

Your child will be learning about addition of three numbers with regrouping (swapping 10 single units for a 10) as well as place value involving hundreds, tens and units over the coming days. Your child needs to know the mathematical language associated with addition and place value – and, add, altogether, plus, together, total, bundles of 10/20, 100 square, numbers 0–99, row, column, vertically, horizontally, diagonally, counting on, tens' house, units' house, change, stay the same, estimate, addition house, value, more, less, swap, regroup, digit, etc.

Addition with Regrouping

Making bundles of 10 using money

Give your child a collection of coins that are only partly grouped in tens, for example, two 10c coins and 12 1c coins. (You may prefer to use cubes/chestnuts/acorns/shells/counters or anything that you have to hand.) Invite your child to count the coins. S/he may use different strategies to arrive at 32c. Do this activity with other numbers, for example, $22 + 14$, $32 + 16$. Discuss the various strategies with him/her and then decide on what the best/most effective strategy is.

Show me!

Give your child 34 1c coins or any materials that can be grouped in tens as above. Ask your child to make 34 using the coins in the standard way, that is, three groups of 10 and four units (single 1c coins). Then ask him/her to come up with as many other ways as possible of showing 34, for example, two groups of 10 and 14 units or one group of 10 and 24 units or 0 groups of 10 and 34 units, etc.

Let's regroup using money 1!

Say to your child: *I have seven 1c coins. I am now going to add six more 1c coins. How many cent have I now? (Yes! 14c.) What can we swap the 14c for? (Yes! One 10c coin and four 1c coins.)* Discuss the value of the two different digits in the answer. Ask: *What is the value of the 1? (Yes! 10c.) What is the value of the 4? (Yes! 4c.)* Explain that it is much easier to carry around a 10c coin than it is to have 10 separate 1c coins in your pocket. It is good to regroup!

Extension: Invite your child to solve other problems involving addition of two one-digit numbers, for example: $7 + 6$, $9 + 5$, $8 + 7$, etc.

Let's regroup using money 2!

Display two 10c coins and nine 1c coins on a table and say: *I am now going to add one 10c and seven 1c coins to the two 10c coins and nine 1c coins ($29c + 17c = ?$). How many cent have we now? First we add the single cent. How many single (loose) cent have we? (Yes! We have 16c.) We don't want to have 16 loose 1c coins in our pockets, so what should we do? (Yes! We must regroup the 16 1c coins as one 10c coin and six loose 1c coins.) The 10c coin goes with its friends in the tens' place.*

How many 1c coins have we now? (Yes! Six.)

How many 10c coins have we now? (Yes! Four.)

Discuss the value of the digits. Ask: *What is the value of the 4? (Yes! 40c.) What is the value of the 6? (Yes! 6c.)*

Extension: Ask your child to solve other problems involving the addition of two and even three two-digit numbers where there is regrouping involved, as above.

Place Value to 199

100 in the environment

Ask your child to think of items that come in hundreds, for example, 100 cent in a euro, 100 pennies in a pound, 100 years in a century, etc.

Making sets of 100

Ask your child to use various items from the environment to make sets of exactly 100 items. S/he could use straws, lollipop sticks, crayons, chalk, balloons, candles, headless matches, cubes, blocks, etc. Making a stack of 10 10c pieces is probably the best way of getting across what a set of 100 looks like. (This can then be regrouped as €1. This shows that $100c = €1$.)

Making numbers beyond 100

Invite your child to make various numbers from 0–199 with whatever concrete material they have to hand, for example, 127. Your child may use different strategies to make 127. S/he may make it as 127 single 1c coins. S/he may prefer to represent 127 as 12 10c coins and seven single 1c coins. S/he may prefer to represent it as 11 10c coins and 17 single 1c coins. Better still, s/he may prefer to represent 127 as €1 coin, two 10c coins and seven single 1c coins. Do this exercise with other numbers, for example, 145, 153, 187, 199.