DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES

Level 1 (Year 1-2) Copy Masters, Number and Algebra

Task 1 – Group Task

Can you find all the ten twins?

Record the number sentences that match your ten twins using an addition sign.

Choose a number between 11 – 19 and represent this in as many ways as you can using the tens frames. Record the number sentences that match.

Task 1 – Independent Tasks

Choose a number between 10 – 19.

Draw two tens frames that would make the number and write the matching number sentences.

Find as different ways to make the number. Each time draw the two tens frames and record the matching number sentences.

Task 2 – Group Task

Choose a number between 20 – 30 and represent this in as many ways as you can using the tens frames.

Record addition and subtraction number sentences that match.

Draw the tens frame.

Task 2 - Independent Tasks

Choose a number between 20 – 30 and draw tens frames that would make the number and write the matching number sentences.

Find different ways to make the number. Draw the tens frames and record the matching number sentences.

Task 3 – Group Task

Malakai has collected 30 pinecones in two bags.
What are all the different ways that he could put the
pinecones into the two bags?

Can you record your ideas using drawings and number
sentences?

Task 3 - Independent Tasks

Litea has 26 leaves and two bags.

What are the different ways that she could put the leaves into the bags?

Can you record your ideas using drawings and number sentences?

Task 4 – Group Task

Sita has 9 toy cars and is given another 6 toy cars for her birthday. How many toy cars does Sita have now?

Leon has 6 toy cars and is given 19 toy cars for his birthday. How many toy cars does Leon have now?

Maka has 7 toy cars and is given another 8 toy cars for his birthday. How many toy cars does Maka have now?

Arapera has 18 toy cars and is given another 7 toy cars for her birthday. How many toy cars does Arapera have now?

Task 4 - Independent Tasks

Sita has 9 toy cars and is given another 5 toy cars for her birthday. How many toy cars does Sita have now?

Leon has 5 toy cars and is given 19 toy cars for his birthday. How many toy cars does Leon have now?

Maka has 4 toy cars and is given another 8 toy cars for his birthday. How many toy cars does Maka have now?

Arapera has 18 toy cars and is given another 4 toy cars for her birthday. How many toy cars does Arapera have now?

$3 + 9 =$

$3 + 19 =$

$8 + 9 =$

$18 + 9 =$

Task 5 – Group Task

Solve the following problems:

$7 + 8 =$

$7 + 18 =$

$17 + 18 =$

$28 + 17 =$

Task 5 - Independent Tasks

Look for patterns and use these to help you solve the problems below:

3 + 2 =

3 + 12 =

13 + 12 =

12 + 23=

6 + 5 =

16 + 5 =

16 + 15 =

25 + 26 =

What patterns did you notice as you solved these problems?

Task 6 – Group Task

Meilani is collecting shells. She has 29 shells and picks up another 6 shells. How many does she have now?

Timo is collecting shells. He has 7 shells and picks up another 48 shells. How many does he have now?

Raj is collecting shells. She has 23 shells and picks up another 19 shells. How many does she have now?

Task 6 - Independent Tasks

Meilani is collecting shells. She has 28 shells and picks up another 4 shells. How many does she have now?

Timo is collecting shells. He has 6 shells and picks up another 49 shells. How many does he have now?

Raj is collecting shells. She has 25 shells and picks up another 18 shells. How many does she have now?

$27 + 6 =$

$9 + 35 =$

$22 + 19 =$

Task 7 – Group Task

Mala has 15 marbles in her collection, and she gave 6 marbles to her brother. How many marbles does she have now?

Haki has 25 marbles in her collection, and she gave 6 marbles to her sister. How many marbles does she have now?

Sima has 18 marbles in his collection, and he gave 9 marbles to her sister. How many marbles does he have now?

Ali has 38 marbles in his collection, and he gave 9 marbles to his brother. How many marbles does he have now?

Task 7 - Independent Tasks

Mala has 13 marbles in her collection, and she gave 4 marbles to her brother. How many marbles does she have now?

Haki has 23 marbles in her collection, and she gave 4 marbles to her sister. How many marbles does she have now?

Sima has 27 marbles in his collection, and he gave 8 marbles to her sister. How many marbles does he have now?

Ali has 37 marbles in his collection, and he gave 8 marbles to his brother. How many marbles does he have now?

$14 - 5 =$

$24 - 5 =$

$16 - 7 =$

$26 - 7 =$

Task 8 – Group Task

$17 - 9 =$

$37 - 19 =$

$13 - 7 =$

$43 - 17 =$

Task 8 - Independent Tasks

Solve these problems.

Look for patterns that will help you solve them.

$15 - 9 =$

$25 - 19 =$

$16 - 7 =$

$46 - 17 =$

$12 - 6 =$

$22 - 6 =$

$18 - 9 =$

$38 - 19 =$

What patterns did you notice? How did they help you?

Task 9 – Group Task

Sesimani helped to pick 26 mandarins from the tree. She gave 17 mandarins away. How many does she have left?

Damon helped to pick 38 mandarins from the tree. He gave 19 mandarins away. How many does he have left?

Daisy helped to pick 44 mandarins from the tree. She gave 16 mandarins away. How many does she have left?

Task 9 - Independent Tasks

Sesimani helped to pick 23 mandarins from the tree. She gave 19 mandarins away. How many does she have left?

Damon helped to pick 35 mandarins from the tree. He gave 17 mandarins away. How many does he have left?

Daisy helped to pick 47 mandarins from the tree. She gave 18 mandarins away. How many does she have left?

$24 - 18 =$

$37 - 19 =$

$45 - 16 =$

Task 10 – Group Task

Work with your partner to work out which number sentences are true or false.

$25 = 25$

$9 + 6 = 15 + 4$

$18 = 9 + 9$

$16 + 8 = 15 + 9$

$15 - 8 = 16 - 9$

$23 - 17 = 23 - 17$

$17 = 25$

Explain why you think the number sentences are true or false.

Task 10 - Independent Tasks

Write your own set of true and false number sentences.

Give your true and false number sentences to your classmates to solve.

Make sure you ask them to explain and justify why they think they are true or false and see if you agree!

Task 11 – Group Task

Can you find the missing numbers?

$9 + 4 = \underline{} + 5$

$5 + 9 = 7 + \underline{}$

$18 + \underline{} = 16 + 5$

$\underline{} + 24 = 7 + 26$

Task 11 - Independent Tasks

Find the missing number

$7 + 8 = \_\_ + 6$

$9 + 5 = 7 + \_\_$

$\_\_ + 14 = 19 + 15$

$17 + \_\_ = 15 + 16$

Task 12 – Group Task

Can you find the missing numbers?

$13 - 8 = 14 - \underline{}$

$14 - 9 = \underline{} - 7$

$21 - \underline{} = 23 - 6$

$\underline{} - 8 = 31 - 7$

Task 12 - Independent Tasks

Find the missing numbers:

$11 - 7 = 12 - \underline{}$

$15 - 8 = \underline{} - 6$

$23 - \underline{} = 25 - 17$

$\underline{} - 36 = 63 - 26$

Task 13 – Group Task

Josiah solves the following problems:

$8 - 0 =$

$56 - 0 =$

$122 - 0 =$

$1359 - 0 =$

He notices a pattern as he solves the problems.

What do you think he notices?

Does this pattern always work?

What other patterns can you find that involve zero?

Do they always work?

Task 13 - Independent Tasks

Find the missing numbers.

$18 = 7 + \underline{\quad}$

$10 - 2 = 6 + \underline{\quad}$

$15 - 8 = \underline{\quad} - 7$

$17 + \underline{\quad} = 18 + 5$

$\underline{\quad} + 29 = 17 + 28$

$23 - 18 = 20 - \underline{\quad}$

Task 14 – Group Task

Mere's teacher asked her to solve $18 + 7 = ?$

Mere adds the two numbers and writes $18 + 7 = 25$.

The teacher then asks her to solve $25 - 18 = ?$

Mere says she already knows the answer.

a) How does she know?

b) Do you think this will work for all numbers? If so, how do you know?

c) Can you write your own examples with other numbers where this relationship works?