

How big a Maths Geek can you become this term?

Many children like to record their progress. Here are a few suggestions of ways they can do this. Go to www.propeller.education/RRB where many of these charts and certificates are available as FREE downloads.

Suggestion 1 How well did I do?

After each attempt at completing the board, the pupil fills in a simple table noting how confidently they approached the board, their strengths and their areas for development. These could then be used to inform teachers' planning.

Name:			
Number used	Confidence rating (1-10)	Strengths	Area to develop
32	6/10	Adding, x and - 10	Subtracting 2 digit numbers

Suggestion 2 Plot your progress to Planet Geekdom!

After each attempt at completing the whole board to a specified time, the pupils write their results in the table below. After each week, they plot their mark on a line graph (great for using Excel!) Can they predict where they feel they will be at the end of the following week? The teacher could collect all results to create a class average and plot on a class line graph.

Name:						
Attempt 1	Attempt 2	Attempt 3	Attempt 4	Attempt 5	Attempt 6	Score

Suggestion 3 Make your mark!

After each attempt at completing the whole board to a specified time, the pupils write their results in the table below. If they have improved their previous score they receive a stamp. If they can collect three stamps they achieve a reward / Maths Geek certificate / merit / choice of the teacher.

Name:						
Attempt 1	Attempt 2	Attempt 3	Attempt 4	Attempt 5	Attempt 6	Score



Rapid Recall Whiteboards

Getting the best from your boards

How do you use the whiteboard?

- 1 In the top left corner of the board, you will see a symbol which varies according to the side of the board and the year group
- 2 Within this symbol write your chosen number – selected from the range given below the shape

- 3 Now complete the board, using the symbol each time to represent your chosen number
- 4 There are a number of ways to mark the board (See overleaf)

Rapid Recall Whiteboards Years 1-6



To order or find out more visit www.propeller.education

Rapid Recall Research and Development



Mastering Marking

One of the key aims of the Rapid Recall Whiteboard is to allow assessment to be quick, efficient and informative. Below are some of our suggestions of different ways to assess / mark using the whiteboard.



Mastering Marking

Plotting pupil progress

Getting the best from the boards

Why not put this poster in your classroom?

The 'Pilot & Navigator' / 'Professor & Scribe' Approach

This approach is a great way to encourage mathematical discussion and develop reasoning. It promotes the regular use of mathematical vocabulary and modelling of good practice between pupils.

Pupils sit in pairs and decide who will be the 'Pilot' (Scribe) and who will be the 'Navigator' (Professor) for one section of the board.

The Navigator works out the answers to the questions and must explain to the pilot how they reached their answer. When the pilot is convinced, they write down the answer on the board. When one section is complete, the pupils swap roles.



The Timed Snapshot

This was the original intent of the boards and is still just as relevant now.

As the teacher, you pick the number and then set a time limit for completion. Explain to your pupils that they can complete the board in any order they choose. When the time is up, an adult can easily assess:

- How much of the board was completed?
- How many questions were completed correctly?
- Why were questions missed?
- Misconceptions

This is a great visual assessment; the parts of the board that are incomplete are often the areas of mathematics that the pupil finds most difficult.



Everybody In!

Changing the starting number provides easy differentiation and allows every child within a year group to access the whiteboard. The choice of number greatly varies the difficulty of the board. For example, using a multiple of ten is far simpler than choosing to use a prime number. Children of differing abilities can sit beside one another using the same board. The children feel in control of their learning and confident in the knowledge that they get to 'wipe-clean' their work at the end of the session, ready to start afresh next time.

How Many and How Much?

Children can work on the boards individually, in pairs and in teams. They can take their time or race against the clock. The teacher might ask children to complete the whole board or they may focus on one aspect. The boards can be approached in a variety of ways. Children can work individually, in pairs or in teams. They can work at their own pace or against the clock, completing the whole board or focusing on a specific aspect.

Mastering Marking

Walkabout

As the children complete the boards, move around the room making quick notes of areas that children are struggling with either because these are left blank or have been answered wrong. Do the class share common misconceptions? The teacher may choose to only discuss / mark those areas of the board at the end of the session or may choose to plan the next session dealing with misconceptions about these areas.

Silent Assassin

The teacher, or a chosen child, moves around the room as the class complete the boards either individually or in pairs. When they see an answer that they disagree with, they silently remove the answer from the board and move away. The children working on the board can then revisit the question. At the end of the session there could be a discussion about one of the errors. Children could be asked to explain why they had made the error and how they reviewed it..

Paired Marking

Children work on the boards individually but must work on the same number as their partner. Before they begin, they could even decide as a pair the order in which they will complete one side of the board. At the end of the timed session, the children compare and discuss their answers.



Divide and Conquer

Each child has a board. In pairs, they choose a number and then choose which parts of one side of the board they will each complete (basically divide one side of the board in two). At the end of the session, if the two boards were put side to side, the pair should have answered every question on one side of the board. The pair check one another's work – are they then happy that every answer on the board is correct?

Table Marking

Have all children sitting at one table working on the same number. When it comes to mark, each child takes a turn offering the answers for a section of the board with explanations of how they reached their answers. If the table believe the answer provided is incorrect, they circle their answer and then check with an adult at the end of the session. The adults in the class could support different tables every week / session.

Off the Board

The whole class use the same number on their boards. At the end of the session, the teacher shows the answers on the IWB and children mark. Once marked, the teacher asks children to vote for the section they found most difficult – each child must vote once. This then informs the focus of teaching for the next section or could allow for a follow up session with a specific group of children on a chosen concept.

Pupil Pick

A pupil's board is picked at random and shown under a visualizer. Pupils compliment the pupil using 'What has worked well...' and 'Even Better if...'



Take your Pick

Throughout the project, the teacher / TA may choose to take 4 - 6 boards at the end of each session to look at in more detail. Pupils may then be asked to work with an adult to discuss the chosen boards in more detail.

Peer Marking

Children complete the boards using a number of their own choice. At the end of the session, they swap boards and use the marking guide to check one another's work. (An interactive answers guide is available on-line). They could even fill in their partner's mark on the pupil record sheet.



Impact

When using the boards, many schools have chosen to take a photo of each board after the child's first attempt and then again 10 weeks later using the same number. The two photos then clearly show the development of knowledge and skills within the ten-week period.

Focused Marking

If all children work on the same number, the teacher may ask them to complete the board in a certain order. They might then choose to mark the first one or two sections with the class to allow time to explore concepts in greater depth.

