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23rd October 2019

Information regarding the progression of times tables on TT Rockstars

As a school, we have been subscribed to TT Rockstars for two years, aiming to support the learning of the times tables from Year 2 onwards. There has been an update called Automatic Training Mode (ATM) this academic year, which classes have been set up to trial. We are hoping that this system is the most effective in supporting the children to embed the times tables, as well as providing the accurate level of challenge over time. The new system has been explained to all Key Stage 2 classes at the start of this academic year. However, we wanted to provide further detailed information for those at home, as the tables your child is seeing may appear 'easy' at some points during the programme. Please continue to read for more information regarding the progression of the times tables and the rationale behind it.

Gig games

A Gig game issues 100 multiplication questions starting with 10 questions on the 10s, followed by 10 questions on each of the 2s, 5s, 3s, 4s, 8s, 6s, 7s and 9s and then 5 questions on the 11s and the 12s. There is a 5 minute time limit and pupils will not necessarily get round to answering all 100 questions during that time, which is fine.

After their first Gig, pupils will be placed at the best starting point on the training course. In other words, it's not just a baseline measure, it's also a diagnostic tool for the algorithms. In addition, pupils are directed to play a Gig game after learning every table as a way to track performance over time and adjust their learning pathway as necessary.

Gigs are part of Automatic Training Mode.

Age Appropriateness

Every Gig game starts with the 10s and then progresses in an age-appropriate order. The TTRS system, therefore, should be able to get useful data even from younger pupils, i.e. in year 2 (UK).

Automatic Training Mode (ATM)

With Automatic Training Mode (ATM) enabled, your learners will go through our pre-programmed levels when they play in the Garage or Arena. As well as saving you time, ATM will shorten the time it takes for your learner to become a Rock Star!



Background – written by TT Rockstars

Over the years, we have accumulated billions of times tables answers from children around the world. From that data, we've formed a sophisticated understanding of how pupils internalise each multiplication and division fact and how they begin to understand the underlying concepts. We then deconstructed all the tables up to, and including, the 12s and reassembled them several times, until we created a highly effective sequence to learning the answers.

How does it work?

Learners play in the Garage or the Arena and begin with our first set of questions (1×10 up to 4×10). When they can answer at a rate of 20 per minute, they are introduced to the next set of questions. As learners progress, ATM brings in commutativity, missing number questions and division facts.

The first 9 levels, look like this:

Level 1 : 1×10 to 4×10

Level 2 : 10×1 to 10×4

Level 3 : A mix of 1 and 2

Level 4 : $10 \times ? = 10$ to $10 \times ? = 40$

Level 5 : $? \times 10 = 10$ to $? \times 10 = 40$

Level 6 : A mix of 4 and 5

Level 7 : $10 \div 10$ to $40 \div 10$

Level 8 : $10 \div 1$ to $40 \div 4$

Level 9 : A mix of 7 and 8

Then the process repeats for 5×10 to 8×10 and once more for 9×10 to 12×10 before moving onto the next table and starting the process again.

Once they have a few tables under their belt, ATM combines them for a while, to consolidate recall, and then brings in a fresh table. The process repeats - all the while giving plenty of opportunity to revisit prior learning, by interleaving earlier tables and giving due weight to the facts we know learners struggle with the most - until your learner has become a Rock Star at all the tables!

How do you move on a level?

By getting an average speed of 3 seconds or less per question, by answering at least 20 questions correctly a minute (i.e. 20 correct answers in a 1 minute game, 40 in 2 minutes, or 60 in 3 minute games).

