

Maths Monitoring 2020/21

To support staff with an online resource to use in class and to set homework (Doodle Maths)

Focus Areas:

- ***Mental Maths and Timestables (to improve the outcomes of children in timestables)***
- ***Provide an alternative method to setting weekly Maths Homework tasks***
- ***Engage children with an online learning tool that is fun but also challenging***

KS2

Initially this programme was trialled with the Year 6 Cohort in 2019 before the first lockdown. Due to the success rate of children using it, and the feedback from Yr6 teachers using it alongside google classrooms, I decided to trial it out in KS2.

Yr3-6 staff were given training by myself on how to best utilise the programme and all children in KS2 have active accounts.

Teachers are able to set questions/topics that are directly linked to the National Curriculum. Teachers can also differentiate work set online by personalising questions for specific cohorts or individual children, by either choosing questions from other Year groups or by creating their own set of questions and outcomes. When setting homework, teachers can also set a deadline for when homework can be completed like how we do at school with due dates for homework.

How it works

Pupils can access Doodle from a phone, tablet, laptop or desktop. It can be used offline and automatically synchronises between devices, ensuring learning is always up to date.

The first time a child logs on they complete a baseline assessment. Children complete a short set of exercises to help Doodle build them a personalised work programme and give teachers an in-depth insight into their learning gaps.

Ideally children should be completing their 7 questions a day. When they use it for 10 minutes a day Doodle will automatically target each child's gaps, ensuring progression through the curriculum and will identify and set relevant work online. Once a child has completed their 7 a day, they then have to complete their added extra which can be done weekly (which is the weekly HW task set by teachers).

Teachers can view children's progress, understanding and confidence levels on the teacher's dashboard. This enables teachers to view how much work/questions they have completed daily or weekly. There are three zones: green, amber and red. Ideally children should be in the green or amber zone.

Conclusion from staff feedback

"This has been so easy to use and I like how we can differentiate the work. It has made setting homework so much easier."

"I like how we can see the traffic light to see who's on track and how the questions/tasks are directly linked to the National Curriculum and the targets we have on our assessment grid"

“Looking at the effort tool, I can see which children are completing their work and who isn’t. During the closure I noticed how a particular lower ability child was using Doodle Maths daily and how much more confident they grew with their mental maths and times tables. Their end of term assessment showed an improvement in their understanding.”

Conclusion from pupils feedback

“Ever since I started Doodle, my maths skills have got much better. It makes learning really fun and I can play it on my tablet. It is really fun trying to keep my streak going and staying in the green zone all the time.” **(YR6 student)**

“Doodle Maths is so much fun! It gives me a really good explanation; the hint is so helpful and I can even save it to tricky questions so Mrs Dean knows what I can’t do. I feel like I can work by myself and I don’t need to always ask Mrs Dean for help.” **(Yr5 student)**

“I love collecting my stars and answering my questions. I really like Doodle Tables, it’s helped me learn my 6 and 4 x tables. I’ve become quicker and quicker at my tables, I even got a certificate for beating my friends with my stars.” **(Yr3 student)**

Conclusion from parents feedback

“George’s ability and confidence with maths has increased dramatically and he is definitely enjoying maths more! A big thank you – we would not have survived homeschooling without you!”

“My son is now on a 171 day streak and his confidence and knowledge have improved greatly. The questions are varied and he just goes online for 5/10 minutes a day. It would be nice for him to get recognised for his efforts, with possibly a certificate”

Next steps - Recommendations

- Subscription for the next year has been confirmed.
- Accounts have been set up for KS1 – staff in KS1 have been shown how to use the app
- Whole school INSET to be delivered on 2/11/21 – to show staff how to use baseline assessment and how to utilise the app to its best ability.

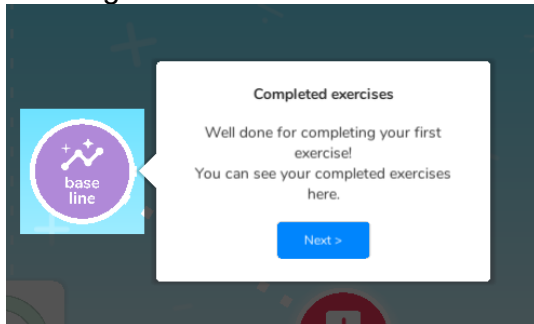
Whole School implementation

- To incentivise children to complete their tasks by providing certificates/trophies – certificates for number of stars collected, similar to reading certificates given in assembly.
- To ensure ALL Year groups are using DoodleMaths and that ALL children are completing their 7x a day (e.g. similar to reading every day).
- To use Doodle Maths to provide an additional intervention for targeted children/groups.
- To use Doodle Maths to help inform class assessments.
- To encourage children to enter Doodle Competitions where they compete against other schools (could use this to target HA and G&T children).
- To use Doodle Tables specifically with YR4 but to be used across all year groups.

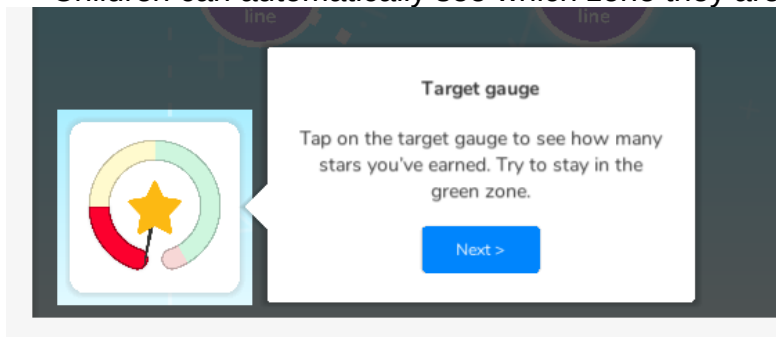
Appendix

E.g of child's screen

First log on



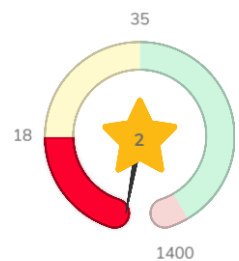
Children can automatically see which zone they are in (they want to be in amber and green)



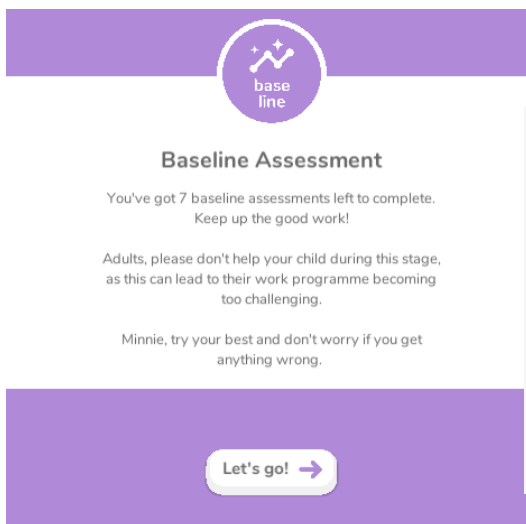
Earn some more stars to reach the green zone.

Your star stats:

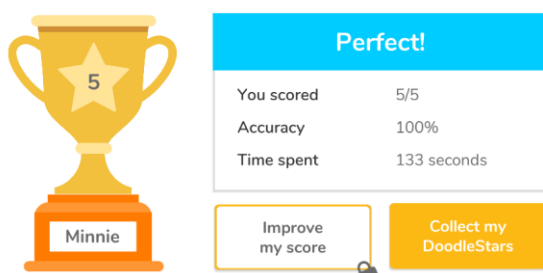
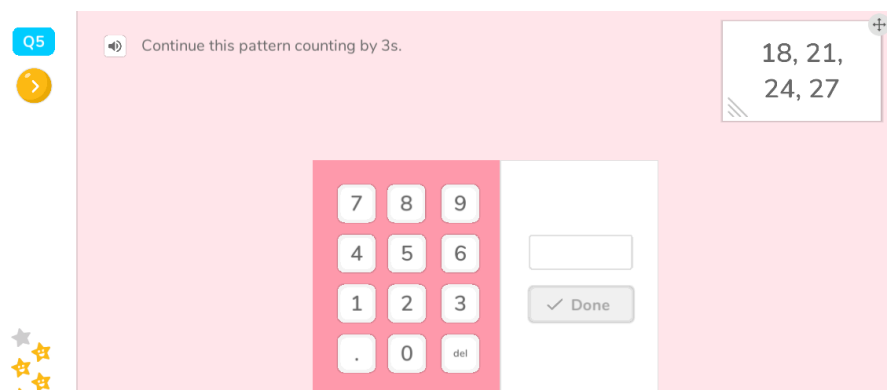
Last 7 days: 2
To spend: 2
Total stars: 2
Current streak: 0



They complete a baseline assessment first



E.g of question and collecting stars



Incentives

Children can immediately see how well they have done and collect stars as they complete questions.

The more questions they answer correctly, the more different levels it unlocks e.g access to creating a robot, access to more games.

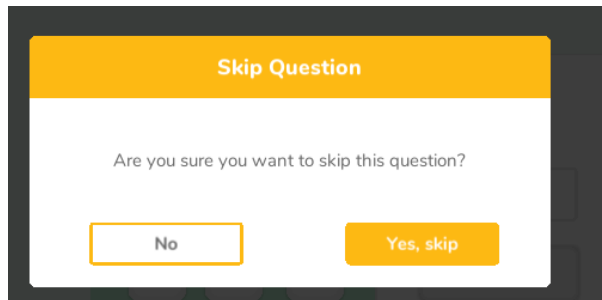
Example of how weekly homework appears on child's screen.

Reading numbers below 1000
Added on 16th September.

Let's go >

Partitioning numbers into hundreds, tens and
Added on 16th September.

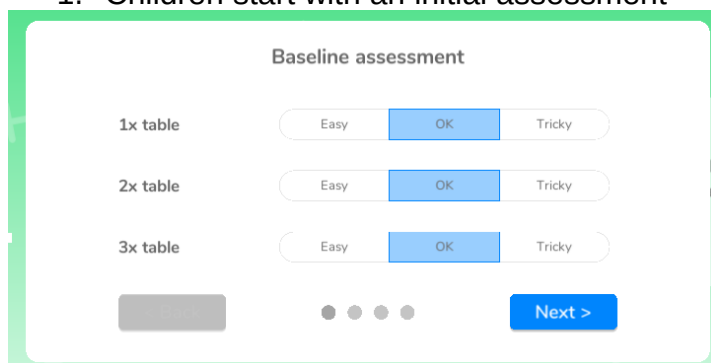
Let's go >



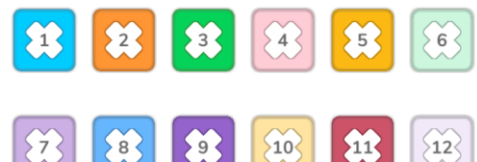
Children can skip a question if they find it tricky and it is reintroduced during another session.

Doodle Tables

1. Children start with an initial assessment



2. They choose a times table to work on.



3. The children complete a range of questions related to chosen time table.
4. They also complete related division facts
5. They get stars and rewards for completing/mastering specific times tables.

E.g of teacher’s screen

Setting work – you can choose from the dropdown menu for year above/below

Year 3	Search AREs
Code	Title
> YR3 NPV 1	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
> YR3 NPV 2	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
> YR3 NPV 3	Compare and order numbers up to 1000
> YR3 NPV 4	Identify, represent and estimate numbers using different representations including measures up to 1000
> YR3 NPV 5	Read and write numbers up to 1000 in numerals and in words

	Comparing and order... 20 Sep	Reading numbers bel... 16 Sep	Partitioning numbers... 16 Sep
Adam SIDDIQUE	–		
Agnes SELLERS	–		
Aleks WILLIAMS	–		
Alfred BRASSETT	–		
Ananya MATHPATI	–		

Monitoring weekly HW to see who has completed their work and how many they have got right/wrong.

Monitoring effort – you can see who has completed questions and the zone they are in

Class	Yr3 Ms Mussa Maths							7 days		14 days	28 days	Custom time	Export	
Name	13 Sep	14 Sep	15 Sep	16 Sep	17 Sep	18 Sep	19 Sep	Stars last 7 days	Streak	Target stars/week	On target			
Adam SIDDIQUE				5		55	46	106	2	40				
Agnes SELLERS							37	37	1	50				
Aleks WILLIAMS				3		No Work Completed		3	0	50				
Alfred BRASSETT								0	0	50				
Ananya MATHPA...					5		11	16	1	50				
Aran SABARWAL						50		50	1	40				