

TAKS STRATEGIES

MATH PATTERNS

www.takswheels.com

- Explain real-life reasons for learning math concepts.
- Require finding patterns as a problem-solving strategy.
- Initiate searches for paired numbers in nature.
- Create tables that show real-life situations.
- Show relationships with Venn diagrams.
- Use cookies to teach "shared equally."
- Point out patterns in the fact families.
- Begin the day with a puzzler.
- Point out relationships.
- Display examples.

MATH WORD PARTS

Word Part	Meaning	Word Part	Meaning
multi-	many	uni-	one
poly-	many	bi-	two
hemi-	half	tri-	three
semi-	half	quad(r)-	four
equi-	equal	octa-	eight
-lateral	side	dec-	ten
sub-	under; down	centi-	hundred
-gon	figure having certain number of angles	milli-	thousand

ANALOGIES!

TAKS OBJECTIVES: MATH GRADE 3

- Obj. 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.
- Obj. 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.
- Obj. 3: The student will demonstrate an understanding of geometry and spatial reasoning.
- Obj. 4: The student will demonstrate an understanding of the concepts and uses of measurement.
- Obj. 5: The student will demonstrate an understanding of probability and statistics.
- Obj. 6: The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.

MATH GRADE 3

HOME CONNECTIONS

Send parents information about how to build their child's self-confidence with math.

PARENTS, TRY THESE ACTIVITIES WITH YOUR CHILD:

- Talk about ways math is important in real life.
- Help your child identify coins and bills; count money.
- Have your child read sales ads aloud.
- Cook together using measurement.
- Hang a thermometer. Read it together.
- Explain shoe sizes.
- Weigh himself or herself.
- Have your child identify shapes around the home.
- Use a face clock. Have your child tell you the time.
- Play card games.

www.takswheels.com

1-800-975-0054

© 2005 Firelight Books. All Rights Reserved. Illegal to Copy. Created by Nancy Nichols, M. A.

MEASUREMENT

SPATIAL REASONING

PROBLEM SOLVING

PROBABILITY/STATISTICS

BASIC OPERATIONS

TAKS STRATEGIES

PROBLEM SOLVING

www.takswheels.com

- Remind students to study tables and diagrams carefully.
- Project: Research cell phone plans. Justify best buy.
- Use real menus for activities. Teach taxes/tips.
- Use role-playing to teach loans/lending rates.
- Project: Determine savings interest rates. Calculate savings over time.
- Teach real-life problem solving by planning a detailed trip.
 - Push students to think!
 - Cooperative learning!

PROBLEM-SOLVING STEPS FOR STUDENTS

- Understand the problem. Read the entire problem. Identify the question that is being asked. Ask, "What information do I have?"
 - "What information do I want to know?"
 - "What information is not important?"
 - "Do I need a formula?" Look for patterns or sequences that can give you clues about the problem.
- Make a plan. Decide on a way to solve the problem. Choose an appropriate problem-solving strategy. Try rounding off and estimating, making a table, drawing a diagram or chart, or using systematic guessing. Try working the simple problem parts first or working backwards.
- Carry out the plan. Follow your problem-solving strategy step by step. Show your work.
- Evaluate the solution for reasonableness. Ask, "Does the answer make sense?" "Does the answer fit in the pattern or sequence?" Always check your work.

RECOGNIZE
GOOD WORK!

TAKS OBJECTIVES: MATH GRADE 8

- Obj. 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.
- Obj. 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.
- Obj. 3: The student will demonstrate an understanding of geometry and spatial reasoning.
- Obj. 4: The student will demonstrate an understanding of the concepts and uses of measurement.
- Obj. 5: The student will demonstrate an understanding of probability and statistics.
- Obj. 6: The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.

MATH GRADE 8

HOME CONNECTIONS

Send parents information about how to build their child's math skills.
PARENTS, TRY THESE ACTIVITIES AT HOME:

- Spend time with your child. Talk about how math is important in the real world.
- Expect homework. Help your child by providing a quiet study place. Turn off the TV and radio.
- Communication between school and home is important. Visit your child's teachers!
- Give your child some responsibilities such as shopping, cooking with recipes, and home repair using real tools.
- Talk about budgets, responsible spending, and saving. Take your child to the bank.
- If your child is having problems, ask the teacher for advice, get a tutor, or suggest study time with friends.
- Play card games and board games. Put together jigsaw puzzles.
- Hang a thermometer and display a face clock. Talk about temperature and time each day.

www.takswheels.com

1-800-975-0054

© 2005 Firelight Books. All Rights Reserved. Illegal to Copy. Created by Nancy Nichols, M. A.

PROBABILITY/STATISTICS

ALGEBRAIC OPERATIONS

MEASUREMENT

ALGEBRAIC OPERATIONS

SPATIAL REASONING