



DICKSON COUNTY SCHOOL DISTRICT

Every Student Every Day

Preparing for 5th Grade Math May 2020

Dickson County math teachers have indicated key skills that would help students be prepared for 5th grade math. These skills can be practiced at home in a variety of ways – through skills practice, games, and online resources.

District Packets will remain on the Dickson County Schools website through the summer. These packets contain skills practice pages with answers attached that students could practice. Students can download these and work on their paper without the need for the internet or printing. Go to www.dcstn.org, choose Parents and Students tab, then select Online Learning, Instruction, and Technology Resources. Choose 4th grade, Math, and select from the 3 printable District Packets which include foundation skills needed for success in 5th grade. Students can work on practice pages based on the skills listed below.

Additional options to prepare your rising 5th grader to be successful in math class next year, here are skills that can be practiced from home along with games or online ideas to get you started:

- Know your multiplication facts from 0-12
 - Using paper, index cards, or post it notes, write each number 0-12 two times. Cut them out, shuffle them, and play “War”. Students can also draw a model to represent each fact and write the fact family for each one. Shuffle and play. The player with the larger product wins the round. The player with the most cards at the end of play wins.
 - Multiplication Dice Game: 2 or more players; Materials: 3 dice, pencil/paper How to Play: Throw all three dice. The highest die is put to the side. Roll the remaining two dice. Take out the highest die. Throw the remaining die. Add the numbers of the first two dice. Multiply the sum by the third die. That is the total score for that player for that round. (Ex. Roll 1 - highest number is 5, Roll 2 – highest number is 3, Roll 3 is a 6. Add $5 + 3 = 8$ and multiply $8 \times 6 = 48$. Player score for the round is 48.) Play 5 or 10 rounds and add the totals to find the overall winner of the game.
 - <https://www.mathplayground.com/multiplication01.html>
 - <https://www.multiplication.com/games/all-games>
- Read and write multi-digit whole numbers (less than or equal to 1,000,000) using standard form, word form, and expanded form (e.g., the expanded form of 4256 is written as $4 \times 1000 + 2 \times 100 + 5 \times 10 + 6 \times 1$).
 - Use a standard deck of playing cards with the 10s, Jacks, Queens, and Kings removed. Aces count as 1. **Round 1:** Deal each player 3 cards. Players use the cards to create the largest 3-digit number possible. Players show their cards, and the player with the greatest 3-digit number takes all the cards. For extra practice, have players read their number out loud. For more practice, have each person write their numbers in expanded form. **Round 2:** Deal each player 4 cards and follow same instructions. **Round 3:** Deal each player 5 cards and follow same instructions. **Round 4:** Deal each player 6 cards and follow same instructions. **Round 5:** Deal each player 6 cards and follow same instructions. At the end of Round 5, the player with the most cards wins the game. Variations: create the smallest number with the cards; instead of cards, roll dice that number of times and record the numbers rolled to create numbers.
 - <https://www.funbrain.com/games/place-value>
- Basic fractions: Generate equivalent fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100; Add and subtract fractions with the same denominator

- Equivalent Fractions Game - Three in a Row: Materials – markers or chips of 2 different colors and a pair of dice. Object is to get 3 in a row (vertically, horizontally, or diagonally). To start: Choose who goes first. Rules: On a turn, a player throws the dice and makes a proper fraction with the numbers rolled (smaller number as numerator). The player then finds an equivalent fraction on the board and covers it with a marker. For example: roll a 6 and 2. Fraction is 2/6. Equivalent fraction can cover 4/12; if an opponent marker is already there, it may be removed. If a player rolls doubles, he or she loses a turn. The first player to get three markers in a row wins! To create the game board: top row: 8/20, 7/14, 12/20, 4/12; 2nd row: 4/20, 9/12, 8/12, 12/15; 3rd row: 5/10, 9/15, 6/12, 3/18; bottom row: 8/24, 5/15, 6/9, 3/12
 - <https://www.mathgames.com/fractions>
- Subtraction with Regrouping
 - Subtraction Game: Use decks of cards, but remove the face cards (king, queen, etc.) and the 10's. Aces are 1 and jokers are zero. Shuffle the deck. Round 1: Each player takes five cards and arranges them into a subtraction problem. Tell players that the object is to arrange the cards so that the problem has the smallest difference (answer). Each player will then write their problem down and solve it on paper. Trade and check, and the player whose answer is the smallest gets a point. Round 2: Each player takes 6 cards and follows same instructions. Round 3: Each player takes 7 cards and follows same instructions. Rounds 4 – 8, follow the same instructions by increasing the number of cards drawn each round by 1. The first player to get 10 points wins!
 - <https://www.splashlearn.com/subtraction-games-for-4th-graders>

For students who enjoy online practice and would like to challenge themselves by attempting 5th grade content or reviewing 4th grade skills, here are a few websites that will allow you to pick and choose topics.

- Prodigy (Gr1-8) – offers a unique, adaptive learning platform that keeps students highly engaged with math. If your student doesn't already have an account, go to <https://www.prodigygame.com/> and click on "Get your free account."
- Khan Academy (K-12) – offers free lessons where students can use exercises, quizzes, and instructional videos to learn and master skills. Students will get immediate feedback and encouragement. <https://www.khanacademy.org/>
- Dreambox Learning (K-8) – offers an adaptive learning platform that keeps students engaged and adapts based on student needs. Go to www.dreambox.com/at-home to register for a free, 30 day trial.
- SplashLearn (K-5) – practice and game opportunities that are engaging and can adapt based on student needs. Go to <https://www.splashlearn.com/math-skills/fourth-grade/place-value/read-and-write-numbers> Parents can sign up for free.

Preparing for 5th Grade Science

Elementary science is designed to build on the natural curiosity of children. Asking questions about why something happens (phenomena) then exploring the idea through hands-on activities while building problem-solving and thinking skills are keys to understanding the world around us.

Topics for Exploration include:

- *Gravitational Force
- *The Milky Way and the Position of Earth in the Solar System
- *Instinctual and Learned Responses

This is a very short list from the numerous topics students will explore next year. To see the complete list of standards (topics), visit: [TN Academic Standards for Science](#)