



RICH MATHEMATICAL TASK BOOKLET

NUMBER & ALGEBRA

YEAR 4

Task Copy Masters

*Phase 2: Year 4: Number and Algebra***Task 1**

Solve the equations. What do you notice?

$$165 + 32 =$$

$$144 + 314 =$$

$$421 + 545 =$$

Represent your thinking using equations and an empty number line.

*Phase 2: Year 4: Number and Algebra***Task 1 (independent)**

Solve the following problems:

$$55 + 22 =$$

$$34 + 35 =$$

$$155 + 43 =$$

$$53 + 236 =$$

$$451 + 246 =$$

What patterns do you notice?

Phase 2: Year 4: Number and Algebra

Task 2

Urita collected 174 hihi. She uses 62 hihi to make a kahoā hihi for her cousin. How many hihi does Urita have left?

Mele collected 359 hihi. She uses 126 hihi to make some kahoā hihi for her cousins. How many hihi does Mele have left?

Jayson collected 567 hihi. He uses 345 to make some kahoā hihi for his cousins. How many hihi does Jayson have left?

*Phase 2: Year 4: Number and Algebra***Task 2 (independent)**

Urita collected 97 hihi. She uses 62 hihi to make a kahoā hihi for her cousin. How many hihi does Urita have left?

Mele collected 249 hihi. She uses 137 hihi to make some kahoā hihi for her cousins. How many hihi does Mele have left?

Kali collected 456 hihi. She uses 232 hihi to make some kahoā hihi for her cousins. How many hihi does Kali have left?

Jayson collected 675 hihi. He uses 351 to make some kahoā hihi for his cousins. How many hihi does Jayson have left?

*Phase 2: Year 4: Number and Algebra***Task 3**

Talia has 237 Pokemon cards in her collection. She is given 54 more Pokemon cards. How many Pokemon cards does Talia have altogether?

Sose has 468 Pokemon cards in her collection. Her cousin gave her his collection of 326 cards. How many Pokemon cards does Sose have altogether now?

Tasi has a mega Pokemon card collection with 873 cards. He is given 456 more Pokemon cards. How many Pokemon cards does Tasi have altogether?

*Phase 2: Year 4: Number and Algebra***Task 3 (independent)**

Tiana and Hamu are playing with Lego blocks. Tiana has 236 blocks. Hamu has 58 blocks. How many Lego blocks do they have altogether?

Soane and Frankie are playing with Lego blocks. Soane has 244 blocks. Frankie has 339 blocks. How many Lego blocks do they have altogether?

Lily and Regan are playing with Lego blocks. Lily has 387 blocks. Regan has 338 blocks. How many Lego blocks do they have altogether?

*Phase 2: Year 4: Number and Algebra***Task 4**

At the family reunion, there were 143 people. There were 68 adults, and the rest were children. How many children were there?

At the family reunion, there were 421 people. There were 219 adults, and the rest were children. How many children were there?

At the family reunion, there were 514 people. There were 386 adults, and the rest were children. How many children were there?

*Phase 2: Year 4: Number and Algebra***Task 4 (independent)**

Mae had 247 stickers in her collection. She used 69 to decorate her bedroom. How many stickers does she have left?

Timo had 432 stickers in his collection. He used 215 to decorate his bedroom. How many stickers does he have left?

Jeong Suk had 764 stickers in he collection. She used 546 to decorate her bedroom. How many stickers does she have left?

*Phase 2: Year 4: Number and Algebra***Task 5**

Tirata had made 146 coconut rolls to sell at the markets. She asked Mereana to make some more. Now Tirata has 214 coconut rolls to sell. How many coconut rolls did Mereana make?

Room 12 had a box of books to sell at the fair. They were given another box of books with 119 books in it. Now they have 302 books to sell. How many books were in the first box?

Marama had 241 containers of poke to sell at the market. She sold some and had 88 containers left. How many containers of poke did she sell?

The book stall at the fair had lots of books to sell. They sold 277 books and had 245 books left. How many books did they have to start with?

*Phase 2: Year 4: Number and Algebra***Task 5 (independent)**

Read each problem and write the equation to match the problem situation before you solve the task.

The helpers at the sausage sizzle had cooked 78 sausages in the morning. They cooked some more in the afternoon. Over the day they cooked 165 cooked sausages. How many did they cook in the afternoon?

At the drinks stall, they sold some bottles of lemonade and 236 bottles of orange. Altogether they sold 422 bottles of drinks. How many bottles of lemonade did they sell?

The helpers at the sausage sizzle sold 437 sausages. They sold some chicken sausages and 289 pork sausages. How many chicken sausages did they sell?

At the drinks stall they sold lots of bottles of drink. They sold 455 bottles over the day and had 161 bottles left. How many bottles did they start with?

*Phase 2: Year 4: Number and Algebra***Task 6**

Solve the following problems:

$$445 + 397 =$$

$$2256 + 589 =$$

$$675 - 237 =$$

$$1452 - 394 =$$

*Phase 2: Year 4: Number and Algebra***Task 6 (independent)**

Solve the following problems:

$$1266 + 237 =$$

$$656 + 3128 =$$

$$753 - 418 =$$

$$3671 - 539 =$$

Represent your thinking using equations and on an empty number line.

*Phase 2: Year 4: Number and Algebra***Task 7**

Can you find the missing numbers?

$$47 + 16 = \underline{\quad} + 15$$

$$\underline{\quad} + 77 = 36 + 79$$

$$129 + \underline{\quad} = 139 + 68$$

$$235 + 58 = 234 + \underline{\quad}$$

*Phase 2: Year 4: Number and Algebra***Task 7 (independent)**

Are these number sentences true or false? Justify your reasoning.

$$254 = 264 - 10$$

$$78 - 4 - 3 = 78 - 7$$

$$126 + 48 = 127 + 49$$

$$572 = 572$$

$$276 + 49 = 278 + 47$$

Write your own true and false number sentences.

*Phase 2: Year 4: Number and Algebra***Task 8**

Find the missing numbers:

$$41 - 18 = \underline{\quad} - 16$$

$$164 - 128 = 165 - \underline{\quad}$$

$$\underline{\quad} - 125 = 162 - 115$$

$$181 - \underline{\quad} = 183 - 39$$

*Phase 2: Year 4: Number and Algebra***Task 8 (independent)**

Find the missing numbers:

$$24 + 17 = _ + 18$$

$$_ + 125 = 187 + 115$$

$$52 - _ = 53 - 19$$

$$63 - 47 = 68 - _$$

$$177 + 289 = _ + 189$$

$$_ - 87 = 351 - 187$$

Use arrows to show your thinking.

*Phase 2: Year 4: Number and Algebra***Task 9**

Maryssa solves $5489 + 2276 = 7765$

Her teacher then asks her to solve the following equations:

$$2276 + 5489 =$$

$$7765 - 2276 =$$

$$7765 - 5489 =$$

Maryssa looks at the equations and says that she already knows the answers without solving each of them.

What patterns do you think that Maryssa noticed?

Do these patterns always work?

Write your own sets of equations with addition and subtraction that use the same patterns.

*Phase 2: Year 4: Number and Algebra***Task 9 (independent)**

Find the missing numbers:

$$1131 - \underline{\quad} = 1012$$

$$\underline{\quad} + 577 = 1691$$

$$525 = \underline{\quad} + \underline{\quad}$$

$$631 = \underline{\quad} - \underline{\quad}$$

$$64 + 39 = \underline{\quad} + 37$$

$$154 - \underline{\quad} = 156 - 89$$

*Phase 2: Year 4: Number and Algebra***Task 10**

Sima solves $48 + 27 + 55 = 130$

His teacher then asks him to solve $27 + 55 + 48 =$

Sima says he already knows the answer.

- a) How does he know?
- b) Do you think this will work for all numbers? If so, how do you know?
- c) Write your own examples with other numbers where this relationship works.
- d) Would this work with other operations (subtraction, multiplication, division)?

*Phase 2: Year 4: Number and Algebra***Task 10 (independent)**

The following number sentence is true:

$$72 - 57 = 15$$

Is $72 - 57 - 8 = 15 - 8$ true or false?

Is $72 - 57 + 36 = 15 + 34$ true or false?

How do you know?

- a) Do you think this will work for other numbers? Can you explain why or why not?

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

*Phase 2: Year 4: Number and Algebra***Task 11**

You have \$12 to buy lunch from the school canteen. What are some different ways to order lunch (food and drink) from the school canteen? How much change would you have?

FOOD	
Sandwiches	\$5
Pizza slice	\$4
Mac'n'cheese	\$4
Pie	\$5
Sushi	\$7
Cookie	\$3
Slice	\$3
Museli bar	\$2
Chips	\$1
DRINKS	
Fruit juice	\$3
Milk	\$2
Smoothie	\$5

Phase 2: Year 4: Number and Algebra

Task 11 (independent)

The school is holding a sausage sizzle fundraiser.

Food and drink prices are:

Sausage \$2

Sausage in bread \$3.50

Drink \$1.50

Older students get very hungry and sometimes order more than one sausage!

Students must pay cash and change can be given.

What are some different ways to order and how might notes and coins be used to pay?

*Phase 2: Year 4: Number and Algebra***Task 12**

Solve the following problems:

$$2342 + 5335 =$$

$$4876 - 3653 =$$

$$675 + 1835 =$$

$$2451 - 439 =$$

$$3978 + 2413 =$$

$$6784 - 4669 =$$