

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 Dr. Stellar'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.

<ul style="list-style-type: none"> <li>• <b>Simon or Mini Wizard</b> (sequencing, following multi-step directions, visual/auditory memory)</li> <li>• <b>Battleship</b> (spatial orientation, visualization, visual memory)</li> <li>• <b>Cribbage</b> (number relationships, patterns, visual clusters)</li> <li>• <b>Quarto</b> (spatial orientation/space organization, patterns, classification)</li> <li>• <b>Concentration</b> (visualization, pattern recognition, visual memory)</li> <li>• <b>Chinese Checkers</b> (patterns, spatial orientation/space organization)</li> <li>• <b>Pachisi</b> (sequencing, patterns, number relationships)</li> <li>• <b>Checkers</b> (sequencing, patterns, spatial orientation/space organization)</li> <li>• <b>Othello</b> (pattern recognition, spatial orientation, visual clustering, focus on more than one aspect, variable or concept of time)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Score Four or Connect Four</b> (pattern recognition, spatial orientation, visual clustering, geometric patterns)</li> <li>• <b>Krypto</b> (number sense, basic arithmetical facts)</li> <li>• <b>Kalah or Mankalah</b> (sequencing, counting, estimation, visual clustering)</li> <li>• <b>Master Mind</b> (sequencing, logical deduction, pattern recognition)</li> <li>• <b>Four Sight</b> (spatial orientation, pattern recognition, logical deduction)</li> <li>• <b>Black-Box</b> (logical deduction)</li> <li>• <b>Card Games</b> (visual clustering, pattern recognition, number facts)</li> <li>• <b>Dominos</b> (visual clustering, pattern recognition, number facts)</li> <li>• <b>Number War Games</b> (visual clustering, arithmetic facts, mathematics concepts)</li> </ul>
--	---

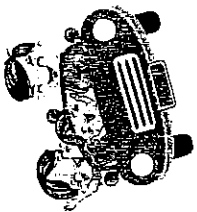
## BASIC FACTS

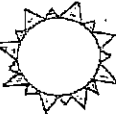


Websites	End of Year Expectations
<ul style="list-style-type: none"> <li>• <a href="http://www.xtramath.org">www.xtramath.org</a> (If your child does not remember their password, follow the steps on the website to register your child).</li> <li>• <a href="https://www.varsitytutors.com/aplusmath">https://www.varsitytutors.com/aplusmath</a></li> <li>• <a href="http://www.mathsisfun.com">http://www.mathsisfun.com</a></li> <li>• <a href="http://illuminations.nctm.org">http://illuminations.nctm.org</a></li> <li>• <a href="http://www.ixl.com">http://www.ixl.com</a></li> </ul>	<p><b>Kindergarten:</b> Fluently add and subtract within 5.</p> <p><b>1<sup>st</sup> Grade:</b> Fluently add and subtract within 10.</p> <p><b>2<sup>nd</sup> Grade:</b> Fluently add and subtract within 20.</p> <p><b>3<sup>rd</sup> Grade:</b> Fluently multiply all products up to 10×10 and related division facts.</p> <p><b>4<sup>th</sup> Grade:</b> Fluently multiply all products up to 12×12 and related division facts.</p> <p><b>5<sup>th</sup> Grade:</b> Keep practicing all fact fluency!</p>

# Summer Math Road Trip – Entering Grade 1



Can you finish the math road trip by completing each of the following math activities? Activities do not need to be completed in order. Answers can be placed in the box or on another piece of paper. Some activities do not require you to write down your answer. When the activity has been completed, a family member can place his/her initials at the bottom of the box.



<p>Write the names of the people in your house. Count the letters in each and write the name that has the most letters in the blank:</p> <p>_____</p>	<p>Look at a calendar and count how many Fridays are in July and August.</p> <p>_____</p>	<p>At bath time, estimate how many minutes it will take to fill the bath tub. Then have a grown up time it with a watch. How close was your estimate to the actual time?</p> <p>_____</p>	<p>Go on a Shape Hunt. Count how many items are shaped like a circle and a square in your house. Circle: _____ Square: _____</p>	<p>Play "I-Spy" (shapes, colors, number of windows, etc.) Use tally marks while you count.</p> <p>_____</p>
<p>Estimate and count how many bites it takes you to eat a sandwich. Estimate and count how many bites it takes a grownup to eat a sandwich. Is the number of bites the same?</p> <p>_____</p>	<p>Find different sizes of plastic containers and fill them with water. Talk about full, empty, etc. Then compare how much each holds.</p> <p>_____</p>	<p>Make a clock face with a paper plate. Write 12 at the top, 6 at the bottom, and then fill in the rest of the numbers. Add hands if you want!</p> <p>_____</p>	<p>Take a handful of pennies and divide them into two groups. How many cents does each group have? Talk about more, less, and equal.</p> <p>_____</p>	<p>A grown-up can choose a number and start counting three numbers. Then you say the next three numbers – or more! Do this several times!</p> <p>_____</p>
<p>Look at the clock and see what you are doing at 10 o'clock, 2 o'clock and 6 o'clock.</p> <p>_____</p>	<p>Use the Foot-Long Foot to measure the length of your bed and other furniture in your house. Which one is longer? Shorter? Are any the same?</p> <p>_____</p>	<p>Find a group of objects to sort (toys, laundry, cans of food, etc.). Find at least two ways to sort and classify (describe each group).</p> <p>_____</p>	<p>Free Space – Enjoy the Day</p> 	<p>Play "Monster Squeeze" or "Guess My Number". Use clue words: "more than" and "less than".</p> <p>_____</p>
<p>Collect 5 shells or rocks. Put them in order from smallest to largest.</p> <p>_____</p>	<p>Take A Break!</p> 	<p>Play "Top-It" (also called War) with a deck of cards.</p> <p>_____</p>	<p>Grab a handful of cereal or candy and estimate how many pieces you have. Now count. Then eat it. YUM!</p> <p>_____</p>	<p>Create a pattern using the shoes in your house. Now tell someone your pattern.</p> <p>_____</p>
<p>Skip count by 10's to 100. Skip count by 2's to 10 or more.</p> <p>_____</p>	<p>Count how many times you can jump for 1 minute.</p> <p>_____</p>	<p>Write the numbers 1-5. Draw objects to match each number.</p> <p>_____</p>	<p>Numbers in Sports – Cut out pictures from magazines or newspapers showing numbers used in sports and paste on a piece of paper.</p> <p>_____</p>	<p>You Did It!</p> 

Student Name: \_\_\_\_\_