

Lower Division Summer Math

PK3 – Grade 4

Summer is a great time for math practice - fun and authentic math practice. Cook and build with your children. Set a budget for your child at the grocery store and make them stick to it. Play cards, dominoes, Yahtzee. Estimate time, distance, and miles per hour on a long car trip. Quality math apps are alright, as long as you stay close and know that your child understands (and continues to understand) how to use it.

One app that we love is Bedtime Math. It's available for iPhone/iPad or Android and can be downloaded from the site: www.bedtimemath.org or follow on Twitter @BedtimeMath. You can also find Bedtime Math on Facebook, Pinterest, and YouTube. You'll find fun daily math problems to figure out with your child(ren).

Keep track of your progress by printing out the monthly Bedtime Math sticker calendars, the Summer of Numbers Constellation Chart, or make one of your own. Participation is not required, but students will get a certificate if they bring their completed sticker chart on the first day of school.

Whatever type of practice you choose over the summer, be sure to spend some time focusing on the target areas for the upcoming grade:

Math's Big Ideas	
Students Entering	Should Practice
PK3	Number names, counting in sequence, counting objects, comparing attributes of objects
JK	
SK	
1 st	Addition and subtraction: concepts, skills, and problem-solving, place-value
2 nd	
3 rd	
4 th	Multiplication and division of whole numbers and fractions-concepts, skills and problem solving

Math Fluency Goals

Fluency means "fast and accurate."

It might also help to think of fluency as meaning the same thing as when we say that someone is fluent in a foreign language: when you're fluent, you flow. It's easy and automatic.

Students entering	Should Be Mastered; Practice to Stay Fresh...	Working Toward...
PK3		<ul style="list-style-type: none"> • Know the number names and count in sequence • Count to tell the number of objects
JK		<ul style="list-style-type: none"> • Know the number names and count in sequence • Count to tell the number of objects
SK	<ul style="list-style-type: none"> • Know the number names and count in sequence • Count to tell the number of objects 	<ul style="list-style-type: none"> • Add/subtract within 5
1st	<ul style="list-style-type: none"> • Add/subtract within 5 	<ul style="list-style-type: none"> • Add/subtract within 10
2nd	<ul style="list-style-type: none"> • Add/subtract within 10 	<ul style="list-style-type: none"> • Add/subtract within 20 <p><i>(By the end of 2nd grade, memorize all sums of two one-digit numbers)</i></p> <ul style="list-style-type: none"> • Add/ subtract within 100 (paper and pencil)
3rd	<ul style="list-style-type: none"> • Add/subtract within 20 <p><i>(By the end of 2nd grade, memorize all sums of two one-digit numbers)</i></p> <ul style="list-style-type: none"> • Add/ subtract within 100 (paper and pencil) 	<ul style="list-style-type: none"> • Multiply/divide within 100 <p><i>(By the end of third grade, memorize all products of two one-digit numbers)</i></p> <ul style="list-style-type: none"> • Add and subtract within 1000
4th	<ul style="list-style-type: none"> • Multiply/divide within 100 <p><i>(By the end of third grade, memorize all products of two one-digit numbers)</i></p> <ul style="list-style-type: none"> • Add and subtract within 1000 	<ul style="list-style-type: none"> • Add and subtract within 1,000,000