Getting Started Guide For Schools

Teacher Accounts

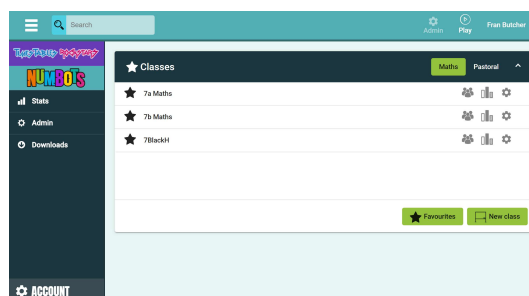## Your account

Got Times Tables Rock Stars?
If you already have a teacher account for logging in to Times Tables Rock Stars then please use the same login details to access NumBots.

First time user
If you're the first ever user at your school, you probably signed up via our website and then received a link to set your password. Once you've done that you'll be taken to the NumBots Dashboard, which will look quite empty for now.

Actions
- Login to manage.numbots.com
- Go to **Account > Teachers** to add colleagues.
- Go to **Account > Classes** to add classes of pupils.
- Click **Play** to try out the NumBots programme for yourself! (For teachers, all levels are unlocked from the start.)
- Click **Stats** to view class reports (pupils only appear in stats if they've started playing NumBots).

NumBots Dashboard

Colleagues' Accounts

Existing Times Tables Rock Stars Teachers
All your colleagues with an existing TTRS account can log in using the same details.

Adding More Teachers
Please go to **Account > Teachers** and click the **New Teacher** button. A short email will be sent to their email address with a link for them to set their password. That's all there is to it!

Assigning Teachers to Classes
All teachers can see all classes so there is no need to assign teachers to classes. Each teacher, however, can "favourite" classes so that they appear at the top of their lists for easier access.

Main NumBots Teacher and Billing Contact
On **Account > Teachers**, one member of staff can be nominated as the "Main NumBots Teacher", which doesn't give them more administrative rights but it does make them the first point of contact for NumBots HQ (Maths Circle Ltd).

A member of staff - potentially also the Main NumBots Teacher - can be nominated as the "Billing Contact". They will be the person that Maths Circle Ltd will contact regarding payment and subscriptions.
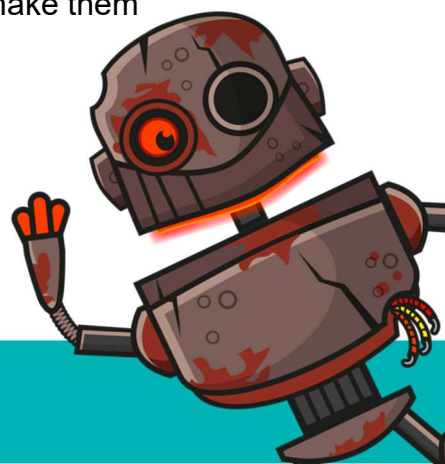
NumBots

Pupil Accounts

Got Times Tables Rock Stars?

If you already have classes and pupils set up for Times Tables Rock Stars then pupils can use the same login details to access NumBots.

Adding New Classes and Pupils

Step 1

Prepare a 4-column spreadsheet with the pupils' first name, surname, class and yeargroup.

	A	B	C	D
1	First name	Surname	Class	Yeargroup
2	Jon	Owens	4F	4
3	Abi	Logan	Willows	4
4	Bon	Joney	7Ma3	7

Save time by including several classes in one long list.
You can include extra columns such as gender, form group, username and password.

Step 2

Copy the data in the spreadsheet by selecting the cells from the top left to the bottom right and pressing ctrl & c (Windows) or cmd & c (Mac). Make sure you've included the top row (column headings) too.

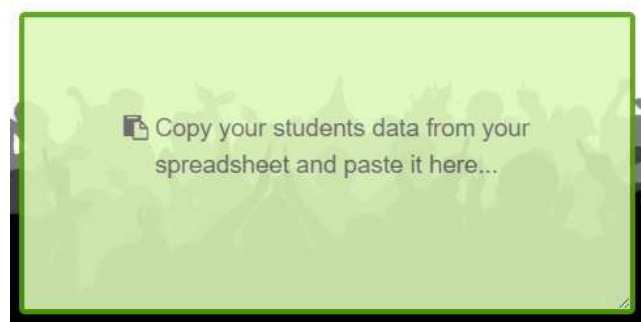|	A	B	C	D
1	First name	Surname	Class	Yeargroup
2	Jon	Owens	4F	4
3	Abi	Logan	Willows	4
4	Bon	Joney	7Ma3	7

Step 3

Login to manage.numbots.com and go to **Account > Classes > Uploader**.
Tap in the large rectangle on the right so that the cursor appears and then paste by pressing ctrl & v (Windows) or cmd & v (Mac).
This will go smoothly so long as your spreadsheet is in good order.

Option 2
Paste Data

Copy your students data from your spreadsheet and paste it here...

Step 4

Follow the onscreen instructions as you scroll down:

- Match the column headings
- Check you're happy with student preview
- Press the Upload button at the bottom

Step 1 - Match Headers

Rockstar Fields	Uploaded Fields
*First Name	First name
*Last Name	Surname
*Maths Band	Class
*Year Group	Yeargroup

Step 2 - New students preview

Missing Username Format
- bazwyn1
- b.wyn1
- b.wynter1

Missing Password Format
- 3 Digits — e.g. 598
- 3 Letters — e.g. ayt
- 4 Alphanumeric — e.g. 4q9j

Action	Name	Username	Password	Year Group	Maths Band
new	Bon Joney	bonjon	959	Year 7	7Ma3
new	Abi Logan	abilog	616	Year 4	Willows
new	Jon Owens	jonowe	681	Year 4	4F

Upload 3 new students

All being well, that should have done it! You'll be told the pupils have been uploaded successfully and be given the chance to download the pupils' username labels and print parent letters.

If you have difficulties with this that can't be solved in school, email support@mathscircle.com
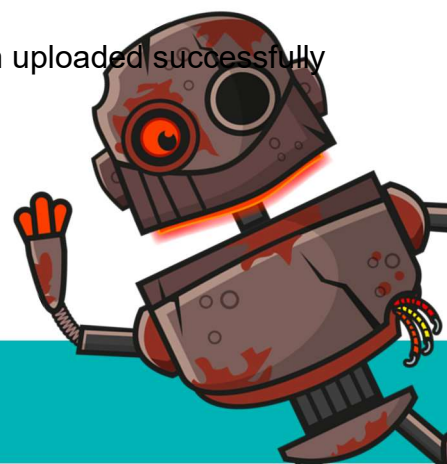
NumBots

How The Game Works

There are two play modes in NumBots that serve different purposes.

1. Story Mode for Understanding

In Story Mode, the emphasis is on mathematical concepts and is underpinned by a mastery approach to teaching. Story Mode features visual representations, procedural variation, exposure to different calculation strategies and interleaved material all in very carefully sequenced order.

Unlocking Levels

Story Mode is set out as a series of Stages (Rust, Tin, Iron, etc) containing levels, a bit like Angry Birds. Rust is the first Stage and level 1 is unlocked, so this is the place for *everyone* to start.

To unlock the next level, players need to earn two stars by showing sufficient proficiency.

The levels in Story Mode follow a natural mathematical progression and move the pupil through the game automatically, which means you don't have to set anything! (You're welcome 😊)
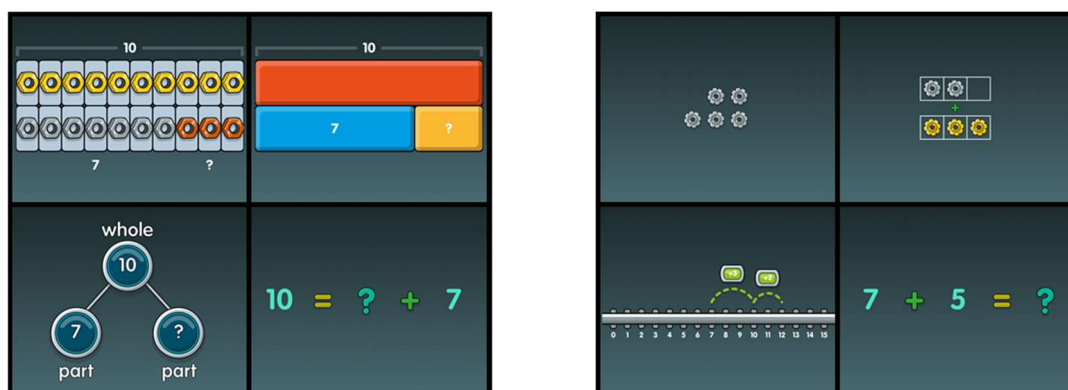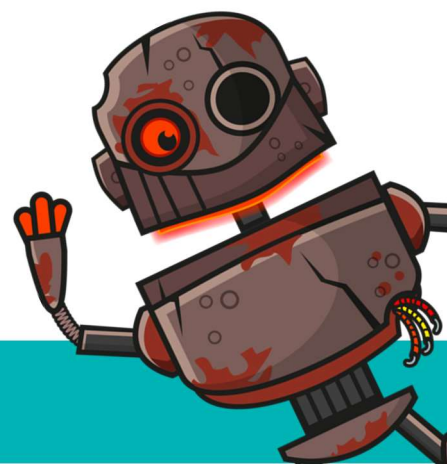

Get In The Habit

Aim for pupils to play in Story Mode for three minutes four to five times a week, to get the best out of NumBots. Little and often is key (spaced practice is more effective than blocked practice).

Baseline

There is no baseline on NumBots.

2. Challenge Mode for Recall

In Challenge Mode, the emphasis is on rapid responses to essential facts and simple sums, against the clock.

Unlocking Challenges

Challenge Mode is locked for new users and is unlocked once players reach a certain level on Story Mode. It's currently set to unlock part way through Tin stage.

There are 20 Challenge levels and only the first is unlocked to begin with. To unlock the next Challenge, players must correctly answer 12 questions in a minute.

Key Skills

Each Challenge focuses on a key skill, as follows:

No,	Key Skill	Example
1	Adding and subtracting 1 or 2 within 10	$1 + 3$, $8 - 2$
2	Number bonds to 5	$3 + ? = 5$
3	Doubles within 10 (i.e. up to 5+5)	$4 + 4$
4	Adding and subtracting 1 and 2 within 20	$17 + 2$, $11 - 1$
5	Number bonds to 10	$3 + ? = 10$
6	Adding and subtracting 10 within 20	$3 + 10$, $16 - 10$
7	Doubles within 20 (i.e. up to 10+10)	$8 + 8$
8	Adding two 1-digit numbers	$5 + 7$
9	Number Bonds to 20	$8 + ? = 20$
10	Subtracting 1-digit numbers within 20	$14 - 6$
11	Adding and subtracting 1, 2 and 10 within 100	$1 + 74$, $51 - 2$, $38 + 10$
12	Adding and subtracting 2-digit numbers to/from multiples of 10	$20 + 64$, $83 - 20$
13	Addition by bridging a multiple of 10	$25 + 6$, $47 + 5$
14	Subtraction by bridging a multiple of 10	$25 - 6$, $42 - 5$
15	Number bonds to 100	$52 + ? = 100$
16	Using compensation to add and subtract within 100	$35 + 19$, $35 - 19$
17	Adding by partitioning two 2-digit numbers	$64 + 25$, $10 + 64$
18	Subtracting by partitioning two 2-digit numbers	$64 - 23$, $47 - 31$
19	Adding any two 2-digit numbers	$63 + 56$, $63 + 58$
20	Subtracting any two 2-digit numbers	$76 - 43$, $76 - 47$
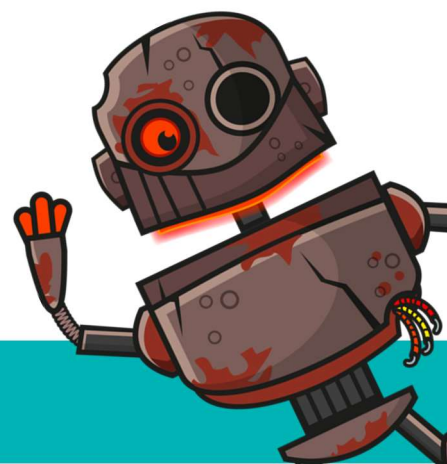
Mental Strategies Defined
Compensation – when you add or subtract too much and then adjust, e.g. to add numbers like 19/29/39, etc you might add 20/30/40 and then subtract 1.

Bridging to a multiple of 10 – when you split the second addend so that count up to the nearest multiple of 10 and then count on the remainder, e.g. to add 27 and 5 you might add 3 then add 2. The same principle applies in reverse when subtracting, e.g. for 23 – 5.

Partitioning – when you split (partition) the 10s and 1s and add/subtract them separately before recombining, e.g. to add 27 and 32 you might add 20 and 30, 7 and 2 and then combine the totals.

Tracking Progress In Challenge Mode
NumBots keeps a record of players' first score on each Challenge and their most recent score for a rudimentary measure of progress.

For more information please see the section on Stats.
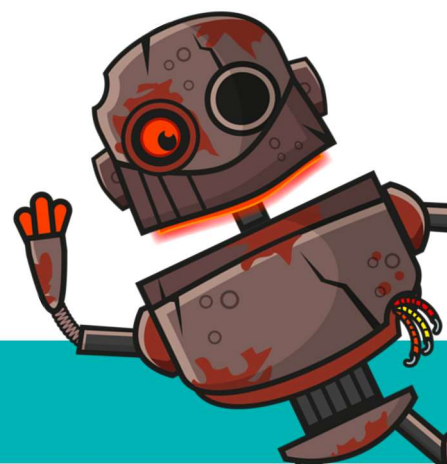
Using NumBots In School

NumBots Time

NumBots is intentionally simple to use – teachers don't need to spend time with settings, data is collected automatically and pupils can learn on their own once logged in. So, generally speaking, it should just be a case of providing the time for pupils to access the platform on computers or tablets.

NumBots time may be found during:

- Soft/fluid registration, i.e. on arrival at school before things get started
- During "continuous provision"
- Maths or Computing lessons
- Intervention sessions
- Breakfast, lunch and after-school clubs

The guiding principle should be "little and often", e.g. three minutes four or five times a week.

Different Sessions, Different Aims

Story and Challenge modes both have their place. We recommend that pupils are encouraged to "help Rusty to shine" (play in Story mode) for the most part and then to "beat your own high score" (play in Challenge mode) at the end of each session or week.

There are no "wrong" ways to use NumBots so feel free to make the most of NumBots in the way that works best for your class.

Using NumBots At Home

To get the best out of NumBots, pupils should play at home and can use the usernames and passwords you've given them.

We have a parent/carer letter template at the end of this guide, which provides an overview of NumBots. Feel free to adapt it as required.
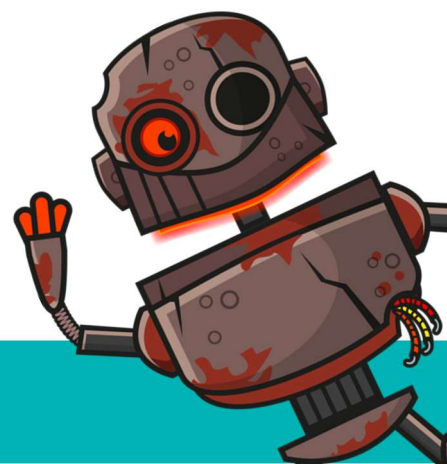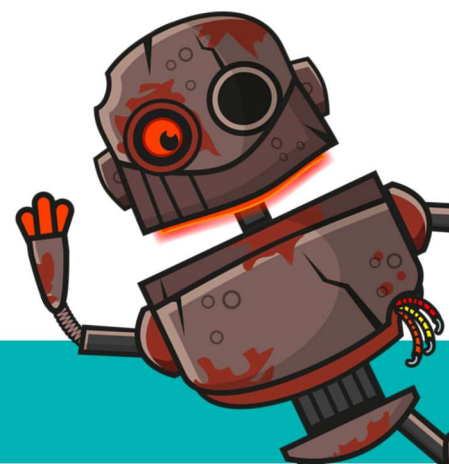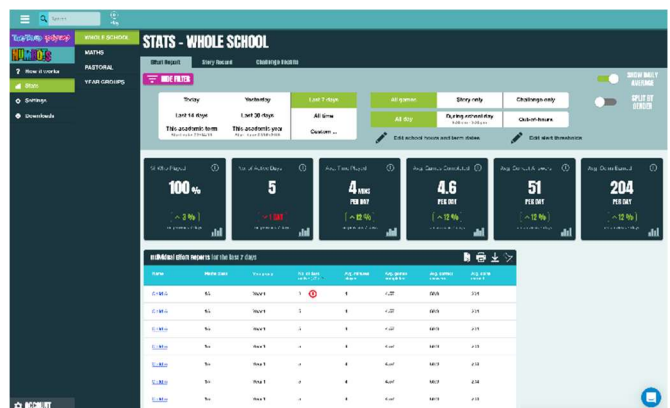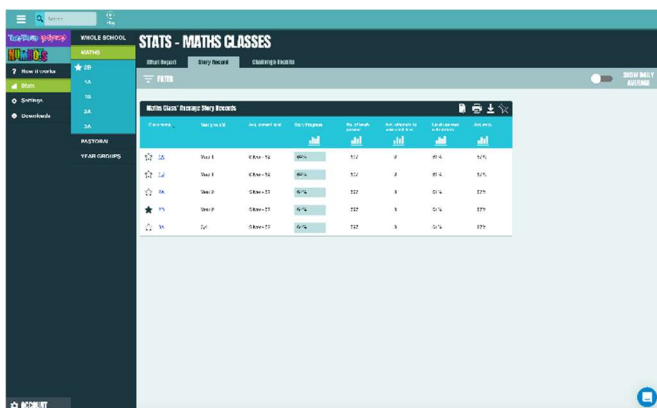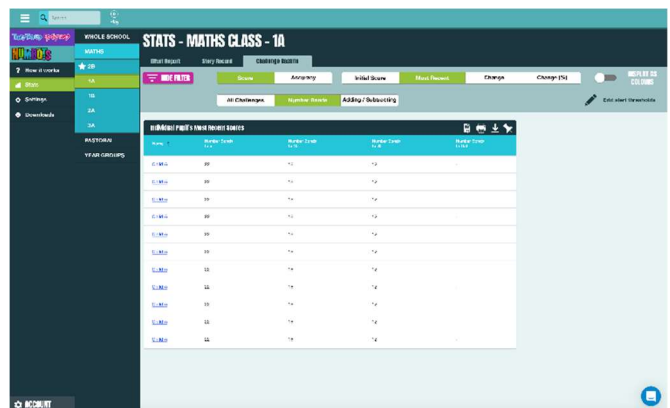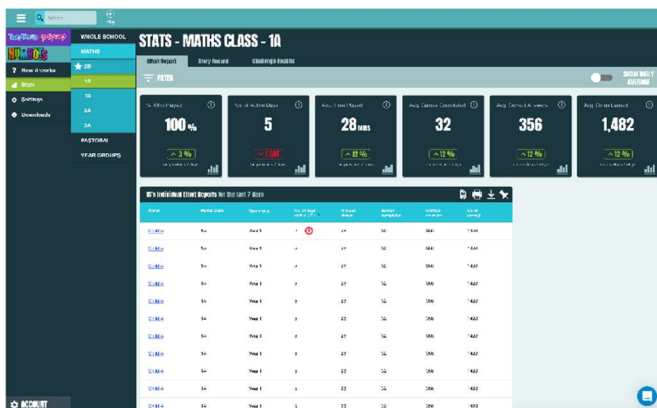
Stats

NumBots' tables and charts provide powerful formative analysis of children's results at whole school and individual class or year group level. You can see which children are underplaying, who is struggling to pass a level and those who are acing it.

The tables can be filtered using the **Custom** button, above, to help you quickly get the information you're looking for so you only need to dip in briefly. We hope this data can inform your planning and resourcing and identify strengths and weaknesses for individuals or groups.

You can find these reports by logging into manage.numbots.com and clicking on **Stats** in the left hand column.

Launch Lesson Plan

Date: _____   Lesson: NumBots Launch Lesson **Plan**   Class: _____

Strand: Technology enhanced mathematical learning.	**Main Focus:** Counting Mental Addition and subtraction Add/Sub (i) (ii) (iii) (iv),	**Key Vocabulary:** upgrade, maths, login, username, password, click, tap, press.

Objectives

Learn about the NumBots back story

Be able to (and remember how to) login to NumBots

NB. Prior to delivering lesson T to read through slides 1-4 to understand the structure of PowerPoint.

Starter 10 minutes

Introduction: Slide 5. In computing room or in teaching classroom. Away from screens at this point.

Today we are going to play NumBots.

Q. Num/Bots- what maths words does this sound like? Elicit. Numbers, bonds

T to show chn the video. Do we want to watch it again? If Y watch again to secure answer to next question.

Pause, Pounce, Bounce *Q.What can you remember from this video?* If chn are struggling, T to model one answer. 'I can remember there was a scrapheap.'

Q. What do you think 'upgrade' means? T to elicit up-grade.

Q. What does this mean? Shining inside and out. T to elicit extended metaphor throughout the game.

Inside the Game: Slide 12

T to check listening and understanding through questioning *Q eg. What does the purple button mean?*

Main Teaching 20 minutes

Login Walk-through

Chn at devices and T and other adults to guide chn through logging on. T to let chn play- T to monitor/ support.

Watch out for

If chn are paired on a computer ensure turn taking.

Edit Slide 34 so chn know how to spell their school/ know the school's postcode by having this visible in the room.

*.numbots has been whitelisted by your network/IT person.

Usernames and password labels are printed prior to lesson.

Chn that have accessibility arrangements to be supported.

Plenary 15 minutes

Ask children to Click on 'Me' and 'Logout.' Move chn back to carpet to show Learning intentions (if you deem appropriate) and Rewards section.

Q. What are we learning here? Elicit counting without counting, number bonds, addition and subtraction

T to go through metaphor of a maths house.

T to show what rewards are available on NumBots.

Talk To Your Partner- *Q. Can you remember which level you got up to? Did anyone manage a challenge?*

Evaluation sheets to be filled in (if you wish).

Outcomes: Can children

- Log on using their username and password?
- Respond to mathematical reasoning and problem solving questions?
- Evaluate a game?

Physical Resources	**Photocopiables**	**Digital Resources**
• Computers/iPads with internet enabled devices.	• Usernames labels • Evaluation sheet (KS1 or KS2).	• NumBots Launch Lesson Powerpoint.
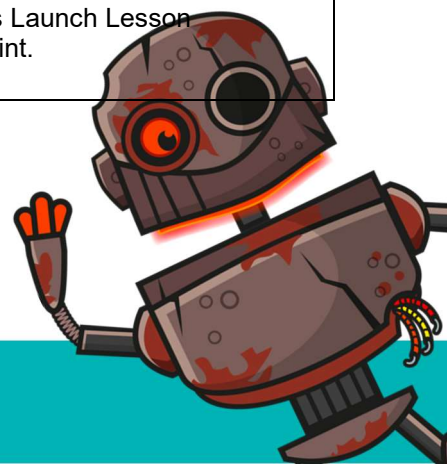
NumBots

FAQs

How do pupils login at home?
Pupils use their school username and password to login at home. They can play in a browser on a desktop or tablet or mobile. The NumBots app will be ready later in 2019.

How do I find out when they last played?
You can see when a pupil has last played by heading to the NumBots Dashboard. To help you quickly identify a child who hasn't played in a while, a clock icon will appear next to the date and time if the child has not played for 3 days. You can use the Effort report to get a sense of how hard they're working (but it doesn't distinguish whether that was in school or at home).

Who should parents contact if there's a problem?
Their child's class teacher should be the first point of contact for the parent.

Can pupils play against each other?
Pupils can access a leaderboard to show coins and stars earned in their class or school but there are no multi-player games. We'll take feedback on whether that's a cherished omission or whether the NumBots audience would really appreciate addition and subtraction races.

Do you have worksheets?
At the moment, the focus is on proving the concept online with the NumBots webgame. That's another way of saying "no, we don't have worksheets yet, apols." We'll use the data to identify high leverage areas of the platform (e.g. the representations that seem to work best and the specific concepts and facts that appear to be most in need) before making a decision on what worksheets would be beneficial.

Can we set homework?
Sure, you can tell the children to login at home and play on numbots.com but if you mean "does NumBots have a way of assigning tasks or goals to pupils?", then it's another "not yet". Once we get a feel for how teachers want to use NumBots and what kind of things they would like to set, we can look into making that happen.

Checklist

- ☐ Spreadsheet of pupils for upload has been correctly formatted (if required).
- ☐ Download Launch Lesson PowerPoint from the NumBots Downloads page (Remember to put your school name on slide 34.)
- ☐ Book the computer suite or devices (if necessary).
- ☐ Parent/carer letter edited and printed (parent letter is at the end of this guide).
- ☐ Username labels printed and cut (x2 for school and home. If the pupils have a TTRS account their username and password will be the same).
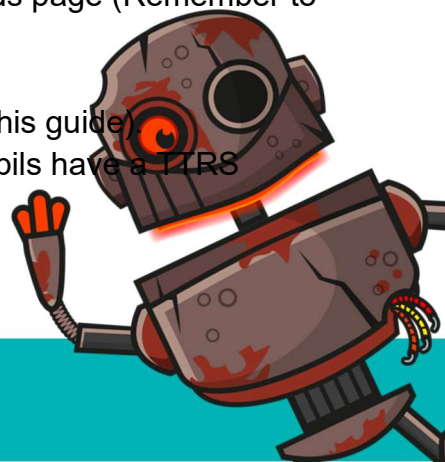
Parent/Carer Letter

Dear parent/carer,

I'm delighted to inform you about a new service we're using to support your child's maths education. The creators of Times Tables Rock Stars have produced a platform for boosting addition and subtraction skills, called NumBots.

Big Difference
NumBots is an online game (currently only playable at play.numbots.com before the apps are released later in 2019) and playing little and often will significantly improve your child's recall and understanding of number bonds and addition and subtraction facts. These are critical foundations in maths so we are excited by the impact NumBots will have.

Logging In
The children have been shown how to login and have brought home a username label in their [book bag/reading planner/insert here]. They might need some help navigating to the website and entering the details but once they're in, they just need some quiet space to get on with the games for 5 minutes.
Please ask your child's teacher if they are struggling to login. Maths Circle (the creators of NumBots) cannot provide username and password information to parents, even during school holidays or out of hours.

Important: please don't allow siblings, friends or family to answer for them but do support your child if they're stuck.

Little and often
In order to get the best out of NumBots children should regularly play for short bursts so we would ask you to give them 5 minutes on Saturdays and 5 minutes on Sundays (or more!)

Game Types
1. Story Mode – the emphasis is on learning the ideas and concepts behind addition and subtraction so it features more diagrams, shapes and question styles.
2. Challenge Mode – the emphasis is more on speed of recall of key facts, like number bonds to 10, doubling small numbers or adding & taking away in your head.

Please let your child's teacher know if you have any questions or comments.
Yours faithfully,

[Insert name]