## Math at Home Addition and Subtraction Activities for Grades K-4

How Did You Solve That? For all of the activities listed below, as well as work your child's teacher may be assigning, ask your child to tell you about how they are thinking about adding and subtracting. If their strategies are unfamiliar to you, listen carefully to your child's explanation; you might even try their approaches to solve a problem or two yourself. Let your child be the teacher! By explaining their thinking, students increase their understanding of addition and subtraction.

## Kindergarten Activities

Double Compare You will need a deck of playing cards with the face cards removed. Each player gets half the deck. Both players turn over their top two cards, and the person with the greater total says "me" and takes the cards. The game is over when all of the cards have been turned over. Be sure to ask your child to explain how they know which number is greater. You might be surprised-although many children count or add to find and compare the totals, some children do not. Instead they reason about the numbers. You can also play this game online: Double Compare

"I have 6 and 3 . You have 5 and 6 . We both have 6, so you have more because 5 is more than 3."

Solving Story Problems Find ways to present problems about combining (addition) and separating (subtraction) small amounts using common situations. For example: "If James wants 3 tacos and Maria wants 4, how many tacos do I need to make?" Encourage children to explain how they solve such problems. Most kindergarteners count from one. Some may count on (or back) or "just know" some combinations.

## Grade 1 Activities

How Many Am I Hiding? Lay out 10 small objects like buttons or pennies and ask your child to count them. Then, while your child covers their eyes, hide some of the objects. Show your child the objects that are not hidden and ask, "How many am I hiding?" Encourage your child to explain their thinking. After playing a few rounds, you can change the total number (from 6 to 12 total) and start again. You can also play this game online: How Many Am I Hiding?

Tens Go Fish You will need a deck of playing cards with the face cards removed. The object of the game is to find pairs of number cards that equal 10. Deal 5 cards to each player Leave the rest in a pile. Any player who can make 10 with 2 of their cards puts them aside and draws 2 more. Then take turns asking each other for a card. For example, if you have a 3, you might ask your child, "Do you have a 7?" If you get a 7, make a pair and put them down. Then draw a card from the deck. If your child does not give you a 7, say "go fish" and draw the top card from the deck. Your turn ends when you cannot make a 10. You can also play this game online: Tens Go Fish

Solving Story Problems About Addition and Subtraction Look for opportunities to make up and solve story problems with your child that involve combining two amounts or removing one amount from another. For example, "I see 4 gray cars and 3 black cars in the parking lot. How many cars are in the parking lot?" Or, "I have 10 pennies in my pocket. If I give 3 of them to you, how many pennies will I have left?" Encourage your child to retell the story in their own words and then share their strategy for solving the problem.

## Grade 2 Activities

Coins Your child can examine coins and talk with someone about what they notice. Ask them questions such as, "What is this coin called?", "Can you find a quarter?", and "How much is each coin worth in pennies?" You can also discuss questions such as: "Here are 2 dimes. How much is this worth?...Can you find another way to make 20 cents?" or "Let's trade coins. I'll give you 2 nickels for 1 dime."

Make $\mathbf{\$ 1 . 0 0}$ Examine a collection of coins and ask your child to tell you about each coin. Discuss how much $\$ 1.00$ is worth in pennies, nickels, dimes, and quarters. Find ways to make $\$ 1.00$ with different combinations of coins. Talk about equivalencies: "Here are 4 quarters. How much is this worth? Can you find another way to make \$1.00?" or "I have 7 dimes. How much more do I need to have \$1.00?" You can also play this game online: Make a Dollar

Spend \$1.00 You will need a collection of coins and two dice. Each person takes $\$ 1.00$ in coins. Take turns rolling the dice and then subtracting that amount (in cents). After each turn, the player says how much money they have left. The game is over when players have no money left. You can also play this game online: Spend a Dollar
$\mathbf{\$ 1 . 0 0}$ Problems Pose problems about subtracting an amount from \$1.00. For example: "If you have \$1.00 and you buy a sticker for 55¢ how much money will you have left?" Encourage your child to use coins to solve the problem and to pose similar problems for you to solve.

Solving Addition and Subtraction Problems Look for 2-digit and 3-digit addition and subtraction situations at home, such as the following:

- There are 36 blueberries in one container and 28 strawberries in another container. How many berries do we have?
- If you have 250 pennies in your piggy bank and you give 120 to your friend, how many pennies do you have left?


## Grade 3 Activities

Collect 1,000 Together you and your child can collect 1,000 of the same small objects to see what a collection of exactly 1,000 objects (such as pebbles, bread tabs, gallon milk lids, or popsicle sticks) looks like. As you collect the objects, organize them in groups of 10 and groups of 100 to help you keep track of them. Before you begin, estimate how long you think it will take to collect 1,000 objects and how much space you think your objects will take up. As your collection grows, you might adjust your estimates on the basis of how long it has taken so far or how much space several hundred take up.

# INVESTIGATIONS <br> TRANSFORMING MATHEMATICS 

Making Sense of Larger Numbers With your child, look for large numbers in the newspaper, on packages, on signs and around your home and neighborhood. Talk about the numbers. For example: "How much would this television cost if you get a \$200 discount?"


Close to 100 You and your child can play Close to 100 online, which involves adding pairs of numbers that add to 100 .

## Grade 4 Activities

Making Sense of Large Numbers With your child, look for large numbers in the newspaper, on packages, on signs, and around your home and neighborhood. Talk together and ask questions about the numbers. You might ask, "How much would the car cost if the salesperson offered a $\$ 2,500$ discount?"


Close to 1,000 You and your child can play Close to 1,000 online, which involves adding pairs of numbers that add to 1,000 .

