# King Athelstan Primary School 

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Dear Families of Reception,

The creators of Times Tables Rock Stars, which you may have heard of if you have older children, have produced a platform for boosting number recognition, addition and subtraction skills, called NumBots.
It is important that your child develops efficient mental calculation strategies to add and subtract two-digit numbers, so that they can leave counting on their fingers behind, and NumBots will help do this.


## Big Difference

NumBots is an online game 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

Your child will have a username label in their reading log book (titled NumBots). They might need some help navigating to the website and entering the details but once they are logged in, they just need some quiet space to play the games.
Please ask your child's teacher for support if you are struggling to login. Maths Circle (the creators of NumBots) cannot provide username and password information directly to parents.

1. Type 'play.numbots.com' into your browser's address bar.
2. Click on

3. Click on

4. Type in 'King Athelstan Primary School'


5. Log in

King Athelstan Primary School


Alternatively, they can play via the app which is free to download on Amazon, Android and Apple devices.

Important: please do not allow siblings, friends or family to answer for them but do support your child if they get stuck.

## Little and Often

In order to get the best out of NumBots children should regularly play for short bursts we recommend playing for about 5 minutes 3 or 4 times a week.

## 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 and taking away in your head.

This website follows many elements of teaching for mastery, which is our school approach in class:

- Multiple representations - Pupils are exposed to a variety of representations and question styles for each concept, from pseudo-concrete, to pictorial, to abstract. This depth-before-breadth approach allows pupils to build up connections between key concepts and ideas, while the visual representations help to create mental models for more advanced questions.


These are all $6+3$, but presented differently - pseudo concrete, sticks, number line and one question written with the = sign on the left

- Minimally different levels - Minimal changes are made to questions from one level to the next, slightly shifting what pupils are concentrating on and gradually increasing the level of demand. The sequenced, unlockable levels prevent pupils from moving ahead until they have fully understood the current concept and grasped the skills they need to confidently tackle the next challenge.


Each level is still doubling 3-first they are objects next to each other, then separated, then as numerals and then + and $=$ signs are introduced.

- Procedural variation - Within a level we keep the majority of each question the same, only varying a single element that we want children to focus on. By fixing certain common elements we reveal the underlying structure, helping pupils to recognise what is fundamental in order to select an efficient mental strategy.


All bonds to 40 - the ones digit stays the same but the tens digit changes

Please let your child's teacher know if you have any questions or comments. We hope your child enjoys developing their mental skills through these games and challenges.

Thank you for your ongoing support,


Miss Ste
Maths Co-ordinator

