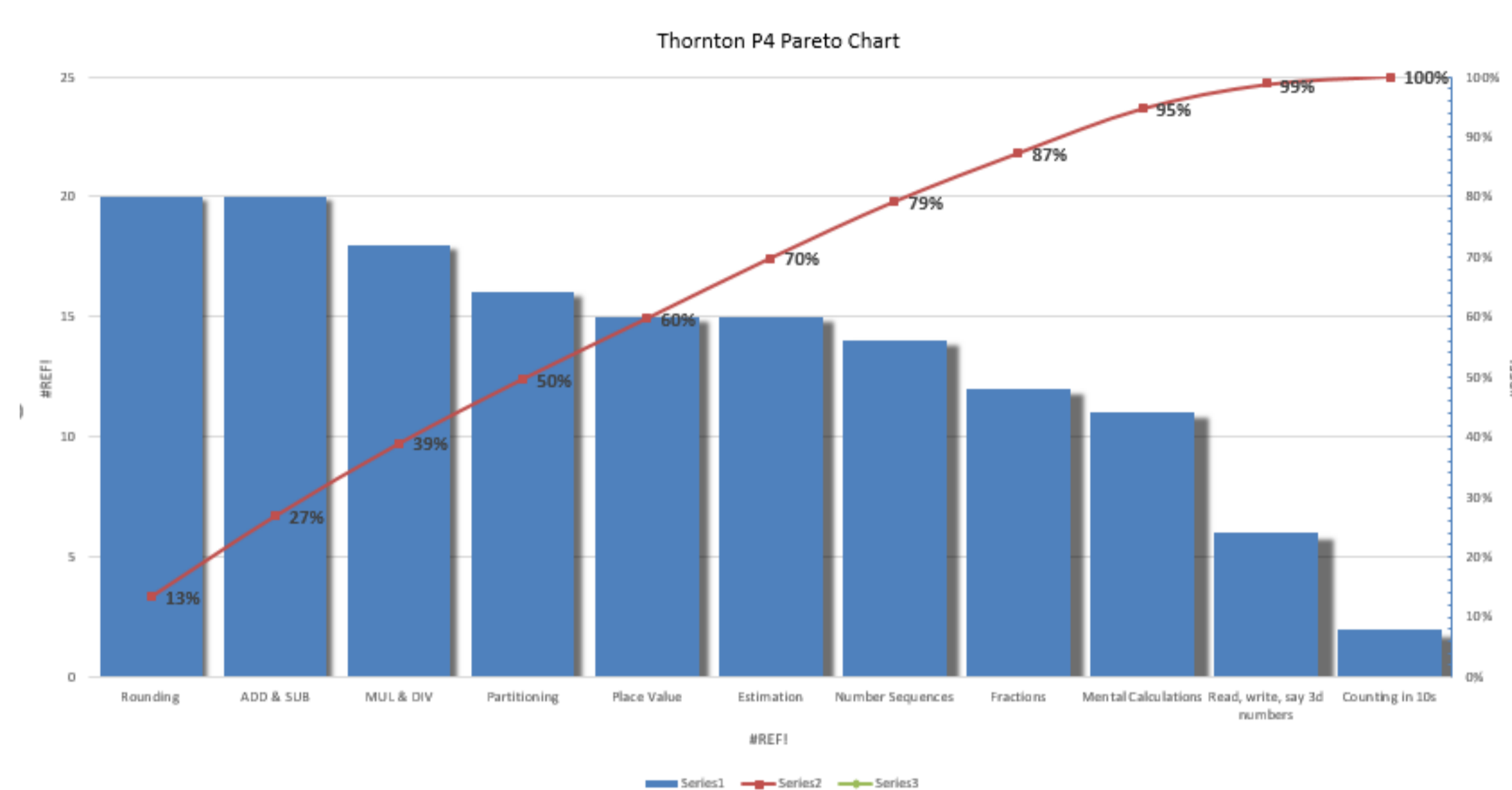
**Aim 1: By October 2019, 85% of children in primary 4 will be able to round 3 digit numbers to the nearest 10. (baseline 31%)**

**Aim 2: By December 2019, 85% of children in primary 4 will be able to write a number sentence using a worded number story within 100 (baseline 31%)**

**Aim3: By 11th February 2020, 85% of children in primary 4 will be able to partition a number to 100 (baseline 45%).**

## Process Change

P4 teachers carried out conceptual numeracy baseline assessment, results were used to create a pareto chart identifying the main area's of difficulty.



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

## Change Ideas

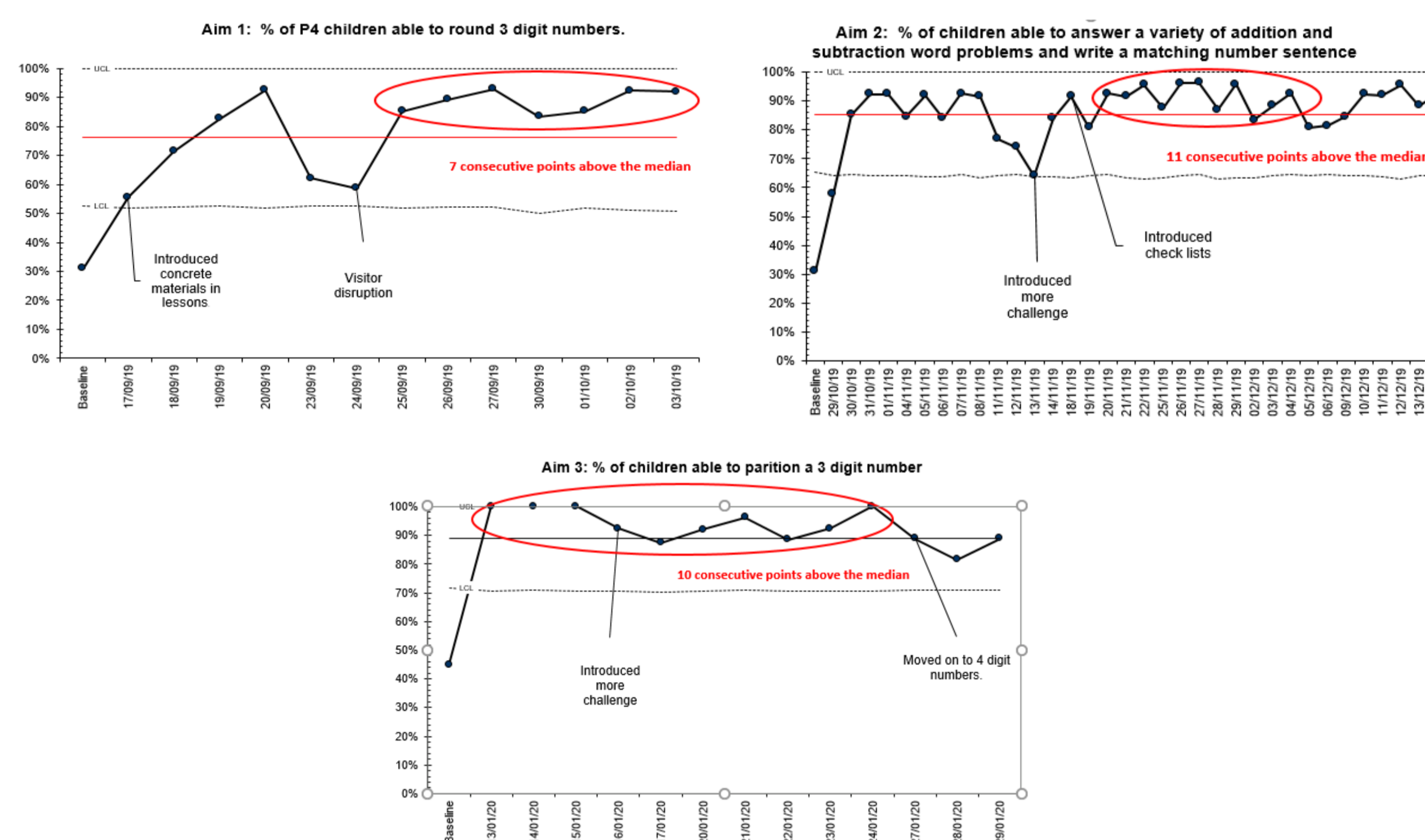
- Daily (where possible) numeracy practise with the full class.
- Teacher input to start numeracy topic modelling each concept with time spent on input gradually scaled back as child confidence and knowledge increases.
- Child involved in data analysis.
- Stage partners working together to plan and analyse data and generate change ideas.
- Using the pareto chart to navigate through key aspects of numeracy.
- Using concrete materials.
- Framing number challenges using number stories and language.
- Teacher engaged pupils in success criteria verbally and had checklists on display.

## Achievements

- 77% of P4 pupils are projected to reach CfE first level numeracy outcomes (Baseline 0%)
- Over 85% of P4 pupils were rounding 3 digit numbers to the nearest 10 within 7 academic days (Baseline 31%)
- Over 85% of P4 pupils were consistently writing a number sentence using a worded number story (addition & Subtraction) within 16 academic days.
- Over 88% of P4 pupils were consistently able to partition a number to 100 as soon as clear learning intention/success criteria was introduced alongside modelling and concrete materials.



## Results



## Conclusions

- Daily focus on numeracy, children generating success criteria and children setting individual targets 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 has contributed to improvement gains over and above the specific changes introduced.
- Teacher confidence in planning and delivering numeracy lessons has increased.

“Once the Model for Improvement was up and running in our classes the process got easier and the children became faster at achieving the aims.” (Teacher)

“The children are enjoying seeing the graph and are proud of their achievements.” (Teacher)

## Next Steps

Learning spread to P7 class to support children to reach CfE second level numeracy outcomes.