



RICH MATHEMATICAL TASK BOOKLET

NUMBER & ALGEBRA

YEAR 1

Task Copy Masters

Phase 1: Year : Number and Algebra

Task 1

Can you find all the combinations to ten?

Record the number sentences that match your combinations to 10 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.

Phase 1: Year : Number and Algebra

Task 1 (independent)

Choose a number between 10 – 19 and draw two tens frames that would make the number and write the matching number sentences.

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

Phase 1: Year : Number and Algebra

Task 2

Malakai has collected 20 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?

Phase 1: Year : Number and Algebra

Task 2 (independent)

Mika has 18 marbles and two bags.

What are the different ways that he could put the marbles into the bags?

Can you record your ideas using drawings and number sentences?

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Task 3

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?

*Phase 1: Year : Number and Algebra***Task 3 (independent)**

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?

$$3 + 9 =$$

$$3 + 19 =$$

$$8 + 9 =$$

$$18 + 9 =$$

*Phase 1: Year : Number and Algebra***Task 4**

Solve the following problems:

$$7 + 8 =$$

$$7 + 18 =$$

$$6 + 5 =$$

$$16 + 5 =$$

*Phase 1: Year : Number and Algebra***Task 4 (independent)**

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

$$3 + 2 =$$

$$3 + 12 =$$

$$13 + 12 =$$

$$4 + 5 =$$

$$14 + 5 =$$

$$14 + 15 =$$

What patterns did you notice as you solved these problems?

*Phase 1: Year : Number and Algebra***Task 5**

Mala has 12 marbles in her collection, and she gave 3 marbles to her brother. How many marbles does she have now?

Haki has 22 marbles in her collection, and she gave 3 marbles to her sister. How many marbles does she have now?

Sima has 15 marbles in his collection, and he gave 6 marbles to her sister. How many marbles does he have now?

Ali has 25 marbles in his collection, and he gave 6 marbles to his brother. How many marbles does he have now?

*Phase 1: Year : Number and Algebra***Task 5 (independent)**

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?

$$14 - 5 =$$

$$24 - 5 =$$

$$16 - 7 =$$

$$26 - 7 =$$

*Phase 1: Year : Number and Algebra***Task 6**

$17 - 9 =$

$27 - 9 =$

$13 - 7 =$

$23 - 7 =$

*Phase 1: Year : Number and Algebra***Task 6 (independent)**

Solve these problems. Look for patterns that will help you solve them.

$$15 - 9 =$$

$$25 - 19 =$$

$$16 - 7 =$$

$$12 - 6 =$$

$$22 - 6 =$$

$$18 - 9 =$$

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

*Phase 1: Year : Number and Algebra***Task 7**

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

$$25 = 25$$

$$9 + 6 = 15 + 4$$

$$18 = 9 + 9$$

$$8 + 6 = 5 + 9$$

$$15 - 7 = 14 - 6$$

$$13 - 7 = 13 - 7$$

$$17 = 25$$

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

Phase 1: Year : Number and Algebra

Task 7 (independent)

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!

*Phase 1: Year : Number and Algebra***Task 8**

Can you find the missing numbers?

$$9 + 4 = _ + 5$$

$$5 + 9 = 7 + _$$

$$18 + _ = 17 + 5$$

$$_ + 24 = 7 + 26$$

*Phase 1: Year : Number and Algebra***Task 8 (independent)**

Find the missing number

$$7 + 8 = _ + 6$$

$$9 + 5 = 7 + _$$

$$_ + 14 = 19 + 15$$

$$17 + _ = 15 + 16$$

*Phase 1: Year : Number and Algebra***Task 9**

Can you find the missing numbers?

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

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

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

$$\underline{\quad} - 6 = 24 - 5$$

*Phase 1: Year : Number and Algebra***Task 9 (independent)**

Find the missing numbers:

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

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

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

$$\underline{\quad} - 16 = 21 - 15$$

*Phase 1: Year : Number and Algebra***Task 10**

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?

*Phase 1: Year : Number and Algebra***Task 10 (independent)**

Find the missing numbers.

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

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

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

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

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

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

*Phase 1: Year : Number and Algebra***Task 11**

Meilani is collecting shells. She has 8 shells and picks up another 6 shells. How many does she have now?

Timo is collecting shells. He has 6 shells and picks up another 18 shells. How many does he have now?

Raj is collecting shells. She has 28 shells and picks up another 6 shells. How many does she have now?

*Phase 1: Year : Number and Algebra***Task 11 (independent)**

Meilani is collecting shells. She has 8 shells and picks up another 4 shells. How many does she have now?

Timo is collecting shells. He has 3 shells and picks up another 19 shells. How many does he have now?

Raj is collecting shells. She has 5 shells and picks up another 18 shells. How many does she have now?

$$7 + 6 =$$

$$9 + 15 =$$

$$12 + 9 =$$

*Phase 1: Year : Number and Algebra***Task 12**

Sesimani helped to pick 16 mandarins from the tree. She gave 7 mandarins away. How many does she have left?

Damon helped to pick 18 mandarins from the tree. He gave 9 mandarins away. How many does he have left?

Daisy helped to pick 14 mandarins from the tree. She gave 6 mandarins away. How many does she have left?