June 2017

Dear Parents:

Summer is a great time for children to relax and have fun. It is also a wonderful time for parents and children to spend time together reading and developing mathematical concepts in fun and engaging ways. We hope that you will find the enclosed activities and suggestions helpful in sharpening and maintaining mathematical skills over the summer.

On the reverse side of this letter are some ideas of **GAMES** you can do every day with your child. Most of the items on the list are commercial games. They are motivational and, with parent involvement, these games are an excellent way to get your child to communicate concepts while sharpening thinking skills. They also provide an opportunity for discussion and questions; encouraging your child to evaluate answers, draw conclusions and strengthen reasoning skills. Games are a low stress way to engage your child in math while developing necessary skills. You will also find a list of **WEBSITES** that can assist in practicing **BASIC FACTS**. Information regarding national and local grade-level basic fact expectations is also provided.

On the following page you will find a **SUMMER MATH CALENDAR**. For each day your child completes an activity, please initial at the bottom of the box. Activities can be completed in any order. Those students who return completed calendars in September will be included in Mrs.Smith’s special raffle!

Have a wonderful summer!

Sincerely,

Jessica Kitchen

 K-5 Math Specialist

 Hingham Public Schools

**GAMES**

The following list of games, excerpted from *Games and Their Uses in Mathematics Learning (Sharma, 2008)*, will help your child sharpen thinking skills, make inferences, draw conclusions, evaluate answers and strengthen reasoning. Beside each title are the skills and concepts that are reinforced.

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| * **Simon** or **Mini Wizard** (sequencing, following multi-step directions, visual/auditory memory)
* **Battleship** (spatial orientation, visualization, visual memory)
* **Cribbage** (number relationships, patterns, visual clusters)
* **Quarto** (spatial orientation/space organization, patterns, classification)
* **Concentration** (visualization, pattern recognition, visual memory)
* **Chinese Checkers** (patterns, spatial orientation/space organization)
* **Pachisi** (sequencing, patterns, number relationships)
* **Checkers** (sequencing, patterns, spatial orientation/space organization)
* **Othello** (pattern recognition, spatial orientation, visual clustering, focus on more than one aspect, variable or concept of time)
 | * **Score Four** or **Connect Four** (pattern recognition, spatial orientation, visual clustering, geometric patterns)
* **Krypto** (number sense, basic arithmetical facts)
* **Kalah** or **Mankalah** (sequencing, counting, estimation, visual clustering)
* **Master Mind** (sequencing, logical deduction, pattern recognition)
* **Four Sight** (spatial orientation, pattern recognition, logical deduction)
* **Black-Box** (logical deduction)
* **Card Games** (visual clustering, pattern recognition, number facts)
* **Dominos** (visual clustering, pattern recognition, number facts)
* **Number War Games** (visual clustering, arithmetic facts, mathematics concepts)
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**BASIC FACTS**

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| Websites* [www.xtramath.org](http://www.xtramath.org) (If your child does not remember their password, follow the steps on the website to register your child).
* <https://www.varsitytutors.com/aplusmath>
* <http://www.mathsisfun.com>
* <http://illuminations.nctm.org>
* <http://www.ixl.com>
 | End of Year ExpectationsKindergarten: Fluently add and subtract within 5.1st Grade: Fluently add and subtract within 10.2nd Grade: Fluently add and subtract within 20.3rd Grade: Fluently multiply all products up to 10×10 **and** related division facts.4th Grade: Fluently multiply all products up to 12×12 **and** related division facts.5th Grade: Keep practicing all fact fluency! |