DICKSON COUNTY SCHOOL DISTRICT

Every Student Every Day

Preparing for 4th Grade Math
May 2020

Dickson County math teachers have indicated key skills that would help students be prepared for 4th 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 3rd grade, Math, and select from the 3 printable District Packets which include foundation skills needed for success in 4th grade. Students can work on practice pages based on the skills listed below.

Additional options to prepare your rising 4th 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) You'll need 3 dice (or roll 3 times) & pencil/paper How to Play: Roll 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 x 6 = 48. Player score for the round is 48.) Player with highest overall total at end of 5 rounds wins.
    - https://www.mathplayground.com/multiplication01.html
    - https://www.multiplication.com/games/all-games

- Know your division facts
    - Roll 2 dice and use those numbers to write 2 multiplication facts. Then, write the division facts that go with them. Ex: roll a 4 and 3. Write 4 x 3 = 12, 3 x 4 = 12, 12 ÷ 4 = 3, 12 ÷ 3 = 4. To practice with numbers up to 12, roll 2 dice and add to get your first number, then roll 2 dice again to get the second number.
    - Create a Bingo card with division facts. Put the quotients (answers) on individual pieces of paper, shuffle and play. Player to get 5 in a row first wins.
    - https://www.multiplication.com/games/division-games
    - https://www.splashlearn.com/division-games

- Add and subtract within 1000 with regrouping and including subtracting across zeros
    - 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 should write their problem down and solve it on paper. Trade and check, and the player whose answer is the smallest get 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: Each player takes 8 cards and follows the same instructions. The first player to get 10 points wins!

- Addition Game: Use decks of cards, but remove the face cards and 10's. Aces are 1 and jokers are zero. Shuffle the deck. Round 1: Each player takes five cards and arranges them into an addition problem of 3 digits + 2 digits. Arrange the cards to create a problem that has the highest sum (answer). Each player should write their problem down and solve it on paper. Trade and check, and the player with the highest sum (answer) gets a point. Round 2: Each player takes 6 cards and follows the same directions to create a 3 digit + 3 digit problem. Round 3: Each player takes 7 cards and follows the same directions to create a 4 digit + 3 digit problem. Round 4: Each player takes 8 cards and follows the same directions to create a 4 digit + 4 digit problem. The first player to get 10 points wins!
- https://www.splashlearn.com/math-skills/third-grade/subtraction/subtract-across-zeroes
- https://www.splashlearn.com/math-skills/third-grade/addition/3-digit-2-digit-with-regrouping

For students who enjoy online practice and would like to challenge themselves by attempting 4th grade content or reviewing 3rd 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 4th 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:

*Energy: Potential and Kinetic

*Photosynthesis

*Layers of the Earth and the characteristics of each

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