#### Number Sense Activities for Home

#### **Counting, Ordering, Comparing** (Math tools: Number Cards)

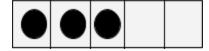
- Forward counting: count as you walk to school; count how many steps you take as you climb up a staircase; count how many cars you pass as you go down a street; try alternating your counging- you say "1", child says "2", you say "3"...and so on.
- Backward counting: same as above but start with 10 or 20...or higher numbers when ready
- Count a collection of objects: count rocks, a handful of pennies, or try picking a number "8" and have your child count out that number of objects
- Name the number after/before: pick a number and have your child name the number after/before
- Count on/back from a given number: pick a number and have your child count up from the number to 10 or 20, or back from the number to 1

Use **number cards** (start with 1-5, then increase number set as child is ready 1-10, 10-20, 1-20, 20-30, 1-30)

- Lay out the cards, ask "Can you give me the number [7]?"
- Show child a card and ask "What number is this?"
- Put the cards upside down in a pile and ask child to: (can be done with a die too)
  - o Pick a card and **count on** to 10 (or 20)
  - Pick a card and count back to 1
  - Pick a card and name the number after
  - Pick a card and name the number before
  - Pick two cards and identify the card that is greater than/less than. You can play
    this card game together, each turning over a card and the person with the higher
    card (or lower card) gets to keep the pair.

<u>Making Five and Making Ten</u> (Math Tools: Ten Frames/Five Frame, counterscan use pennies or small pieces of paper)

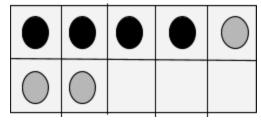
- Say a number, 1-5 if using Five Frame or 1-10 if using Ten Frame, and have the child place that number of counters in the frame.
  - Ask: "How many counters do you have? How many more to make five/ten?"



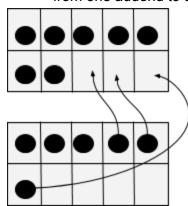
Without child watching, place counters in the frame, and then show the child and ask:
 "How many counters are there? How do you know? What do you notice? How many more to make five/ten?"

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- Use two different colored counters and without the child watching, place counters in the frame, first one color, then the next.
  - Ask: "How many [black] counters? How many [gray] counters? How many altogether? How do you know?"



• Make a Ten Strategy: Write out two single digit numbers to add, for example 7 + 6. Have the child build each number in the separate ten frames and then move counters from one addend to the other to make a ten and then state the total.



$$7 + 6 = 10 + 3 = 13$$

**Subitizing Numbers** (Math Tools: Die or Subitizing Dot Cards, blank piece of paper, dots- pennies or cut circles)

- Hold up a dot pattern for about 3 seconds and then hide it. Ask, "How many dots did you see? How did you see them?" Start with easy patterns to build up their confidence and ability to visualize the patterns. Spend time discussing the configuration of the pattern and how children saw how many dots there were (you can turn back over the card to discuss what they saw).
- Give the child a blank paper (or ten frame if using the ten frame dot cards) and some dots. Hold up a dot pattern for about 3 seconds and have the child make the pattern they saw using the counters on the mat. Ask, "How many dots did you see? How did you see them?" Spend time discussing the configuration of the pattern and how children saw how many dots there were
- Place 3 dot pattern cards facing up in front of the child, all but one of which have the same number of dots just in a different way. Ask, "Which of these is not like the other?"

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- Pick out some pairs of dot cards that have different patterns, but the same number of dots depicted. Mix up cards and place them upside down in an array formation. Play Memory- players take turns turning over two cards and seeing if they have the same number of dots. If they do, the player keeps the pair, and the other player takes a turn. If they do not match, the player turns them back over in the same spot, and the other player takes a turn. Keep playing until all pairs have been matched.
- Play High Card: Deal the dot cards to each player, so each player has the same number of cards. On each turn, each player turns over one card and the player with the card that has more dots can take the two cards. If the cards have the same number of dots, players leave those cards and place a new card on top. The player with more dots on this next card gets to take all four cards.

# <u>Composing and Decomposing Numbers</u> (Math Tools: Number Bond Mat, counters)

• Pick a number (1-5 or 1-10, it works well to use one of the number cards so the child can see the number). The child places the number in the large circle, the whole, and counts out that amount of counters. Then have the child see how many different ways s/he can decompose the number, moving the counters into the two circles, recording the whole and the parts as a number bond. Try adding equations too (e.g. 2+3=5, 4+1=5, 5+0=5, 5-3=2....)

