

# Helping Your Child With Math Homework

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# Why Homework?

Today, the emphasis on standardized test scores and competition for college admission puts pressure on teachers to cover more material than a typical school day allows. This results in teachers who assign homework out of necessity and have increased dependency on the home to act as an extension of the school.

# Why Homework?

Assigning homework is an historical practice with little basis in scientific research. Although many studies have provided inconclusive results as to the effectiveness of homework at increasing actual academic achievement, many teachers and parents believe that there are extraneous benefits of assigning homework that make this practice worthwhile.

# ["Top 10" Benefits of Homework]

## 1. Time Management and Self Discipline

- Students can learn to manage time and meet deadlines by breaking down projects and assignments into pieces.

## 2. Work Independently

- Students can learn to manage assignments and solve problems on their own, without the help of teachers, parents, or other students.

## 3. Personal Responsibility

- Students take ownership of their learning.

# “Top 10” Benefits of Homework

## 4. Develop Research Skills

- i.e. locating, organizing, and condensing information

## 5. Develop the Ability to Use Resources

- Such as libraries, reference materials, and web sites

## 6. Extend Learning

- Time spent on homework allows children to use skills they already have and apply them to new situations.

## 7. Integration

- Students can integrate their learning by applying many different skills to a single task, such as book reports or science projects.

# “Top 10” Benefits of Homework

## 8. Develop Mastery

- Review and practice of skills taught in school allows students to achieve a level of mastery that otherwise may not be possible.

## 9. Improves thinking and memory

- Independent learning and problem solving can improve your child’s critical thinking and analytical skills.

## 10. Preparation

- Students can use prior knowledge and skills to explore new subjects that they will begin learning in school.



# Homework Can Benefit You, Too

- Homework allows you to:
  - Develop a connection with your child's teacher
  - Learn more about your child's education
  - Learn more about your child's school
  - Help your child develop a value for and love of education



# Homework: A “Time” Line

- The amount of time your child spends on homework will gradually increase as (s)he progresses in school.
- Some students will require more time than others to complete assignments.
- It is important to help your child establish good study habits throughout the elementary school years so that (s)he is prepared to handle the extensive workload in middle and high school.

# Homework: A “Time” Line

An approximation for time spent on homework is as follows:

<b>Kindergarten to 3rd Grade</b>	<b>4th to 6th Grade</b>	<b>7th to 12th Grade</b>
<b>Up to 20 Minutes Each Night</b>	<b>20 to 40 Minutes Each Night</b>	<b>Varies: Up to 2 Hours Each Night</b>

# Tips For Parents

- An environment conducive to thinking and learning is key for successful completion of homework.
  - Set a regular time and place for homework
    - ⇒ A good work area should be convenient, quiet, comfortable and well-lit.
  - Eliminate or remove distractions
    - ⇒ Choose an area that is free of family traffic.
  - Provide supplies and identify resources
    - ⇒ Make sure your child has the necessary materials to complete assignments before beginning.
  - Express interest in what your child is learning

# Remember...

- **All children have different needs and learning styles. Accommodate them:**
  - Some children work best with background noise or music, while others require complete silence.
  - Some may want to power through homework immediately after arriving home from school, while others need some down-time before they can get started.
  - The most important thing you can do is to establish a routine that works best for your child and stick with it!

# Communication Is Key

- **Communication with teachers is very important for helping your child with homework. Here are some important things to remember:**
  - **Speak with your child's teachers at the beginning of the school year**
    - ⇒ Let them know that you want to be kept informed!
  - **Request a meeting if you suspect an issue**
    - ⇒ Tell teachers briefly why you want to meet, and make the arrangements.
  - **Provide Feedback**
    - ⇒ Let teachers know whether your child finds the assignments too hard or too easy.

# How Can I Help My Child with Homework?

- **Do not do the homework yourself!**
  - Doing homework for a child sends a message that he or she is incapable of doing the work and that perfection is the main objective.
  - It also denies your child the opportunity to develop skills and gain understanding from the experience.



# How Can I Help My Child with Homework?

- **Encourage children to take notes regarding homework assignments when they are given**
  - A planner, homework or “Math at Home” notebook can help your child keep track of assignments.
  - Work together to get this started, and make sure your child knows how to use it!
- **Discuss homework assignments**
  - Talk with your child about the concepts of the assignment before beginning. This will familiarize you with the topic of study.
  - Do short quizzes the day before a test!

# How Can I Help My Child with Homework?

- **Limit after-school activities**
  - Allow time for homework and family activities.
- **Monitor television and computer use**
  - If a favorite show comes on during scheduled study time, record it!
  - This will help your child establish priorities.
- **Plan homework schedules and routines**
  - Allow some free time when assignments are completed.
- **Avoid scheduling homework right before bedtime**
  - Children will be too tired or feel pressured to finish by bedtime.

# How Can I Help My Child with Homework?

## ■ **Stay nearby**

- You can read, write, or catch up on paperwork.
- Be available to provide assistance if requested, but avoid imposing your help or way of doing something.

## ■ **Make sure your child is well rested, fed, and has had time to wind down after school**

## ■ **Prioritize extensive or numerous assignments from easiest to hardest**

- This will keep your child from losing motivation or getting discouraged.

# How Can I Help My Child with Homework?

- **Check completed assignments**

- Review homework that has been marked and returned.



- **Provide lots of feedback**

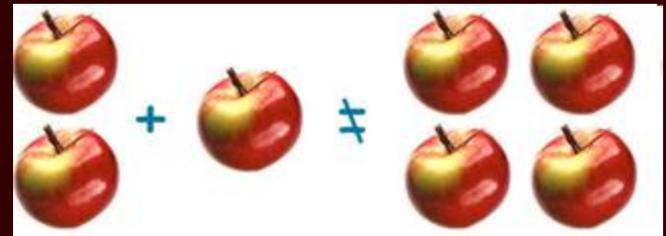
- Stay positive!

- **Focus on what your child has done *right*, first**

- This is particularly important for young children.
- Corrections are sometimes interpreted by children as disapproval. Provide them with care.

# How Can I Help My Child with Math Homework?

- Try not to let your personal feelings about math affect your child
- Have your child solve five problems at a time, then check their work.
  - This will prevent your child from completing an entire assignment incorrectly, which can be discouraging.
  - It also provides you with opportunities to give a lot of positive feedback!
- If assistance is requested, solve the problem together.
  - Have your child explain where and why (s)he is stuck.
  - Ask Questions: Did you add this correctly?



- If your child can find the mistakes, (s)he will be less likely to make them in the future.

# How Can I Help My Child with Math Homework?

- **Encourage the use of reference materials, such as a computer with an Internet connection, a calculator, or a number graph/grid**
  - You can make a 100 or 200 number grid for use at home.
  - Be consistent! If your child's teacher does not allow the use of calculators, do not allow one to be used at home.
- If a computer is not available in the home, plan regular visits to a public library or community learning center where access is available.
- Supervise Internet use. Create a homework login and password account to avoid distractions.



# If Homework Is a Headache...

- Homework is intended to be a positive experience to enhance student learning and develop good study habits. It should never be used as punishment. Remember to ***stay positive***, but contact the teacher if:
  - Your child consistently gets 25% or more wrong on homework problems and assignments
  - Your child never seems to have any homework
  - Homework is a frustrating experience for you and the child
  - You are concerned about the length of time it takes your child to complete assignments

# If Homework Is a Headache...

- Homework issues may signify a greater problem, such as a learning disability, which requires immediate attention.
- You typically spend more time one-on-one with your child than his or her teacher, so you may detect problems before (s)he does.
- Do not hesitate to write a note to the teacher expressing your concern and requesting a conference. Together, you can come up with an action plan.

# What If I Don't Understand What My Child Is Learning?

- Math homework tends to challenge parents because:
  - The language used to explain concepts is not the same as when you were in school.
  - You haven't "solved for  $x$ " and other math-related concepts for several years.
  - Math challenged you when you were in school.

# What If I Don't Understand What My Child Is Learning?

- **Don't Give Up! There are a variety of things you can do, such as:**
  - Take a refresher course
    - ⇒ The PTA may be able to arrange for this to take place and have your child's teacher provide instruction.
  - Recruit a classmate that understands the material to be your child's study buddy
  - Take advantage of the math homework helpers available for free online
    - ⇒ Some provide informative tutorials, and you and your child can watch them together!
    - ⇒ [http://school.discoveryeducation.com/homeworkhelp/home\\_work\\_help\\_home.html](http://school.discoveryeducation.com/homeworkhelp/home_work_help_home.html)

# Additional Ways to Help Your Child Learn Math

- **Aside from homework help, there are other ways that you can facilitate your child's love of math:**
  - **Activities: Math is Everywhere!**
    - ⇒ Math in the home  
<http://www.math.com/parents/articles/mathhome.html>
    - ⇒ Math at the grocery store  
<http://www.math.com/parents/articles/grocerymath.html>
    - ⇒ Math on the go  
<http://www.math.com/parents/articles/mathgo.html>
    - ⇒ Math for the fun of it!  
<http://www.math.com/parents/articles/funmath.html>

# Additional Ways to Help Your Child Learn Math

- ❑ Children's picture books that introduce and elaborate on math-related concepts
  - ⇒ [http://childrenspicturebooks.info/articles/picture\\_books\\_for\\_math.htm](http://childrenspicturebooks.info/articles/picture_books_for_math.htm)
  
- ❑ Institute family math game nights
  - ⇒ <http://www.educationallearninggames.com/math-games.asp>
  
- ❑ Participate in school Math Nights
  - ⇒ If your school doesn't already have these, work with the PTA and administration to get them started.
  - ⇒ You can contact a local college or university and get them involved as well!

Any questions?

