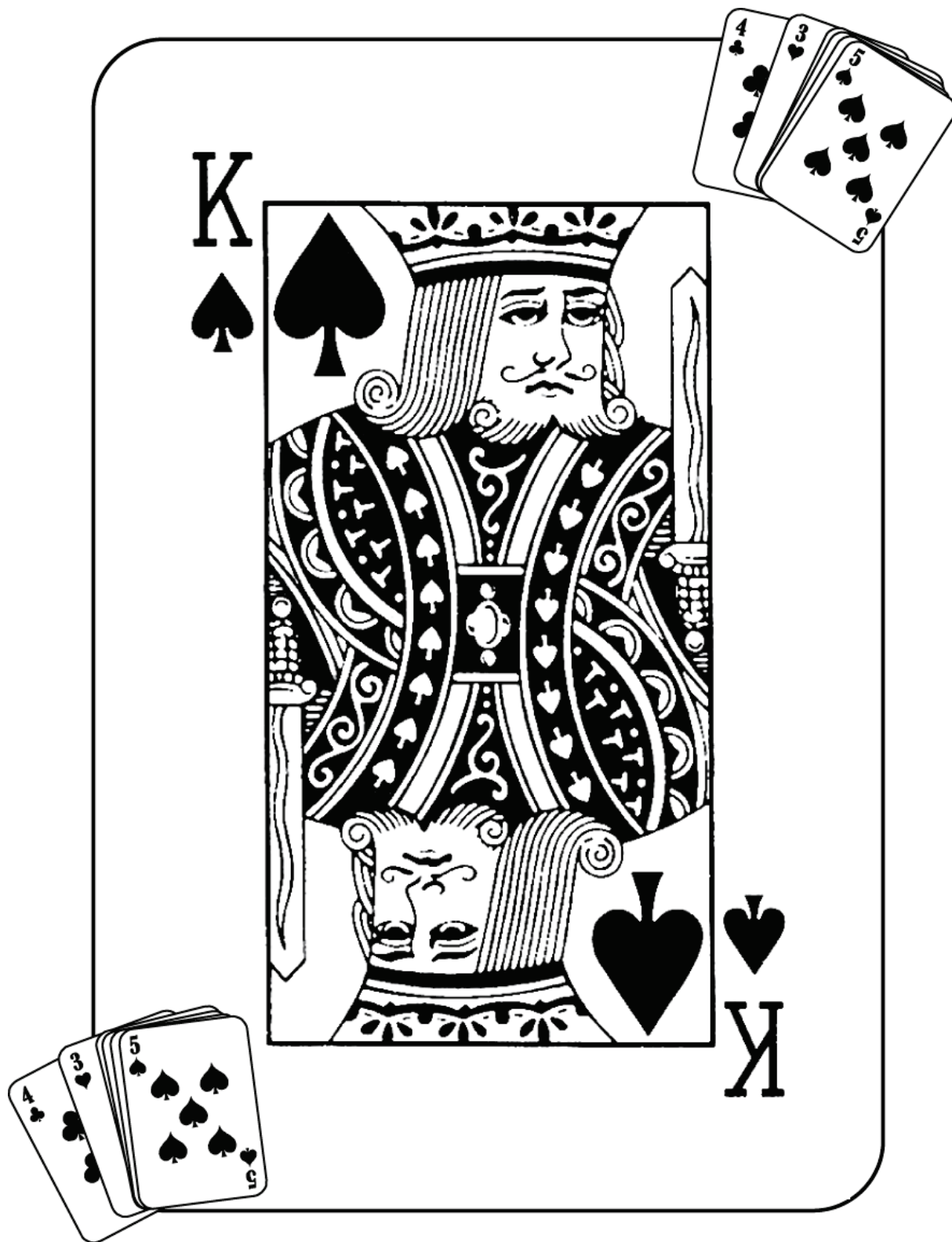


FAMILY MATH FUN

Introductory Packet

1st through 5th Grades





Background

- ◆ Developed by the University of Chicago School Mathematics Project
- ◆ Based on research about how students learn and develop mathematical power
- ◆ Provides the broad mathematical background needed in the 21st century

In *Everyday Mathematics* you can expect to see . . .

- ... a problem-solving approach based on everyday situations;
- ... an instructional approach that revisits concepts regularly;
- ... frequent practice of basic skills, often through games;
- ... lessons based on activities and discussion, not a textbook; and
- ... mathematical content that goes beyond basic arithmetic.

How to Help Your Child With Mathematics



Create a homework routine.

Familiar routines help work go smoothly at school *and* at home. With your child, decide on a time and place to do homework, along with a few rules. A typical routine might go like this:

Come home, have a snack, clear a space at the table, start math homework. Create place for homework supplies. Always have a sharp pencil, and circle problems you want help with. Once homework is complete, put it in your book bag.

Read Family Letters and Study Links.

These pages describe what your child is learning so that you can help. They also suggest fun, easy math activities you can do at home. Consider keeping all of these pages in a special folder to refer to later.

Communicate with the teacher.

You are the link between your child and school, and it is your responsibility to share your thoughts and concerns with the teacher. Call or write a note if your child has had trouble with homework, ask questions if you or your child do not understand something, and share good news when you see progress.

Ask your child to explain.

Encourage your child to teach you the day's math lesson by using the problems in the Study Links. Ask questions about the steps your child uses to solve a problem, such as *Why did you put that number there?* or *What does that zero mean?*

Use questions to help.

Although it's tempting to give children answers when they're confused, they learn more if you help them discover the answers for themselves. Try doing this with questions such as these:

- *Have you seen problems like this before? Is there an example anywhere that might help?*
- *What is the problem asking you to do or to find?*
- *What's one idea you have for finding an answer?*
- *Can you draw a picture of the problem? Can you use objects (like coins, beans, and so on) to show the problem?*

Be accepting of mistakes.

Let your child know that every mistake is an opportunity to learn. When your child makes a mistake, ask him or her to explain how he or she arrived at the answer, give praise for the correct steps or thinking, and gently point out where the error occurred. Then have your child try a similar problem (you may have to make one up) to practice the new understanding.

Play math games.

Games your child brings home from school or store-bought games that involve mathematical thinking will help your child master skills. Your child's teacher can give you a list of popular commercial games with mathematical content.

Observe a mathematics lesson in your child's classroom, or volunteer to help.

Visit your child's classroom—it's the best way find out more about *Everyday Mathematics*.

When you volunteer to help with activities, you also learn a great deal. Do not worry if you're not a math expert—teachers always appreciate an extra hand and will find ways to use your skills.



Read the Student Reference Book with your child.

Many schools periodically send home this "math encyclopedia" for families and students to use together. Choose a page or section related to the day's Study Link, and read it together. Try the activities or questions at the end of the section with your child.

Share real-life math situations.

Think about the ways you use math in your everyday life—at work, at the store, at the bank, in the kitchen, and so on. Invite your child to observe or participate in these activities with you. Encourage your child to think mathematically about common activities, such as folding laundry or taking out the garbage—*How many socks are in 12 pairs? About how many pounds does a bag of trash weigh?*

Give gifts that encourage mathematical exploration.

Children love special gadgets and tools, as well as games and activities that challenge their minds. Giving a gift related to math is a good way to reinforce and reward your child's accomplishments. Here are some ideas: a watch, a timer, an hour glass (egg timer), a calendar, a tape measure, a calculator, pattern blocks, books of brainteasers, 3-dimensional building kits, puzzles, maps, and a wide variety of games.



Commercial Games That Use Mathematics

Many games you have at home or see at the local store involve mathematical thinking. Students develop their skills in an almost effortless way when they play these games with each other and adults. The ages shown are suggested by the manufacturer, however, let the interest and motivation of your child be your guide when selecting and playing the games.

Counting, Adding, and Subtracting

Chutes and Ladders® (3+)

Hi Ho! Cherry-O® (3+)

Sorry!® (6+)

Trouble® (5+)

Uno® (6+)

Attributes, Patterns, and Geometry

Crazy Eights—traditional card game (4+)

Guess Who?® (6+)

Guess Where?® (6+)

jigsaw puzzles

Rummikub® (8+)

tangrams (5+)

Strategy and Spatial Perception

The a-MAZE-ing Labyrinth® (8+)

Battleship® (7+)

checkers (3+)

Clue® Jr. (5+) and Clue® (8+)

Connect Four® (7+)

Jenga® (6+)

mancala (6+)

memory (many names exist for this game of matching face-down pictures) (3+)

Mille Bornes® (8+)

Othello® (8+)

Pretty Pretty Princess® (5+)

More excellent games can be found on the Internet by searching under "educational math games"