

Examples of Questions/Prompts when Talking Math with your Student

- Can you predict the solution? What makes you think that?
- What was your strategy for solving that problem?
- Does your answer seem reasonable? How do you know?
- How is ___ problem like a problem you have already solved?
- Will your strategy always work?
- What do you see? What is the pattern?
- Make predictions about _____. (i.e. the weather, what comes next in a pattern)

Other Considerations

Reminder that faster isn't smarter. Allow your student to grapple with problems. Productive struggle helps the brain grow and make connections.

Encourage your student to make connections to other mathematics, everyday life and other content areas.

DreamBox is a computer adaptive learning tool. When your student is "playing" in DreamBox, it is important for them to work independently and without paper and pencil. Assisting a child when playing may lead the program to place a child at a level they are not yet ready for.

Free Math Apps: The Math Learning Center
<https://www.mathlearningcenter.org/resources/apps>
These Apps are computer and tablet friendly.



Oakridge
ELEMENTARY SCHOOL

STEM at Home

APS Supported STEM programs for iPad

- DreamBox. School code: bqt4/6d9r
(DreamBox also can be accessed on a computer
<https://play.dreambox.com/login/bqt4/6d9r>)
- Reflex
(Reflex Math can also be accessed on a computer
reflexmath.com)
- Seesaw
- BrainPop
- Tynker Coding for Kids (Grades 3-5)

Ideas for STEM at Home

- **Number of the Day.** Choose a random number or use the date. The student can write +, -, x, and/or ÷ problems with the Number of the Day. Write the number in expanded form, in words, "sticks and dots", a number bond, on a tens frame, on a number line and/or in a word problem. How the student represents the number is based on grade level. This is a paper/pencil activity.
- **Counting, Sorting, and Making Groups.** Using Legos, coins, bottle caps, dried beans, Cheerios, cotton balls, etc. Counting, sorting and making groups gives students an opportunity to make sense of Base 10 and promotes algebraic thinking.
- **Find, Build, and Extend Patterns.** All grade levels engage in this work. Ask your student to build a repeating or growing pattern with Legos, blocks, etc. Patterns are not limited to concrete objects. Also build patterns with hand claps, snaps, musical instruments. (Kindergarten is limited to repeating patterns.)

GAMES to PLAY and Promote Computational Fluency

1. Salute! (K – 5)(materials: a standard deck of cards with face cards removed, ace = 1). Two or three players
 - This game is suitable for addition or multiplication.
 - Two players, without peeking, put a card on their forehead. (Like the game “Heads Up!”)The third person adds or multiplies the value represented on the cards and says the sum or product to the players with the card on their forehead.
 - The players with the card on their forehead try to guess the number (addend or factor) they are holding.
 - The first person to get their number wins a point. Players rotate turns.
2. Go Fish for 10s (K-2) (materials: a standard deck of cards with Kings and Jacks removed. (Ace =1, Queens = 0) Two to four players
 - This is played like standard “Go Fish”, but players fish for combinations of ten.
 - Players are dealt four cards. Players look at their cards to see if they have a combination that makes 10. Any pairs they have are laid on the table for all to see. If necessary, they draw cards from the remaining cards, the “fish pond”. Players must have four cards at all times.
 - Players take turns asking the others for specific cards. For instance, if a friend has a 4 in their hand, they would ask another player “Do you have a six?” If the player has a 6, they give it to the player, if not, the friend takes a card from the “fish pond”. Play continues until all cards are used. The player with the most combinations wins.
 - Variation: Have five cards in your hand. Change the combinations to a different number. For numbers less than 5, players must subtract.
3. War! (K-5)(materials: a standard deck of cards with Kings and Jacks removed.) (Ace =1, Queens = 0) Alternatively, use the entire deck: K = 13, Q = 12, J = 11, Joker = 0. Two players.
 - This game is played like classic War, except players add or multiply the value of the cards.
 - Both players draw and lay down a card from the top of their pile. The first player who correctly says the sum or product keeps the cards. The player with the most cards at the end of the game wins.
 - If there is a tie, two more cards are played.
4. Diffy Dozen (K-1)(materials: two dice and 12 counters-buttons, coins, etc. per player)
 - Both players roll the dice and find the difference between the numbers each rolled. The player with the greater difference gives that number of counters to the other player.
 - Play 10 rounds or until one player is out of markers.
 - Variation: Use a deck of cards to generate higher numbers.
5. Oh No! 99! (Grades 2-5)(materials: a standard deck of playing cards, Jokers removed) Two players.
 - The dealer shuffles and deals 4 cards to each player.
 - Players take turns playing one card at a time, adding or subtracting the value of their card to or from their jointly accumulated score. When a card is played, the player draws a new card from the deck.
 - Play continues until one player forces the other player to go over the score of 99.

Card Values and Operations

1. Aces: Add 1
2. Jacks: Subtract 10
3. Queens: Wild cards that represent any other card in the deck.
4. Kings: Add 0
5. All other (2-10): Add or subtract their face value