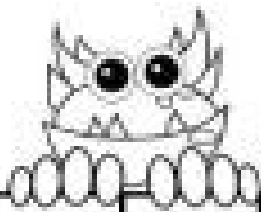


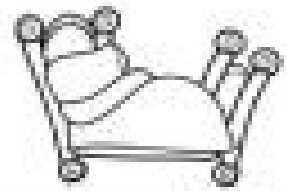
What you can do to help your child develop “Number Sense”

Council Rock School District Elementary Math Specialists (November, 2019)

- What is this thing called, “*Number Sense*?” Number sense essentially means the ability to use numbers flexibly. For example, 7 is the same as $6+1$, $5+2$, and $4+3$. This is helpful when asked to solve $9 + 7$. How? $9+7$ can become $9+1+6$, which is the same as $10+6$.
- Have a “Number of the Day.” For example, 18. Ask, “What are some different ways you can make 18?” (Sample answers: 1 ten and 8 ones, 18 ones, $17+1$, $15+3$, $10+8$, $9+9$, $20-2$, 9×2 , etc.)
- Ask your child to show a number a variety of ways, for ex. drawing dots, in a ten frame, on a number line, using tallies, etc.
- Ask your child how they solve problems. This will help reveal their thinking.
- Share how you think about and solve the same problem. Talk about different ways you can use to get to the same answer.
- Ask your child to do mental math frequently. Asking questions involving doubles (ex. $6+6$), doubles +1 (ex. $6+7$), making 10 (ex. $8+7 = 8+2+5 = 10+5 = 15$), and adding or subtracting from a ten (ex. $10+4$, $40+9$, $50-2$, $20-3$).
- Have your child make estimates before doing arithmetic. How close was your estimate? Estimation 180 (www.estimated180.com) is a good resource for estimation questions.
- Have informal “Number Talks.” For example, ask how they could find the answer to $9 + 8$ or $12 - 7$ mentally.
- Pose problems that have more than one answer. See www.WODB.ca for visuals that ask the question, “Which one doesn’t belong?”
- Highlight the math in your daily experiences when possible.
- Have your child draw problems and their solutions so they can visualize their thinking. For visuals to help your child model their thinking, see <https://www.mathlearningcenter.org/resources/apps>
- Allow the use of manipulatives or objects to model and solve problems.
- Some different apps or video games you may want to consider to help with math:
 - Pic-A-Path* (NCTM, gr. 3-8)
 - Deep Sea Duel* (NCTM, gr. 3-5)
 - Mathbreakers* (mathbreakers.com)
 - Motion Math* (motionmathgames.com)
 - Dragon Box* (dragonbox.com)
 - Wuzzit Trouble* (brainquake.com)
 - First in Math** (firstinmath.com) “Very Important Facts (VIF’s)” activity
 - Math Moments* (<http://www.crsd.org/mathmoments>)
- Use a 120 Chart (see attached) with your child and ask questions such as, “What is 1 more than ___? What is 1 less than ___? What is 2 more than ___? What is 2 less than ___? What is 10 more than ___? What is 10 less than ___?” You can also skip count by 2’s, 5’s, and 10’s on the 120 Chart. The 120 Chart provides a visual for children to see patterns in our number system.
- Play games with your child that help develop mathematical understanding, such as “Tens Go Fish”, “Turn Over Ten”, and “10-Pin Limbo”. Directions are attached.
- Fun puzzles can be found at <https://www.kenkenpuzzle.com/>



120 Chart



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Tens Go Fish

(or Fives Go Fish – adjust everything to make 5 instead of 10!)

You need a deck of ordinary playing cards with the face cards and 10s removed.

1. Each player is dealt 5 cards.

2. Each player looks for pairs from his or her cards that make 10. Players put down the pairs of cards that make 10, and they draw new cards to replace them.

3. Players take turns asking each other for a card that will make 10 with a card in their own hands.

If a player gets the card he or she asked for, he or she puts the pair down and picks a new card from the deck.

If a player does not get the card that he or she asked for, the player must "Go Fish" and pick a card from the deck.

If the new card makes 10 with a card in the player's hand, he or she puts the pair of cards down and takes another card.

If a player runs out of cards, the player picks two new cards.

A player's turn is over when no more pairs can be made that make 10.

The game is over when there are no more cards.

Turn Over Ten

(or Turn Over Five – adjust everything to make 5 instead of 10!)

You need a deck of ordinary playing cards with the face cards removed.

Note: The ace will stand for a zero in this game.

1. Shuffle the cards.

2. Lay out cards, four rows, five in each row, face down.

3. Place the other cards in a draw pile, face down off to the side.

4. Players take turns flipping over two cards. A player can make a match if the two cards make ten when added together.

For example: 2 and 8, 3 and 7, 6 and 4, you get the idea...

5. If a match has been made, the player gets to keep those cards.

6. Replace the cards with the cards from the draw pile.

7. Keep on playing until all matches have been made.

8. The player with the most cards in the end wins.