References

**TIPS MATH**

**TIPS LANGUAGE ARTS**

**TIPS SCIENCE**

Prototype Activity List

Over 500 prototype TIPS interactive homework activities:

- **MATH**
  Grades K-5 and Middle Grade Samples
- **LANGUAGE ARTS**
  Grades 6-8
- **SCIENCE**
  Grades 6-8 and Grade 3 Samples

National Network of Partnership Schools
Johns Hopkins University
3003 N. Charles Street, Suite 200
Baltimore, MD 21218

Contact: Dr. Frances Van Voorhis
TIPS Coordinator
Phone: (410) 516-8061
Fax: (410) 516-8890
www.partnershipschools.org
nnps@csos.jhu.edu

©2001
More TIPS Information and Activities

Choose “TIPS-Teachers Involve Parents in Schoolwork.”

See:

- An OVERVIEW of the TIPS Process
- RESEARCH
- TIPS BY SUBJECT (Language Arts, Math, and Science)
- SAMPLE TIPS ACTIVITIES
- BLANK TIPS TEMPLATES
- Information about the TOP TIPS PROJECT
- TIPS RESOURCES
- A BULLETIN BOARD to discuss TIPS topics
- SOCIAL STUDIES AND ART VOLUNTEERS – another TIPS process.

Acknowledgments
This work is supported by grants from Disney Learning Partnership and the U.S. Department of Education, Office of Educational Research and Improvement (OERI). The opinions and approaches are the authors’ and do not necessarily reflect the positions or policies of either funding source.
TIPS SCIENCE

Grade 6-8
Pikesville Set

ASTRONOMY
S-01 Galactic Olympics
S-02 Planetary Scavenger
S-03 It's All Relative!
S-04 It's a String Thing
S-05 Outrageous Orbits
S-06 Wide Open Spaces

DIVERSITY OF LIFE
S-07 Classification is Key
S-08 Bat-Man!
S-09 You Be the Judge!
S-10 Name Game
S-11 Picture Perfect
S-12 That's Not Growing Back!
S-13 Refrigerator Safari
S-14 Tricky Taxonomy

ECOLOGY
S-15 Parts of the Ecosystem
S-16 Climatographs
S-17 Fresh Water
S-18 Oil and Water
S-19 Population Growth
S-20 Bath or Shower

GENETICS
S-21 How Does Heredity Affect You?
S-22 Tall or Short Pea Plants
S-23 Colorblindness
S-24 “Designer” Fruits and Vegetables
S-25 Cloning...Cloning...Cloning
S-26 Striving for Perfection
S-27 Same or Different...Which is Better?

GEOLOGY
S-28 Journey Through the Earth’s Layers
S-29 The Plates Are Crashing!
S-30 I Feel the Earth Move!
S-31 Should We Stay or Should We Go?

S-32 This Is the Hardest One!
S-33 Lasting Impressions
S-34 Frozen in Time
S-35 It's The Law!

HUMAN SYSTEMS
S-36 “Cell”ebration!
S-37 Levels of Life
S-38 Down the Hatch
S-39 You’ve Got Some Nerve!
S-40 We Got the Beat!
S-41 Muscle Bound
S-42 Making Connections
S-43 What’s in a Name?
S-44 Putting the Pieces Together

MACHINES
S-45 Levers Have Class
S-46 Design a Bike
S-47 Cut and Paste Circuits
S-48 Wasted Energy
S-49 It’s About Hard Work

OCEANOGRAPHY
S-50 Float or Sink
S-51 “Egg”cellent Experiment
S-52 Profile Mapping
S-53 So You Want to Be an Oceanographer...
S-54 Designer Fish

SKILLS AND PROCESSES
S-55 Cylinder Challenge
S-56 Out of Control!

SOUND AND LIGHT
S-57 The Eyes Have It!
S-58 Mirror Madness
S-59 Perfect Pitch
S-60 Somewhere Over the Rainbow
S-61 Good Vibrations
S-62 Ride the Wave

TIPS MATH

Grade 2

M2-1 Counting by 2s, 5s, and 10s
M2-2 Write Ones, Tens, and Hundreds
M2-3 How Many Tens, Ones, and Hundreds?
M2-4 Identify Equal Parts
M2-5 Match ½, ⅓, ¼, and ⅕ to Shaded Regions
M2-6 Match Fractions to Shaded Parts
M2-7 Add 2-Digit Numbers without Regrouping
M2-8 Addition Word Problems through 100
M2-9 Subtract 2-Digit Numbers without Regrouping
M2-10 Subtraction Word Problems through 100
M2-11 Subtract 3-Digit Numbers
M2-12 Addition with Regrouping
M2-13 More Addition with Regrouping
M2-14 Subtraction with Regrouping
M2-15 More Subtraction with Regrouping
M2-16 Create Addition Word Problems to 100
M2-17 Addition and Multiplication Are Related!
M2-18 Multiplication Word Problems
M2-19 Divide Sets Equally
M2-20 Multiplication and Division are Related!
M2-21 Use a Graph
M2-22 Count Money
M2-23 Add and Subtract Money
M2-24 Use =, <, and >
M2-25 Number Order
M2-26 Tell Time to the Nearest 15 Minutes
M2-27 Tell Time to the Nearest 5 Minutes
M2-28 Time Word Problems
M2-29 Metric Measurement (Centimeters)

Grade 3

M3-1 Write 3-Digit Numbers
M3-2 Numbers in Expanded Forms
M3-3 Add Three Numbers
M3-4 Addition – Regrouping Ones to Tens
M3-5 Addition – Regrouping Tens to Hundreds
M3-6 Addition – Regrouping Ones to Tens and Tens to Hundreds
M3-7 Make Money
M3-8 Subtraction – Regrouping Tens for Ones
M3-9 Subtraction – Regrouping Hundreds for Tens
M3-10 Subtraction – Regrouping Thousands for Hundreds
M3-11 Add and Subtract (to 99)
M3-12 Short Word Problems with 3-Digit Numbers
M3-13 Subtraction – One Step Word Problems
M3-14 Word Problems – Add or Subtract with Regrouping
M3-15 Word Problems – More Addition or Subtraction
M3-16 Addition and Subtraction – Two Step Word Problems
M3-17 Inequalities
M3-18 Inequalities – Addition and Subtraction
M3-19 Round to the Nearest 10
M3-20 Round to the Nearest 100
M3-21 Round to the Nearest 10’s and 100’s
M3-22 Metric Measurement
M3-23 Multiply by 1-Digit Numbers
M3-24 Multiply Numbers to 9
M3-25 Find the Missing Factor
M3-26 Divide without Remainders
M3-27 More Division with Remainders
M3-28 Word Problems Involving Time
M3-29 Fractional Parts
M3-30 Words and Fractions
M3-31 Compare Fractions
M3-32 Order Fractions
M3-33 Bar Graphs
M3-34 Interpret Line Graphs
M3-35 Tally Charts
M3-36 Parallel and Perpendicular Lines
M3-37 Sides and Angles
M3-38 Diameter and Radius of a Circle
M3-39 Find the Perimeter of Shapes
M3-40 Addition, Multiplication, Subtraction, and Division Facts
TIPS MATH

Grade 4
M4-1 Change Words to Numbers
M4-2 Identify Place Value
M4-3 Compare Numbers Using <, >, or =
M4-4 Round to the Nearest Ten
M4-5 Round to the Nearest Hundred
M4-6 Round to the Nearest Thousand
M4-7 Add 4 Digits with Regrouping
M4-8 Subtract 4 Digits with Regrouping
M4-9 Multiply by 10, 100, 1000
M4-10 Multiply by 1 Digit with Regrouping
M4-11 Multiply by Tens, Hundreds, or Thousands
M4-12 Multiply by 2 Digits with Regrouping
M4-13 Divide 2 Digits by 1 Digit
M4-14 Divide 2 Digits by 1 Digit with a Remainder
M4-15 Divide 2 Digits by Multiples of Ten
M4-16 Add Fractions with Like Denominators
M4-17 Subtract Fractions with Like Denominators
M4-18 Change Improper Fractions to Mixed Numbers
M4-19 Change Mixed Numbers to Fractions
M4-20 Equal Fractions
M4-21 Add Unlike Fractions
M4-22 Subtract Unlike Fractions
M4-23 Compare Fractions Using >, <, or =
M4-24 Place Value
M4-25 Congruent Figures
M4-26 Lines, Line Segments, and Rays
M4-27 Intersecting, Parallel, and Perpendicular Lines
M4-28 Identify Angles
M4-29 Find the Perimeter of a Polygon
M4-30 Word Problems - Addition or Subtraction?
M4-31 Word Problems - Multiplication
M4-32 Word Problems - Addition, Subtraction, and Multiplication

Grade 5
M5-1 Add up to 4 Digits
M5-2 Add up to 4 Digits with Regrouping
M5-3 Addition Word Problems
M5-4 Subtract up to 4 Digits
M5-5 Subtract up to 4 Digits with Regrouping
M5-6 Subtraction Word Problems
M5-7 Addition and Subtraction Word Problems
M5-8 Multiplication Patterns
M5-9 Multiply up to 3 Digits by 1 Digit
M5-10 Short Form Multiplication
M5-11 More Short Form Multiplication
M5-12 Multiplication Word Problems
M5-13 Multiply up to 3 Digits by 2 Digits
M5-14 Divide Tens and Ones
M5-15 Division Word Problems
M5-16 Estimate Tens in the Quotient
M5-17 Division with Remainders
M5-18 Solve and Check Division Problems
M5-19 Divide Thousands, Hundreds, Tens, and Ones
M5-20 Use Division to Find the Fractional Part of a Set
M5-21 Add Like Fractions
M5-22 Subtract Like Fractions
M5-23 Add and Subtract Mixed Numerals
M5-24 Write Fractions in Lowest Terms
M5-25 Write Equivalent Fractions
M5-26 Compare Unlike Fractions
M5-27 Identify and Name Points, Lines, Line Segments, and Rays
M5-28 Acute, Right, and Obtuse Angles
M5-29 Read and Write Numerals to Hundred Millions
M5-30 Roman Numerals

TIPS SCIENCE

Grade 7
S7-18 Circulatory and Respiratory Systems: We Will Recover
S7-19 Respiratory Systems — Take a Deep Breath
S7-20 Digestive System: Digest This
S7-21 The Energy Detective -- Finding Starch and Fat
S7-22 The Most Widely Used Drug
S7-23 The Excretory System -- Waste Away
S7-24 Nervous System -- The Brain
S7-25 Nervous System -- Brain Power
S7-26 Nervous System -- Is It Magic?
S7-27 Right or Left Brain Dominance?
S7-28 You Have A Lot of Nerve(s)
S7-29 Nervous System -- Test Your Nerves
S7-30 Understanding Genetics -- Just By Chance
S7-31 The Endocrine System
S7-32 What is AIDS?
S7-33 Update: Reported Cases of AIDS
S7-34 Review: What a System of Systems

Grade 8
Physical Science
DIVERSITY IN MATTER
S8-1 Testing Theories -- Where Does Water Come From?
S8-2 What Really Happens?
S8-3 Made to Measure
S8-4 Matter, Matter Everywhere
S8-5 On Your Mark, Get Set, Go!
S8-6 Does it Matter?

Grade 7
S7-35 The Green Leaf -- Food Factory of the World
S7-36 Understanding Genetics -- Tall or Short Pea Plants
S7-37 Something Wild and Living
S7-38 Biomes on a New Planet

Grade 8
S8-39 You’ll Need Energy to Choose a Career
Overview of TIPS

Teachers helped researchers design, implement, and test a school-family partnership process called Teachers Involve Parents in Schoolwork (TIPS) Interactive Homework. With TIPS, any teacher can regularly, and relatively easily, help all families stay informed and involved in their children's learning activities at home, and help all students complete homework that should promote greater success in school.

The TIPS homework assignments require students to talk to someone at home about something interesting that they are learning in class. TIPS helps solve some common problems with homework:

- It helps all families become involved, not just the few who know how to discuss math, science, or other subjects.
- It makes homework the student's responsibility and does not ask parents to "teach" school subjects or skills. 
- It asks students to share and enjoy their work, ideas, and progress with their families.
- It allows families to send comments or questions to teachers in a section for home-to-school communications.

With TIPS, homework becomes a three-way partnership involving students, families, and teachers at the elementary, middle, or high school levels.
TIPS LANGUAGE ARTS

Grade 6

WRITING
L6-1 Writing a Paragraph – A Favorite Activity
L6-2 Parts of a Paragraph – Set it Straight
L6-3 Creative Writing and Oral Speaking – It's News to Me
L6-4 Rhyming Poem – Who are you?
L6-5 Combining Sentences – Make Short Ones Long
L6-6 Explanatory Writing – Late Night Movie
L6-7 Explanatory Writing – A Shopping Spree
L6-8 Explanatory Writing – Where Would You Travel?
L6-9 Explanatory Writing – On a Desert Island
L6-10 Narrative Writing – A Typical Day
L6-11 Narrative Writing – What's So Funny?
L6-12 Narrative Writing – Planning a Party
L6-13 Narrative Poem – Keeping Time

GRAMMAR
L6-14 Nouns and Adjectives – In the Kitchen
L6-15 Naming Common and Proper Nouns – Are You Proper?
L6-16 Eradicating Errors
L6-17 Verbs – Put Them in Action
L6-18 Verbs – Present and Past
L6-19 Commas and Quotation Marks – Interviewing a Famous Person

WORDS AND MEANINGS
L6-20 Multiple Meaning Words – Give It a Shot!
L6-21 Fact or Opinion?
L6-22 Sequential Order – Now, You're Cooking
L6-23 Order! Order!
L6-24 Similarities and Differences
L6-25 Chronological Order – Memories of Me

Grade 7

WRITING
L7-1 Descriptive Paragraph: First Impressions
L7-2 What a Character!
L7-3 Descriptive Words – Styles of the Famous
L7-4 A Special Soul
L7-5 T.V. Tale – Telling Time
L7-6 Hairy Tales from the Past
L7-7 Eyewitness
L7-8 True Story!
L7-9 You Are There – Writing a Monolog
L7-10 Letter Writing: Advice to a Talk Show Host
L7-11 Talk Show Guest
L7-12 The Thinking-Writing Connection – Making Decisions
L7-13 Combining Sentences – Make Us One
L7-14 Sentence Completion – Can You Say More?
L7-15 Set a Good Example
L7-16 Can You Do Imitations?
L7-17 Whose Portrait on a Dollar?
L7-18 Stick to the Facts

GRAMMAR
L7-19 Do They Agree? Subjects and Verbs
L7-20 Verbs – Where and When is the Action?
L7-21 Adjectives and Adverbs – How Descriptive!
L7-22 Parts of Speech Sweatshirt
L7-23 Edit This, Editor

WORDS AND MEANINGS
L7-24 Categories – What’s What?
L7-25 Order in the Kitchen – Can You Cook?
L7-26 Fact or Opinion – Which is Which?
L7-27 Context Clues: Being Late is a Big Mistake!
L7-28 A Word to the Wise – Vary Very
L7-29 Expanding Similes
L7-30 The Homonyms Jeopardy Game
L7-31 Predicting Outcomes – Solving Riddles

Grade 8

WRITING
L8-1 Getting Off to a Good Start
L8-2 Photo Opportunities
L8-3 One Really L – o – n – g Sentence

GRAMMAR
L8-4 Does It Make Any Sense?
L8-5 Build a Better Paragraph
L8-6 A Helping Hand
L8-7 Think It Through
L8-8 Looking Wa-a-ay Ahead
L8-9 Jobs and Success
L8-10 Coping: I Can Handle It!
L8-11 Apples and Oranges, or Peas in a Pod

WORDS, MEANINGS, and OTHER THINGS
L8-12 Writing to Persuade
L8-13 Living on a Budget
L8-14 Personification: Come Alive!
L8-15 Moving in the Right Direction
L8-16 Do You Know the Way to...?
L8-17 Just Tell Me How
L8-18 To Whom it May Concern
L8-19 Radio Rap
L8-20 Now, a Word from Our Sponsor
L8-21 Help Wanted!
L8-22 Hopes and Dreams
L8-23 Enjoying Haiku