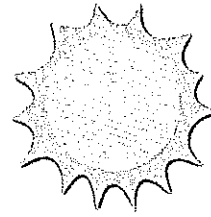


Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 1 Lesson 1



1. Fill in the blanks with numbers.

a) $700 = \underline{\quad} 7 \text{ hundreds} = 70 \text{ tens}$

If your child has difficulty naming 700 using only tens, ask them to think about how they would show \$100 using only ten-dollar bills. Then ask how many \$10 bills it would take to show 2 hundred, 3 hundred...all the way to 7 hundred.

b) Three hundred twenty = $\underline{3} \underline{2} \underline{0}$

c) $396 = \underline{3} \underline{\quad} \underline{\quad} \text{ hundreds } \underline{9} \underline{\quad} \underline{\quad} \text{ tens } \underline{6} \underline{\quad} \underline{\quad} \text{ ones}$

2. Arrange in order beginning with the smallest:

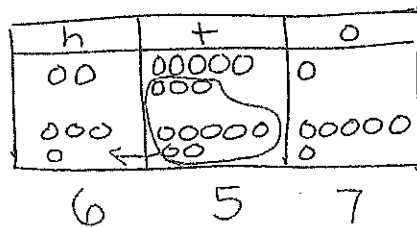
210, 201, 102, 120

$\underline{\quad} \underline{1} \underline{0} \underline{2} \underline{\quad}, \underline{\quad} \underline{1} \underline{2} \underline{0} \underline{\quad}, \underline{\quad} \underline{2} \underline{0} \underline{1} \underline{\quad}, \underline{\quad} \underline{2} \underline{1} \underline{0} \underline{\quad}$

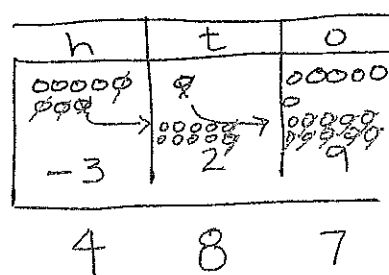
3. Add or Subtract

(VIDEOS: ADDING WITH TRADING & SUBTRACTING WITH TRADING)

$$\begin{array}{r} 1 \\ \text{a) } 281 \\ + 376 \\ \hline 657 \end{array}$$



$$\begin{array}{r} 7 \text{ } 10 \text{ } 16 \\ \text{b) } 816 \\ - 329 \\ \hline 487 \end{array}$$



4. Fill in the blank with cm or m.

a) The height of your room is about 4 m .

b) The length of a pencil is 20 cm .

BLANK

Singapore Summer Shape Ups: Level 2 - Thinking Guide

5. Write $<$, $>$, or $=$ in each blank.

a) 6×4 $=$ $6 + 6 + 6 + 6$ 4 sixes
is the same
as 4 sixes

b) 3×4 $<$ 5×3 4 threes is
less than 5 threes

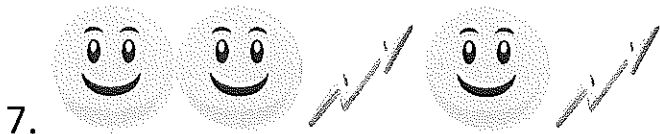
6. Mrs. Burns drinks 3 cups of coffee each day. How many cups of coffee does she drink in one week?

3	3	3	3	3	3	3
M	T	W	T	F	S	S

$$3 \times 7 = 21$$

$$\text{or } 3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$$

Mrs. Burns drinks 21 cups of coffee in one week.



What fraction of the shapes are faces? 3 out of 5 or $3/5$

What fraction of the shapes are lightning bolts?

2 out of 5 or $2/5$

$$\frac{\boxed{3}}{\boxed{5}} + \frac{\boxed{2}}{\boxed{5}} = 1 \text{ whole}$$

5 fifths = 1 whole

we already have 3 fifths

so we need 2 more.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 1 Lesson 2

1. Fill in the blanks with in., ft., or yd.

a) Your classroom is about 30 ____ft____ wide.

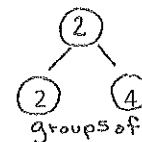
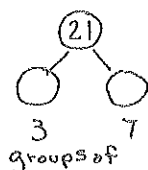
b) The football field is 100 ____yds____ long.



2. Fill in the blanks. (VIDEO: STRATEGIES FOR LEARNING MULTIPLICATION FACTS)

a) $7 \times 2 =$ __14__ 2 sevens or $7+7$ b) $3 \times 5 =$ __15__

c) $21 \div 3 =$ __7__ d) $8 \div 2 =$ __4__



3. Use mental math to solve.

a) $550 - 70 =$ __480__

Think: $(450 + 100) - 70 = 450 + (100 - 70) = 450 + 30 = 480$

These equations are an adult representation of the thinking strategy. Your child will likely verbalize these ideas rather than writing them. In addition your child may have another strategy for computing this difference mentally.

b) $729 - 400 =$ __329__

Think: 7 hundreds 2 tens 9 ones take away 4 hundreds = 3 hundreds 2 tens 9 ones = 329

c) $46 + 99 =$ __145__

(VIDEO: MENTAL MATH - ADDITION/SUBTRACTION)

Think: $46 + 100$ and then take away the extra... $46 + 100 = 146 - 1 = 145$

d) $184 + 40 =$ __224__

Think: 1 hundred 8 tens 4 ones + 4 tens = 1 hundred + 12 tens + 4 ones
= 1 hundred + (1 hundred + 2 tens) + 4 ones = 224

Singapore Summer Shape Ups: Level 2 - Thinking Guide

4. Fill in each blank.

a) $427 = \underline{\quad 4 \quad}$ hundreds $\underline{\quad 2 \quad}$ tens $\underline{\quad 7 \quad}$ ones

b) $420 = \underline{\quad 42 \quad}$ tens

Counting money is a great way to help children understand naming numbers with different units. Think of \$420 but using only \$10 bills. How many would we need?

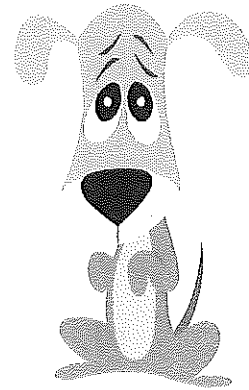
c) $\$8.43 = \underline{\quad 843 \quad}$ ¢

d) $368\text{¢} = \$\underline{\quad 3.68 \quad}$ \$3.68 or 3 dollars 68 cents

5. Mrs. Roberts bought 5 treats for each of her 3 dogs. How many treats did she buy altogether?

$$5 + 5 + 5 = 15 \text{ or } 5 \times 3 = 15$$

Mrs. Roberts bought 15 treats altogether.



6. Order the following fractions from least to greatest.

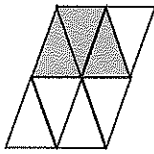
(VIDEO: COMPARING FRACTIONS)

$$\frac{1}{6}, \frac{1}{2}, \frac{1}{3}, \frac{1}{9} \qquad \frac{1}{9}, \frac{1}{6}, \frac{1}{3}, \frac{1}{2}$$

If your child has difficulty ordering these fractions, ask them if they would rather share a cake with 2 friends or 9 friends and why. They will most likely be able to tell you that sharing with fewer people means bigger parts (pieces). This intuitive reasoning should help them decide if one of nine pieces or one of two pieces is larger.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

5. What fraction of the shape is shaded?

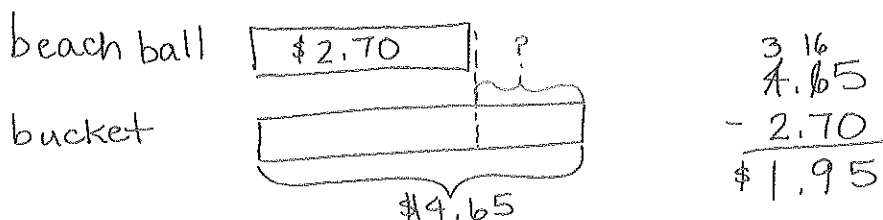


$$\frac{3}{8}$$

or 3 equal parts out of 8 equal parts.

6. A beach ball costs \$2.70. A sand bucket costs \$4.65.

(VIDEO: MODEL DRAWING SUBTRACTION – HOW MANY MORE?)



The bucket costs \$ 1.95 more than the beach ball.

“More than” is a complex idea for second graders. Help your child navigate this problem by asking “How much would we need to add to the beach ball’s bar to make it the same as the bucket’s bar?”

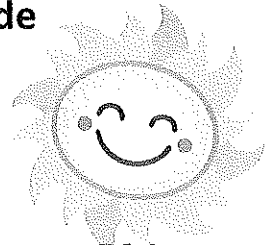
b) How much do they cost altogether?

$$\begin{array}{r} 1 \\ \$2.70 \\ + \$4.65 \\ \hline \$7.35 \end{array}$$

They cost \$ 7.35 altogether.

Week 1 is done! Great job! Keep up the good work!

Singapore Summer Shape Ups: Level 2 - Thinking Guide



Week 2 Lesson 1

1. Complete the following number patterns.

a) 584, 574, 564, 554, 544, 534, 524

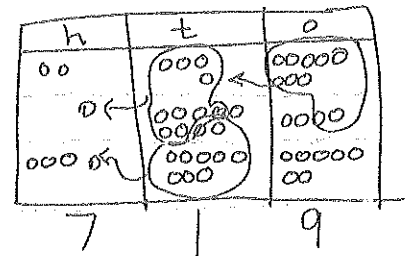
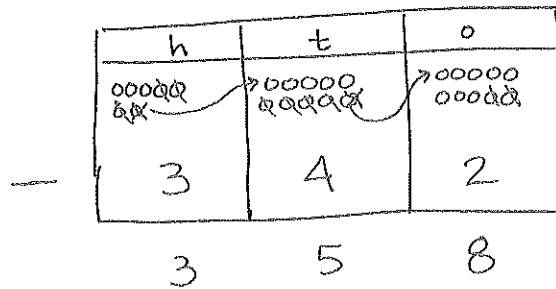
b) 672, 674, 676, 678, 680, 682

2. Add or Subtract.

(VIDEOS: ADDING WITH TRADING & SUBTRACTING WITH TRADING)

$$\begin{array}{r} \overset{9}{\cancel{6}10} \\ 700 \\ - 342 \\ \hline 358 \end{array}$$

$$\begin{array}{r} 21 \\ 238 \\ + 94 \\ + 387 \\ \hline 719 \end{array}$$



3. Fill in the blank with kg or g.

A book weights about 2 kg.



b) A grape weighs about 10 g.



Singapore Summer Shape Ups: Level 2 - Thinking Guide

4. Fill in the blanks.

a) $250 = \underline{25} \text{ tens} = \underline{250} \text{ ones}$

b) Three hundred ten = $\underline{310}$

c) $986 = \underline{9} \text{ hundreds } \underline{8} \text{ tens } \underline{6} \text{ ones}$

5. Mrs. Croussillac has 190 sea shells altogether. 84 of them are cracked. (VIDEO: SUBTRACTING WITH TRADING)

a) How many sea shells are not cracked?

$$\begin{array}{r} 8 \ 1 \\ 190 \\ - 84 \\ \hline 106 \end{array}$$

$\underline{106}$ sea shells are not cracked.

b) How many more uncracked sea shells does she have than cracked sea shells? (VIDEO: MODEL DRAWING – HOW MANY MORE?)

$$\begin{array}{r} 106 \\ - 84 \\ \hline 22 \end{array}$$

$10 \text{ tens} - 8 \text{ tens} = 2 \text{ tens}$
 $6 \text{ ones} - 4 \text{ ones} = 2 \text{ ones}$

She has $\underline{22}$ more uncracked sea shells than cracked sea shells.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 2 Lesson 2



1. Fill in the blanks with numbers.

a) 1000 pennies = 10 dollars

10 sets of 100 pennies

b) Three hundred six = 306

2. Add or Subtract.

(VIDEO: ADDING WITH TRADING & SUBTRACTING WITH TRADING)

a) 907

- 738

169

b) 399

+ 282

681

3. Caroline had a piece of string 350 cm long. She used 95 cm to tie her kite. She used 180 cm for flying the kite.

a) What was the total amount of string used for the kite?

95

+ 180

275

$100 + 170 + 5 = 275$

She used 275 cm of string.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

- b) How much string was left over?

$$\begin{array}{r} 14 \\ 2 \overline{) 350} \\ \underline{350} \\ 75 \end{array}$$

75 cm of string was left over.

- c) How much shorter was the piece used to tie the kite than the piece used for flying the kite?

$$\begin{array}{r} 17 \text{ } 10 \\ 180 \\ \underline{- 95} \\ 85 \end{array}$$

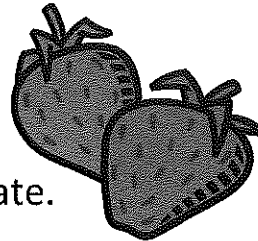
The piece used for tying was 85 cm shorter than the piece used for flying.

4. Michael put 27 strawberries equally on 3 plates. How many strawberries were on each plate?

$$27 \div 3 = 9$$



9 strawberries were on each plate.



5. Use mental math to solve.

(VIDEO: MENTAL MATH – ADDITION/SUBTRACTION)

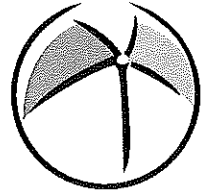
a) $969 - 400 = \underline{569}$

b) $484 + 70 = \underline{554}$ 48 tens + 7 tens = 55 tens + 4 ones

c) $315 - 99 = \underline{216}$ Think: $315 - 100 = 215$, but subtracted 1 too many so add 1

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 2 Lesson 3



1. Fill in the blanks.

(VIDEO: STRATEGIES FOR LEARNING MULTIPLICATION FACTS)

a) $45 \div 5 = \underline{9}$

b) $7 \times 4 = \underline{28}$

c) $36 \div 4 = \underline{9}$

d) $10 \times 5 = \underline{50}$

2. Sarah had a book to read for the summer. She read 5 pages a day for one week, but still had 35 pages left to read.

a) How many pages did Sarah read in one week?

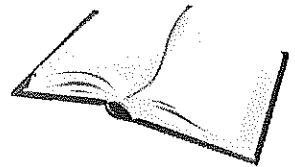
$$5 \times 7 = 35 \text{ or } 5 + 5 + 5 + 5 + 5 + 5 + 5$$

She read 35 pages.

b) How many pages were in the book altogether?

The pages Sarah read + the pages that were left to read.

$$35 + 35 = 70$$



The book had 70 pages altogether.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

- c) How many more days will she have to read if she continues to read 5 pages each day?

$$35 \div 5 = 7$$

If your child has difficulty, let them act this out with 35 beans, pennies, noodles, etc. Ask them to make groups of 5 until there are no counters left, then count the number of groups they made.

She will have to read 7 more days.

- d) How many weeks will it take her to finish the book?

7 days is 1 week

It will take her 1 week(s) to finish the book.

- 3) Ms. O has planned a field trip for the 3rd graders. 26 students are going in cars and each car holds 4 students. How many cars are needed?

The standard division algorithm is not appropriate for second graders. Instead use "repeated subtraction." Start with 26. Make groups of 4 (one car) until there are not enough to make another group. This "left over" is the remainder. However, in this story, the leftover children still need a ride to the field trip, so one more car is needed.

$$26 - 4 - 4 - 4 - 4 - 4 - 4 = 2$$

$26 \div 4 = 6$ with 2 left over (6 groups of 4 children with 2 children left over)

 7 cars are needed.

Singapore Summer Shape Ups: Level 2 - Thinking Guide



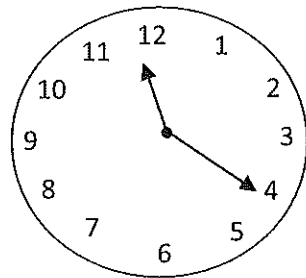
a) What fraction of the shapes are stars? 6/9 or 2/3

6 shapes out of 9 shapes are stars. 2 groups of shapes out of 3 groups of shapes are stars.

b) What fraction of the shapes are hearts? 3/9 or 1/3

3 shapes out of 9 shapes are hearts or 1 group of shapes out of 3 groups of shapes are hearts.

5.



a) It is 11 : 20

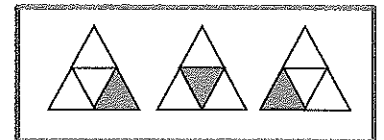
b) It is 20 minutes past

11.

c) If lunch is in 25 minutes, what time is lunch?

11 : 45

6. Continue the pattern with three more triangles:



Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 3 Lesson 1

1. Write $>$, $<$, or $=$ in the blank.

a) $508 \underline{\quad} > \underline{\quad} 58$

b) $400 - 20 \underline{\quad} < \underline{\quad} 400 + 20$

Rather than simply calculating the answers to both sides of the inequality, ask your child to think of 400 as the starting place. On the left, something is being taken away from 400. On the right, something is being added to 400. Logically, which will be larger?

c) $4 \times 5 \underline{\quad} < \underline{\quad} 4 + 4 + 4 + 4 + 4 + 4$
5 fours is less than 6 fours

d) $3 \times 4 \underline{\quad} = \underline{\quad} 6 \times 2$

2. Fill in the blanks with lb or oz.

a) A baby weighs about 8 lbs .

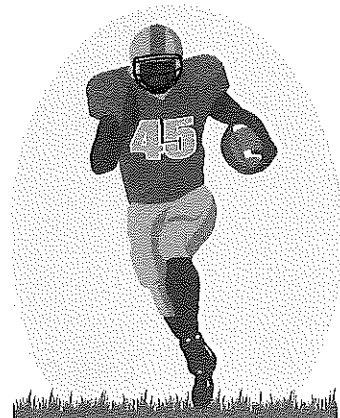
b) A small piece of fruit weighs about 4 oz .

3. A basketball player weighs 178 lbs. A football player is 156 lbs heavier.

a) How much does the football player weigh?

$$\begin{array}{r} 11 \\ 178 \\ + 156 \\ \hline 334 \end{array}$$

Or think about place value units:
1 hundred + 1 hundred = 2 hundreds
7 tens + 5 tens = 12 tens
8 ones + 6 ones = 14 ones
= 3 hundreds, 3 tens, 4 ones



The football player weighs 334 lbs.



Singapore Summer Shape Ups: Level 2 - Thinking Guide

- b) How much do the football and basketball players weigh altogether? 178 (400 + 100 + 12)

$$\begin{array}{r} + 334 \\ \hline 512 \end{array} \quad \text{or 4 hundreds, 10 tens, 12 ones}$$

The players weigh 512 lbs. altogether.

4. 

Encourage your child to see the array as 6 equal groups of 3 for (a) and 3 equal groups of 6 in (b). Then use the whole (18) and the relationship between the parts/whole to answer (c) and (d).

a) $3 \times 6 = \underline{18}$

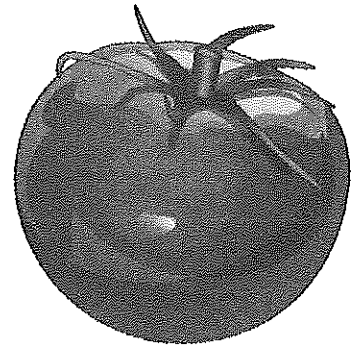
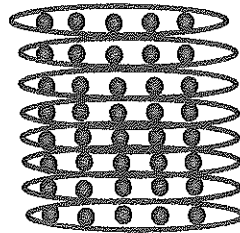
b) $6 \times 3 = \underline{18}$

c) $\underline{18} \div 3 = 6$

d) $\underline{18} \div 6 = 3$

5. Joseph paid \$40 for 8 kg of tomatoes. How much does 1 kg of tomatoes cost?

$$40 \div 8 = 5$$



1 kg of tomatoes costs \$ 5.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

6. If 17 students are in 3 rows, how many students are left out?

```

* * * * *
* * * * *
* * * * *
* *
    
```

 2 students are left out.

7. Add or Subtract.

(VIDEOS: ADDITION WITH TRADING & SUBTRACTING WITH TRADING)

$$\begin{array}{r}
 \text{a) } \quad \overset{4}{\$8.84} \\
 \quad \quad \underline{- 3.94} \\
 \quad \quad \quad \$1.90
 \end{array}$$

$$\begin{array}{r}
 \text{b) } \quad \overset{1}{\$6.75} \\
 \quad \quad \underline{+ 2.85} \\
 \quad \quad \quad \$9.60
 \end{array}$$

$$8. \quad \frac{\boxed{5}}{\boxed{9}} + \frac{\boxed{4}}{\boxed{9}} = 1 \text{ whole}$$

9 ninths makes a whole.
We have 5 ninths so we
Need 4 more ninths.

$$\frac{\boxed{1}}{\boxed{7}} + \frac{\boxed{6}}{\boxed{7}} = 1 \text{ whole}$$

7 sevenths make a whole.
We have 1 seventh so we
need 6 more sevenths.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 3 Lesson 2

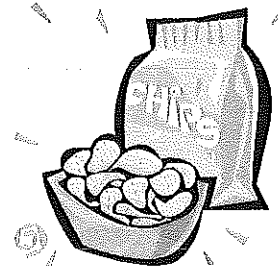
1. Christopher wanted a coke and chips from the concession stand. A coke costs 50¢ and chips cost 40¢. If he gave the concession stand man 4 quarters, how much change did he get back?

$$0.50 + 0.40 = 0.90$$

$$4 \text{ quarters is one dollar, so } 1.00$$

$$1.00 - 0.90 = 0.10 = 10 \text{ cents}$$

He received 10 ¢ in change.



2. Use mental math.

a) $\$8 - \$6.75 = \underline{\$1.25}$

Count on from \$6.75 ... 25 cents to 7.00, then \$1.00 more to make \$8.00.

b) $\$2.40 - 25¢ = \underline{\$2.15}$

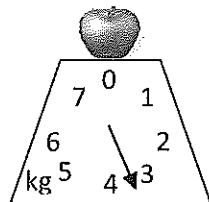
40 cents - 25 cents = 15 cents, but we still have the 2 dollars, so 2.15

c) $\$4 - 35¢ = \underline{\$3.65}$

\$4.00 is \$3 + \$1, so we can subtract 35 cents from \$1. 100 cents - 35 cents = 65 cents. Add back the \$3 we didn't use.

$$\begin{array}{r} 4 - 35¢ \\ \hline \$3 \quad \$1 \\ \hline = \$3.65 \end{array}$$

3. How much does the apple weigh? (Remember! 1 kg = 1000g)



How much does the apple weigh?

3.5 kg = 3 kg 500 g

Singapore Summer Shape Ups: Level 2 - Thinking Guide

4. Fill in the blank with $<$, $>$, or $=$.

a) $2 \times 7 = \underline{\quad} < \underline{\quad} 2 \times 8$

b) $2 \times 7 = \underline{\quad} = \underline{\quad} 7 + 7$ 2 sevens is the same as 2 sevens

c) $5 \times 9 = \underline{\quad} > \underline{\quad} 9 + 9 + 9 + 9$ 5 nines is more than 4 nines

5. An astronaut action figure costs \$8.90 and a cowboy action figure costs \$5.85. (VIDEO: SUBTRACTION – HOW MANY MORE?)

a) How much more does the astronaut cost than the cowboy?

$$\begin{array}{r} 8\ 10 \\ 8.\cancel{90} \\ - 5.85 \\ \hline 3.05 \end{array} \quad \begin{array}{l} 8.00 - 5.00 = 3.00 \\ 0.90 - 0.85 = 0.05 \end{array}$$

The astronaut costs \$ 3.05 more than the cowboy.

b) If you wanted to buy both toys, how much money would you need?

$$\begin{array}{r} 1 \\ 8.90 \\ + 5.85 \\ \hline 14.75 \end{array} \quad \begin{array}{l} 13 \text{ ones, } 17 \text{ tenths, } 5 \text{ hundredths} \\ \text{or } 13.00 + 1.70 + 0.05 \end{array}$$

To buy both toys, I would need \$14.75.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 3 Lesson 3

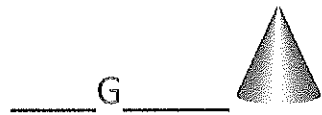
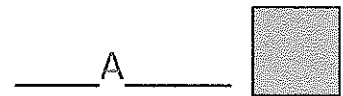
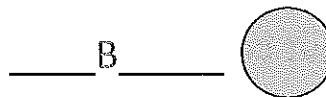
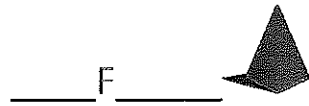
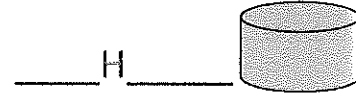
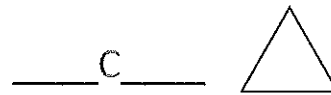


1. Fill in the blanks.

a) $2.8 \text{ kg} = \underline{2} \text{ kg } \underline{800} \text{ g}$

b) $5.6 \text{ kg} = \underline{5} \text{ kg } \underline{600} \text{ g}$

2. Match the word to the figure shown.



A. Square

D. Sphere

G. Cone

B. Circle

E. Prism

H. Cylinder

C. Triangle

F. Pyramid

Singapore Summer Shape Ups: Level 2 - Thinking Guide

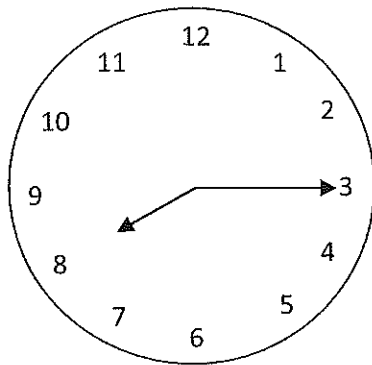
5. Fill in the blanks with in., ft., or yd.

a) The door of your house is about 10 ___ft___ tall.

b) A tree is about 10 ___yds___ tall.

c) A book at school is about 10 ___in___ long.

6.



It is 8:15

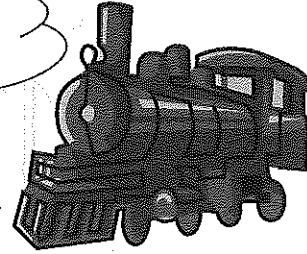
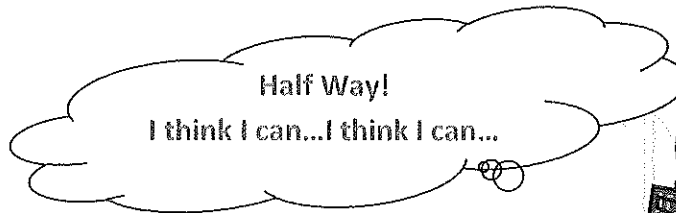


It is 15 minutes past the hour.

If it took Sally 10 minutes to get home, she would arrive home at 8:25.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 4 Lesson 1



1. Complete the following regular number patterns.

a) 333, 336, 339, 342, 345, 348

b) 586, 596, 606, 616, 626, 636, 646

2. Arrange in order from smallest to largest.

a) 270, 207, 702, 720 207, 270, 702, 720

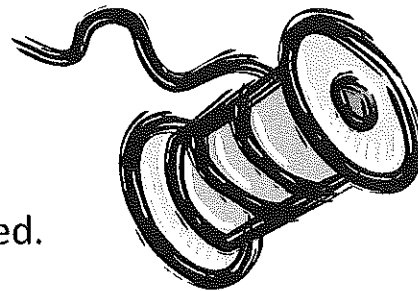
b) 303, 330, 333, 33 33, 303, 330, 333

3. Madison has 96 cm of thread to sew on a button and repair a hole in her shirt. It takes 32 cm to sew on the button and 56 cm to repair the hole.

a) How much thread is required to sew the button and repair the hole?

$$\begin{array}{r} 32 \\ + 56 \\ \hline 88 \end{array}$$

88 cm of thread are needed.



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b) How much thread is left over?

$$\begin{array}{r} 8\ 16 \\ \cancel{88} \\ - 88 \\ \hline 8 \end{array}$$

8 cm of thread are left over.

4. Fill in blanks.



a) Box A weighs 40 g.

$$40 + 40 = 80$$

b) Box B weighs 120 g.

$$40 + 40 + 40 = 120$$

c) Box B is heavier than Box A.

(Write "heavier" or "lighter".)

5. Add or Subtract.

(VIDEOS: ADDING WITH TRADING & SUBTRACTING WITH TRADING)

$$\begin{array}{r} 1\ 1 \\ \text{a) } \$3.72 \\ 5.33 \\ + 1.65 \\ \hline \$10.70 \end{array}$$

$$\begin{array}{r} 8\ 17\ 16 \\ \text{b) } \$9.76 \\ - 6.88 \\ \hline \$2.88 \end{array}$$

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Week 4 Lesson 2



1. Fill in the blanks.

a) $4 \times 6 = \underline{\quad 24 \quad}$ d) $10 \times 7 = \underline{\quad 70 \quad}$

b) $36 \div 4 = \underline{\quad 9 \quad}$ e) $4 \times 8 = \underline{\quad 32 \quad}$

c) $20 \div 5 = \underline{\quad 4 \quad}$ f) $45 \div 5 = \underline{\quad 9 \quad}$

Remember that fluency with multiplication facts is not the goal of second grade work. Second graders have learned to think of multiplication as repeated addition of equal groups. So the answer to 4×6 can be found by skip counting by 4's

2. Fill in the blanks with kg or g.

a) To measure a pencil, it would be best to use g.

b) To measure 3 books, it would be best to use kg.

3. Cody has 99 quarters. He has 56 less dimes than quarters.

a) How many dimes does he have?

$$99 - 56 = 43$$

Cody has 43 dimes.

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b) How many coins does he have in all?

(VIDEO: MENTAL MATH – ADDITION/SUBTRACTION)

$$99 + 43 = 142$$



Cody has 142 coins in all.

4. Write $<$, $>$, or $=$ in each blank.

a) 6×3 $<$ 6×4

b) $3 + 3 + 3 + 3 + 3 + 3$ $>$ 3×5
6 threes is more than 5 threes

c) 4×4 $=$ $8 + 8$

d) $15 \div 3$ $=$ $15 - 10$

e) 504 $>$ 405

f) $400 - 40$ $>$ $300 + 40$

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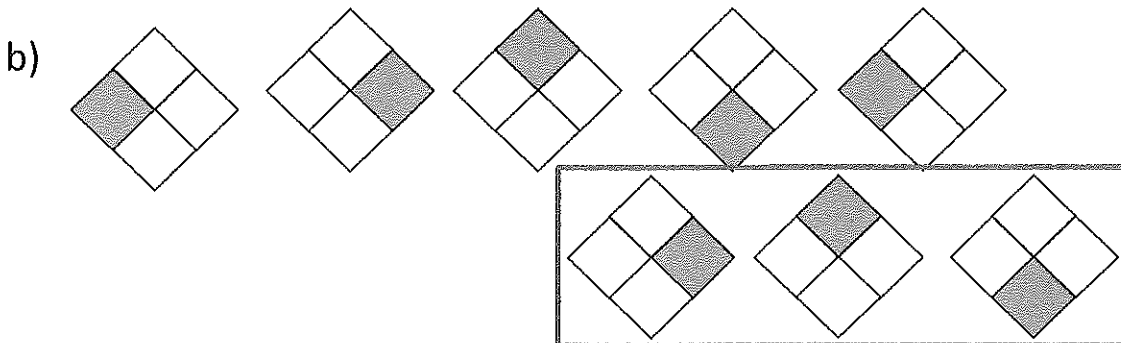
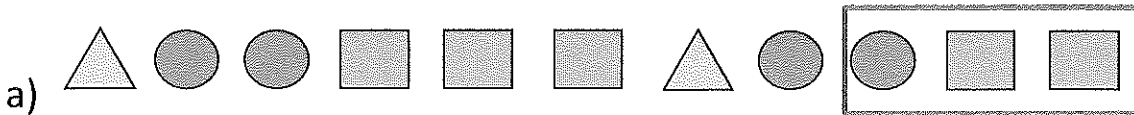
5. Add or Subtract.

(VIDEOS: ADDING WITH TRADING & SUBTRACTING WITH TRADING)

$$\begin{array}{r} \text{a) } \quad \overset{11}{592} \\ + 388 \\ \hline 980 \end{array}$$

$$\begin{array}{r} \text{b) } \quad \overset{710}{804} \\ - 292 \\ \hline 512 \end{array}$$

6. Continue the pattern with three more shapes.



7. Write $>$, $<$, or $=$ in each blank.

a) 1 day $\underline{\quad}>\underline{\quad}$ 16 hours


b) 25 days $\underline{\quad}<\underline{\quad}$ 1 month






c) 16 weeks $\underline{\quad}=\underline{\quad}$ 4 months



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Week 4 Lesson 3

1. Each  stands for 5 medals won at the track meet.

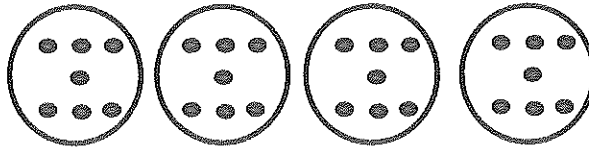
Gregory	
Ian	
Ty	
Josh	
Nick	

- a) ___Ty___ won the most medals.
- b) _Gregory_____ won the least medals.
- c) Ty has ___10___ more medals than Nick.
- d) Ian has ___20___ fewer medals than Ty.
- e) Josh has ___15___ medals.
- f) Ty has ___40___ medals.

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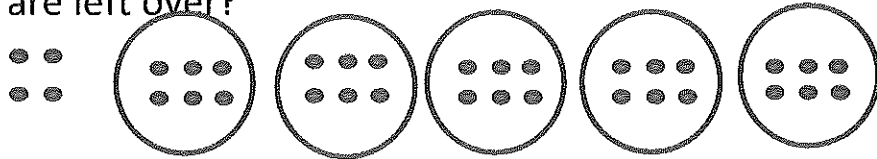
2. 28 stickers were divided equally among 4 students. How many stickers did each student get?

$$28 \div 4 = 7$$



Each student got 7 stickers.

3. If 34 tickets for Carnival Knight were put into 5 piles, how many tickets are left over?



4 tickets are left over.

4. Add or subtract mentally.

(VIDEO: MENTAL MATH – ADDITION/SUBTRACTION)

a) $62 + 5 = \underline{67}$ b) $330 + 70 = \underline{440}$

$30 + 70 = 100 + 300 = 400$

c) $52 - 7 = \underline{45}$ d) $503 - 9 = \underline{494}$

$52 - 2$ is 50 and then subtract 5 more

$503 - 10 = 493$, but 9 is 1 less than 10
so 493 becomes 494

$$\begin{array}{r} 52 - 7 \\ 2 \overset{\wedge}{5} \end{array}$$

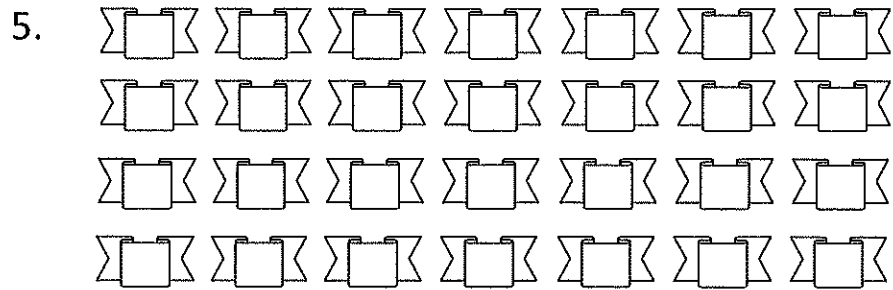
e) $75 - 46 = \underline{29}$ f) $97 + 376 = \underline{473}$

$75 - 45 = 30$, but we need to subtract 1 more

$100 + 376 = 476$, but that is 3 too many
so we take it away

Didn't know you were this good did you?

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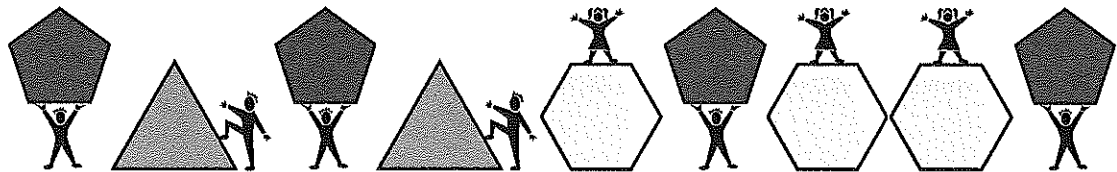


a) $4 \times \underline{\quad} \underline{7} \underline{\quad} = 28$

b) $7 \times \underline{\quad} \underline{4} \underline{\quad} = 28$

c) $\underline{\quad} \underline{28} \underline{\quad} \div 4 = 7$

d) $28 \div \underline{\quad} \underline{7} \underline{\quad} = 4$



6.

a) What fraction of the shapes are triangles? $\underline{\quad} \underline{2/9} \underline{\quad}$

2 shapes out of 9 total shapes are triangles

b) What fraction of the shapes are hexagons? $\underline{\quad} \underline{3/9}$ or $\underline{\quad} \underline{1/3} \underline{\quad}$

3 shapes out of 9 total shapes are hexagons or 1 group out of 3 groups are hexagons

c) What fraction of the shapes are pentagons? $\underline{\quad} \underline{4/9} \underline{\quad}$

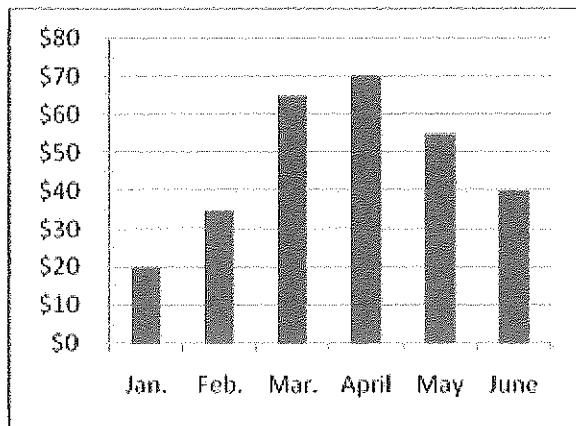
4 pentagons (5-sided figures) out of 9 total shapes.

Singapore Summer Shape Ups: Level 2 - Thinking Guide



Week 5 Lesson 1

1. This graph shows money that Nicole has earned babysitting each month.



- a) Nicole made \$ 65 in March.
- b) She made the most money in April.
- c) She made the least money in January.

d) She made twice as much money in June as in January

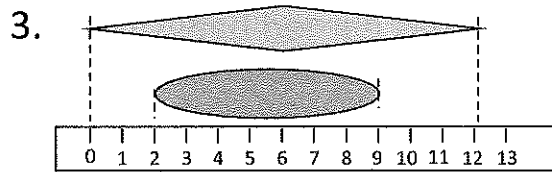
e) In April she made \$ 35 more than in February.

2. Add or Subtract. (VIDEOS: ADDING WITH TRADING & SUBTRACTING WITH TRADING)

$$\begin{array}{r}
 ^1 ^2 \\
 \text{a) } \$4.76 \\
 3.88 \\
 \underline{+ 2.27} \\
 \$10.91
 \end{array}$$

$$\begin{array}{r}
 14 \\
 \text{b) } \cancel{7.54} \\
 \underline{- 6.85} \\
 \$0.69
 \end{array}$$

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a) The diamond is 12 cm long.

b) The oval is 7 cm long.

c) The oval is 5 centimeters shorter than the diamond.

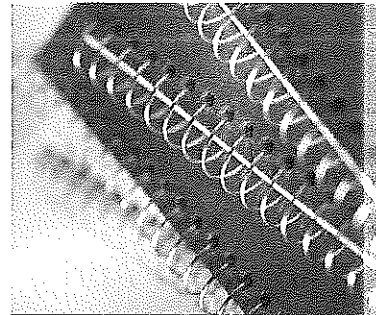
d) Together the diamond and oval total 19 cm.

4. Ainsley write 4 pages in her journal each day.

a) If she goes to school 5 days a week, how many journal pages will she write in one week?

$$5 \times 4 = 20$$

$$4 + 4 + 4 + 4 + 4 = 20$$



Ainsley writes 20 journal pages each week.

b) If she reads 2 pages to her mom every afternoon, how many days will it take her to read 16 pages?

$$16 \div 2 = 8$$

It will take Ainsley 8 days to read 16 pages.

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5. A hamburger costs 65¢, French fries cost 45¢, and a drink costs 45¢.

a) How much would you pay for a burger, fries, and a drink?

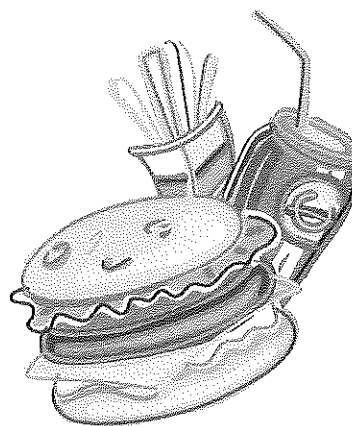
$$65 + 45 + 45 = 155 \text{ cents or } \$1.55$$

A burger, fries, and a drink would cost \$ 1.55

b) How much more does a hamburger cost than fries?

$$0.65 - 0.45 = 0.20$$

A burger costs 20 ¢ more than fries.



6. Order the following fractions from largest to smallest.

$$\frac{1}{9}, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}$$

Remember, we are talking about pieces of a whole.

If we cut a whole into 9 equal pieces they are smaller than

$$\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{9}$$

the pieces if we cut the whole into 8 equal pieces. 8ths are

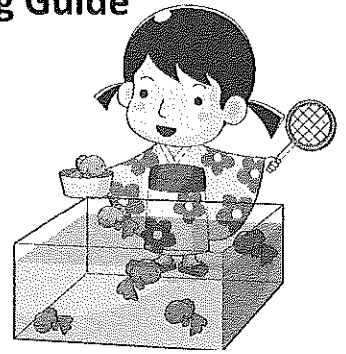
smaller than 4ths, and 4ths are smaller than halves.

If this is difficult for your child, ask him/her if they would rather share a cupcake with 2 people or 9 people. This is a familiar context that allows them to reason about the size of the equal parts.

You've worked so hard and you're almost there!

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 5 Lesson 2



1. Fill in the blanks with numbers.

a) $80 + 700 + 4 = \underline{784}$

b) Nine hundred ninety-nine = $\underline{999}$

c) 10 ten dollar bills = $\underline{1}$ hundred dollar bills

d) $600 = \underline{60}$ tens = $\underline{600}$ ones

$782 = \underline{7}$ hundreds $\underline{8}$ tens $\underline{2}$ ones

2. Fill in the blanks.

a) $\underline{28} + 12 = 40$

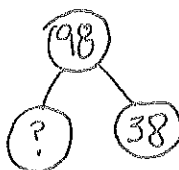
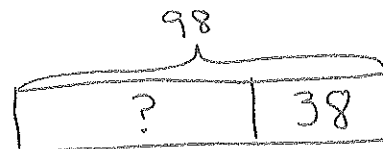
b) $\underline{72} - 17 = 55$

c) $49 + \underline{13} = 62$ 49 and 1 makes 50 then we need 12 more to make 62

d) $98 - \underline{60} = 38$

Approaching the missing number using

a bar model or a number bond can encourage your child to count on from the part that they have (38) to the whole (98)



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3. Use mental math to solve. (VIDEO: MENTAL MATH – ADDITION/SUBTRACTION)

a) $872 - 400 = \underline{\quad 472 \quad}$

b) $400 - 97 = \underline{\quad 303 \quad}$

$400 - 100 = 300$, but we took away 3 too many so we have to add it back –
 $300 + 3 = 303$

c) $97 + 628 = \underline{\quad 725 \quad}$

$100 + 628 = 728$, but we added 3 too many so we have to take them away - $728 - 3 = 725$

d) $387 + 9 = \underline{\quad 396 \quad}$

$387 + 10 = 397$, but 10 is 1 too many, so we take it away to get 396

4. Write $<$, $>$, or $=$ in each blank.

a) $700 + 88 \underline{\quad = \quad} 88 + 700$

b) $700 + 88 \underline{\quad < \quad} 77 + 800$

c) $2 + 2 + 2 + 2 \underline{\quad < \quad} 4 \times 4$

4 two's is smaller than 2 four's or 8 is smaller than 16

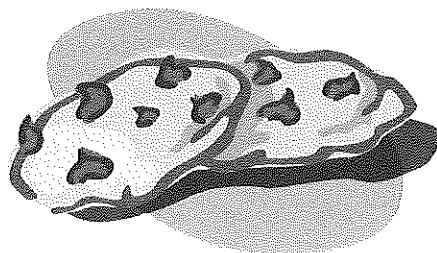
d) $3 \times 4 \underline{\quad > \quad} 12 \div 3$

5. Chef Pat made 45 cookies. He gave 5 cookies to each Girl Scout. How many cookies did each girl receive?

$$45 \div 5 = 9$$

Allow your child to act out any story problem that is difficult for them to visualize.

There were 9 Girl Scouts.



Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 5 Lesson 3

1. Write $<$, $>$, or $=$ in each blank.

- a) 4 quarts _____ = _____ 1 gallon
4 quarts = 16 cups 1 gallon = 16 cups
- b) 1 cup _____ < _____ 2 pints
2 cups = 1 pint
- c) 4 pints _____ > _____ 1 quart
4 pints = 8 cups 1 quart = 4 cups
- d) 1 quart _____ = _____ 2 pints
1 quart = 4 cups 2 pints = 4 cups



Capacity measurements are very abstract. Don't fret if your child has not mastered this skill! Real world experience like cooking or playing with measuring cups in the bathtub are fun ways to become more comfortable with these relationships.

2. Six boys came to Bailey's Birthday party. His mom made 3 cups of lemonade and 2 cupcakes for each boy.

- a) How many cups of lemonade did Bailey's mom make?

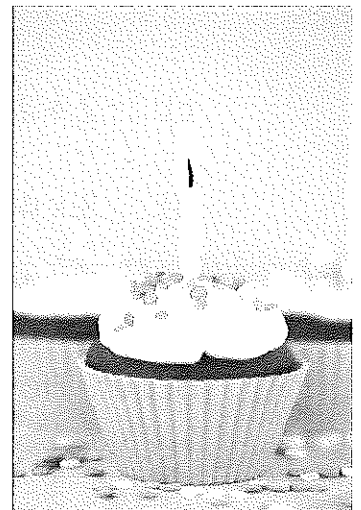
$$6 \times 3 = 18 \quad \text{or} \quad 3 + 3 + 3 + 3 + 3 + 3$$

Bailey's mom made 18 cups of lemonade.

- b) How many cupcakes did she make?

$$6 \times 2 = 12 \quad \text{or} \quad 2 + 2 + 2 + 2 + 2 + 2$$

She made 12 cupcakes.



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- c) If each boy drank only 2 cups of lemonade, how many cups were left?

$$18 - 12 = 6$$

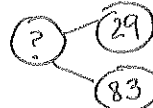
6 cups were left.

3. Use mental math to fill in the blanks.

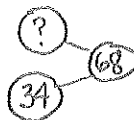
a) $32 - \underline{13} = 19$



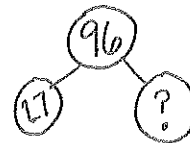
b) $\underline{112} - 29 = 83$



c) $\underline{34} + 34 = 68$



d) $27 + \underline{69} = 96$



4. Add or subtract. (VIDEO: MENTAL MATH – ADDITION/SUBTRACTION)

a) $\$3.58 + \$2.99 = \underline{\$6.57}$

$3.58 + 3.00 = 6.58$, but 3.00 is 1¢ too many so 6.57

b) $\$7.42 + \$4.40 = \underline{\$11.82}$

$\$7 + \$4 = \$11$ and $42\text{¢} + 40\text{¢} = 82\text{¢}$ and $\$11 + 82\text{¢} = \11.82

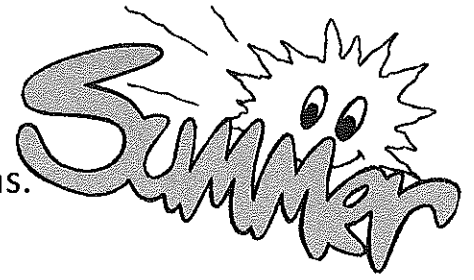
c) $\$2.72 + \$1.98 = \underline{\$4.70}$

$2.72 + 2.00 = 4.72$, but 2.00 is 2 pennies too many so 4.70

d) $\$10.00 + \$4.40 = \underline{\$14.40}$

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 6 Lesson 1



1. Complete the following number patterns.

a) 234, 334, 434, ___534___, ___634___, ___734___

b) 822, 812, 802, ___792___, ___782___, ___772___

2. Luke and Jacob have 320 yellow and red blocks altogether.

a) If there are 180 red blocks, how many blocks are yellow?

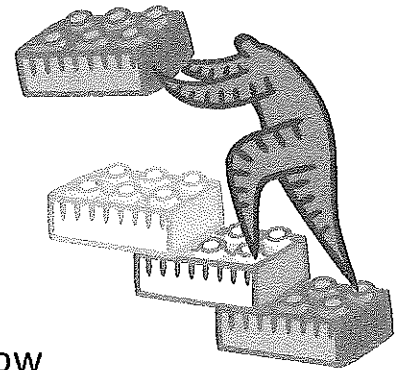
$$320 - 180 = 140$$

There are ___140___ yellow blocks.

b) How many more red blocks than yellow blocks are there?

$$180 - 140 = 40$$

There are ___40___ more red blocks.



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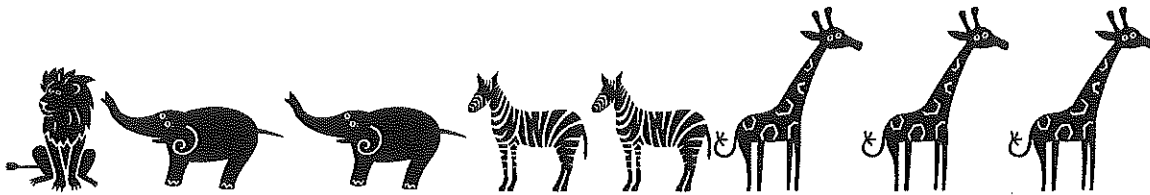
- c) If Luke uses 80 red blocks and 100 yellow blocks, how many blocks of each color does Jacob have to use?

$$180 \text{ red} - 80 \text{ red} = 100 \text{ red}$$

$$140 \text{ yellow} - 100 \text{ yellow} = 40 \text{ yellow}$$

Jacob has 40 yellow blocks and 100 red blocks.

3. At the zoo, we saw the following animals.



- a) How many elephants and zebras? 4
- b) How many animals altogether? 8
- c) How many more giraffes than lions? 2

5. Fill in the blanks. Remember! 2nd grade thinks about multiplication as adding equal groups. Allow your child to skip count to multiply or to draw and/or act out multiplication and division.

a) $5 \times 7 = \underline{35}$

b) $18 \div 2 = \underline{9}$

c) $15 \div 3 = \underline{5}$

d) $4 \times 3 = \underline{12}$

e) $2 \times 8 = \underline{16}$

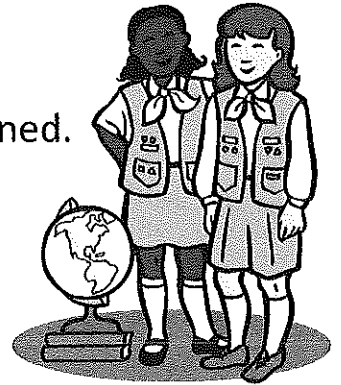
f) $21 \div 3 = \underline{7}$

Singapore Summer Shape Ups: Level 2 - Thinking Guide

Week 6 Lesson 2

1. Each \triangle stands for one Girl Scout badge earned.

Katie	$\triangle \triangle \triangle \triangle \triangle \triangle \triangle$
Katherine	$\triangle \triangle \triangle \triangle \triangle$
Marissa	$\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$



a) How many more badges does Katie have than Katherine?

Katie has 2 more badges than Katherine.

b) How many fewer badges does Katie have than Marissa?

Katie has 3 fewer badges than Marissa.

c) Who has twice as many badges as Katherine?

 Marissa has twice as many badges as Katherine.

Singapore Summer Shape Ups: Level 2 - Thinking Guide

2. Fill in the blanks with “more than”, “less than”, or “the same as”.



- a) Box B weighs less than 45 g.
- b) Box A weighs the same as Box B.
- c) Box A weighs less than 45 g.
3. Add or subtract.

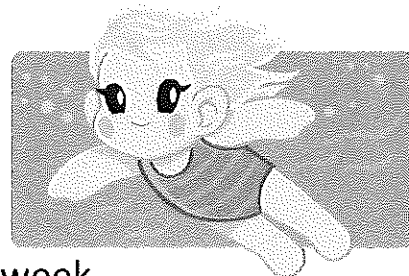
a)
$$\begin{array}{r} 21 \\ 245 \\ 392 \\ + 199 \\ \hline 836 \end{array}$$

b)
$$\begin{array}{r} 17 \\ 218 \\ - 15 \\ \hline 385 \\ - 197 \\ \hline 188 \end{array}$$

4. Leigh and her family went to the beach for 7 days. How many weeks were they at the beach?

7 days = 1 week

They were at the beach for 1 week.



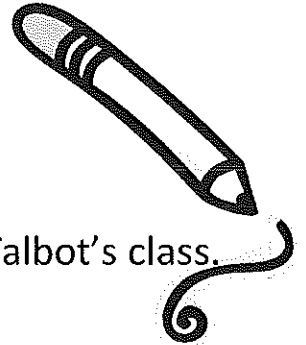
Singapore Summer Shape Ups: Level 2 - Thinking Guide

5. Mrs. Talbot's class needs pencils for math class.

- a) If she has 50 pencils and every student needs 5 pencils, how many students are in her class?

$$50 \div 5 = 10$$

There are 10 students in Mrs. Talbot's class.

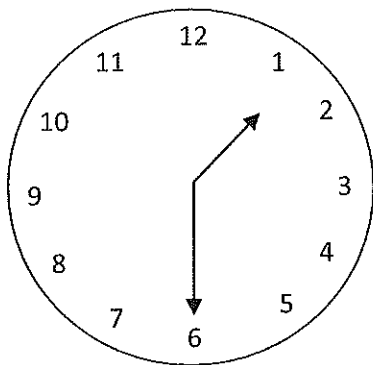


- b) If she buys 12 more pencils, how many pencils can each student have now and how many are left over?
12 more pencils means each of the 10 students gets one more, making 11, and there are 2 left over.

Let your child act out this problem with real objects if they have difficulty visualizing it.

Every student gets 11 pencils and there are 2 left over.

6. What time is it? It is 1 : 30 .



Recess starts at 1:30pm and lasts 20 minutes. What time does recess end?

 1 : 50 pm

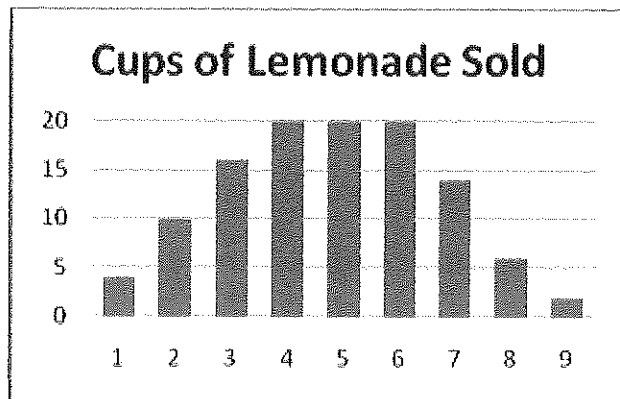
School ends at 3:00pm, how much longer are you in class?

1 hour 30 minutes

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Week 6 Lesson 3

1. The graph below show cups of lemonade sold during the 9 weeks of summer.

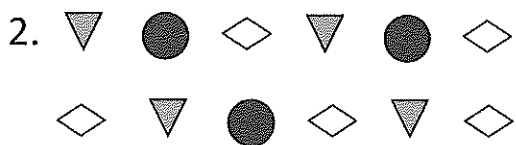


a) During week 9 the fewest cups were sold.

b) In weeks 4, 5, and 6 the same number of cups were sold.

c) 18 fewer cups were sold in week 2 than in week 4.

d) The number of cups sold altogether in weeks 1 and 2 is the same as the number of cups sold in week 7.



a) How many shapes altogether? 12

b) How many are diamonds and circles? 8

c) How many more diamonds than triangles? 1

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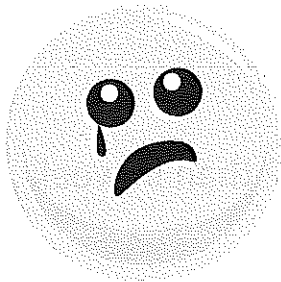
3. Arrange the numbers in order from largest to smallest.

272, 227, 727, 722

___727___, ___722___, ___272___, ___227___

4. There are 5 days left of summer (boo hoo). You have 40 more pages of your book to read. How many pages must you read each day?

$$40 \div 5 = 8$$



You must read ___8___ pages each day.

5. Write <, >, or = in each blank.

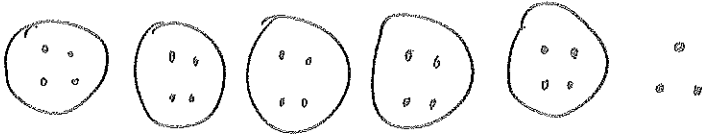
a) 3×5 ___ = ___ 5×3 3 groups of 5 equals 5 groups of three

b) 9×2 ___ > ___ $20 - 3$

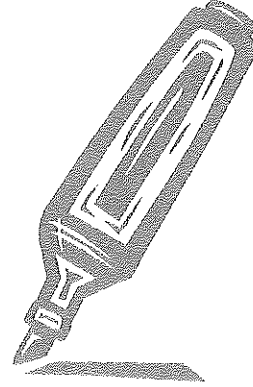
c) 8×5 ___ = ___ 10×4

Singapore Summer Shape Ups: Level 2 - Thinking Guide

6. If you have 23 markers that you must put in five bundles, how many markers are left over?



3 markers are left over.



7. Add or Subtract.

Think:

$$\begin{array}{r} \text{a) } \$3.98 \\ + \quad 5.22 \\ \hline \$9.20 \end{array}$$

$$\begin{array}{r} 4.00 \\ +5.22 \\ \hline 9.22 \end{array}$$

2 pennies too much

$$\begin{array}{r} \text{b) } \$7.77 \\ - \quad 6.99 \\ \hline \$0.78 \end{array}$$

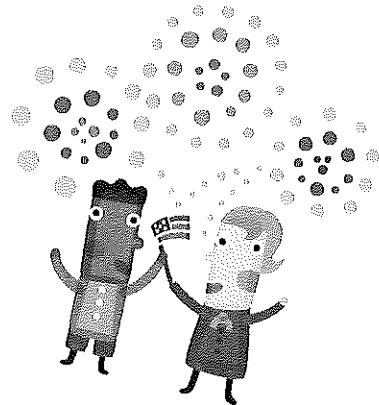
$$\begin{array}{r} 7.77 \\ -7.00 \\ \hline 0.77 \end{array}$$

1 penny too little because we took away 1 penny too much

8. If you ride your bike to your friend's house, it takes you 25 minutes. How long does it take to get to your friend's house and back home?

$$25 + 25 = 50$$

It takes 50 minutes.



Congratulations! You've finished your Summer Shape Up!

