Understanding **M**athematics

Student's Activity Book
for Class **2**

Name: ....

Section: ....

School: ....

ཤེས་རིག

Department of School Education
Ministry of Education and Skills Development
Royal Government of Bhutan
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CONTENTS

INTRODUCTION

This **Student Activity Book for Class 2** is to be introduced in the schools from the year 2013, along with the new **Mathematics Teacher's Guide** for the same class. The term "activity book" means the same as what is usually called "Workbook".

This Student Activity Book for Class 2 in mathematics is expected to fulfill the long desired need for such a book. This is something that the teachers have been expressing a wish for during the last several years even with the old mathematics curriculum.

The mathematics curriculum emphasizes hands-on, practical, communication and reasoning intensive classroom activities often intended for group or pair-based engagement. It espouses students' capacity to discover ideas, to deepen their reasoning skills, to build on their intuitions, to arrive at common generalizations, and to create (or recreate) knowledge. The Teacher's Guide will aid the teachers in carrying out this curricular intention. The activities in the Activity Book, although paper-and-pencil based, are designed to support the activities suggested in the Teacher's Guide.
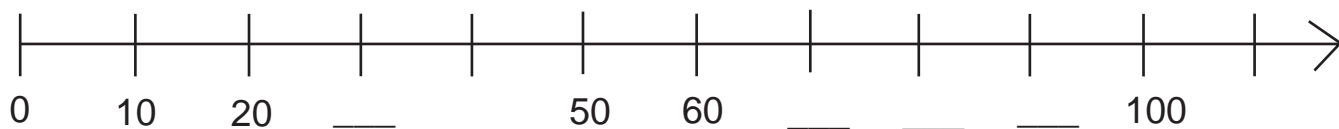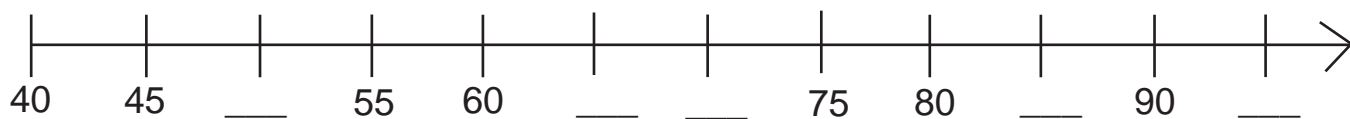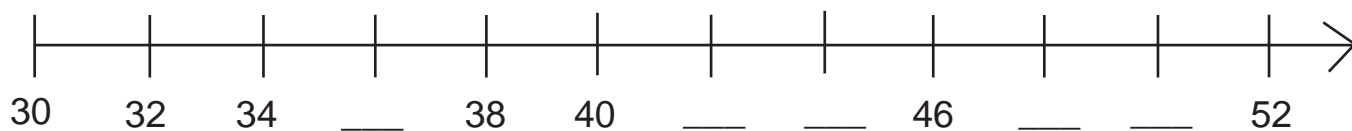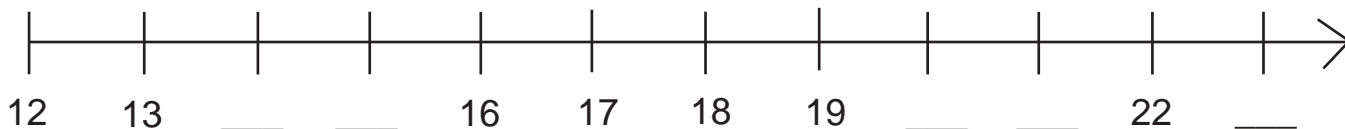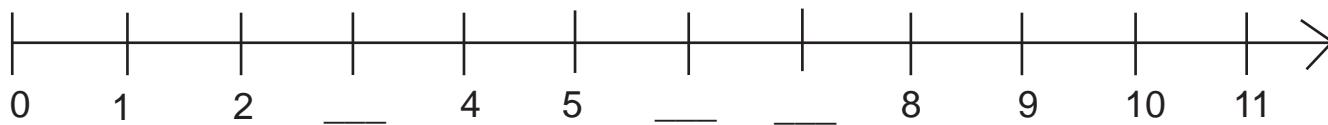
Following are some pertinent points related to this activity book and its intended manner of use.

- The activities in this book serve as extensions of and support to the normal classroom activities. They cannot replace the activities mentioned or suggested in the Teacher's Guide.

- The activities for each chapter are generally intended for use along the course of the lessons or at the end of teaching the chapter, rather than at the outset.

- The students should normally do and complete the activities during the class hours under the close guidance of the teacher.

- The teacher should engage the students in verbal discussions on the activities to extend beyond simply completing the activities, wherever possible and appropriate. Many of the activities have this opportunity built in them.

- Some of the activities could be done in more than one valid way, depending on how the students reason with the problem. That is why it would be important to ask the students for their reasons, where appropriate.

- The *Teacher's Remark(s)* space provided below each activity is intended to provide a space in which the teacher may record any useful and interesting anecdotes concerning the child and the particular activity. The anecdotal records could also help the teacher in assessing the student's learning. The space could also be used to communicate messages to the parents and caregivers of the child.

- The *Summative Assessment Recording Sheets* included at the end of the book are meant for the teacher to record the student's understanding and achievement of the learning goals for each chapter assessed through the means of *Interview-based Performance Tasks*. The teacher could remove these sheets from the book and maintain them in separate files for the student's assessment records.

- There is no assumption that this activity book, beside the Teacher's Guide, would be sufficient as a programme of studies for mathematics in Class 2. The teacher is encouraged to go beyond what is presented here to make additional activity sheets for the students, as needed.

The Primary Mathematics Section, REC, would like to welcome comments and feedback from teachers and other users of this activity book that may contribute to its improvement. We wish success and enjoyment in the teaching and learning of mathematics for teachers and students.

Trashi Delek.

Write the missing numbers for the number lines.

0   1   2   ___   4   5   ___   ___   8   9   10   11

12   13   ___   ___   16   17   18   19   ___   ___   22   ___

30   32   34   ___   38   40   ___   ___   46   ___   ___   52

40   45   ___   55   60   ___   ___   75   80   ___   90   ___

0   10   20   ___   ___   50   60   ___   ___   ___   100

Teacher's Remark(s):

Teacher's Signature and Date:

Write the missing numbers in each sequence.

Skip count by 5s: 35, 30, 25, _____, 15, _____, _____, _____

Skip count by 10s: 100, 90, _____, 70, 60, _____, 40, _____, _____

Skip count by 2s: 30, 28, _____, _____, 22, _____, _____, 16

Skip count by 1s: 11, 10, 9, _____, _____, 6, _____, 4, 3, 2, 1

Skip count by 10s: 50, 40, _____, _____, _____, _____

Skip count by 5s: 50, ____, 40, ____, 30, 25, _____, 15, _____, 5

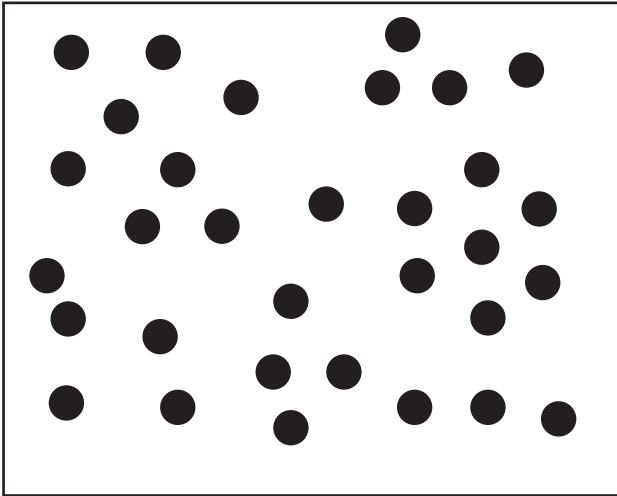Skip count by 2s: 50, 48, _____, 44, _____, 40, _____, _____, 34

Skip count by 1s: _____, 49, 48, 47, ____, 45, _____, _____, _____, 41

Write the number of buttons below the three circle that contain them.
How many buttons do you think will be there in the empty circle? Write the
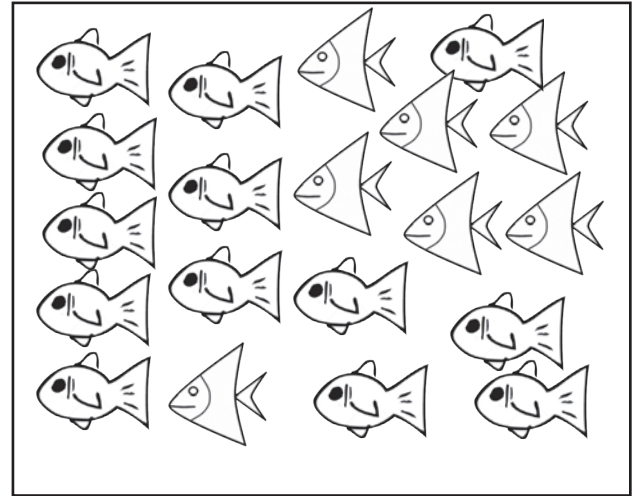number and draw the buttons.

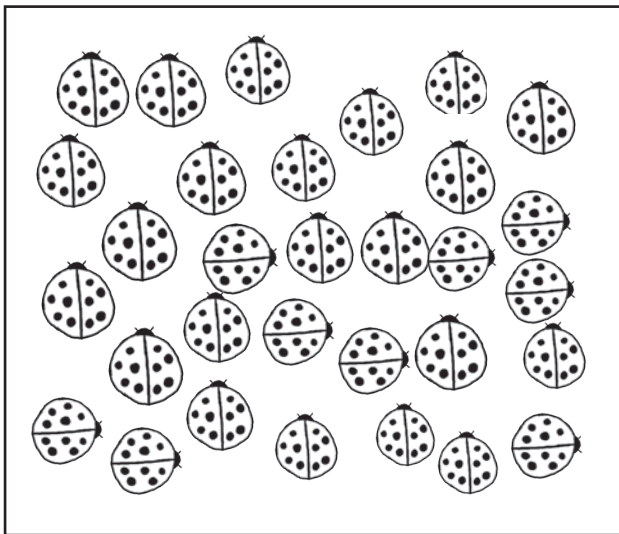_____   _____   _____   _____

First, estimate the number of items in each set and write down your estimates.
Then, count and write the actual number of items for each set.
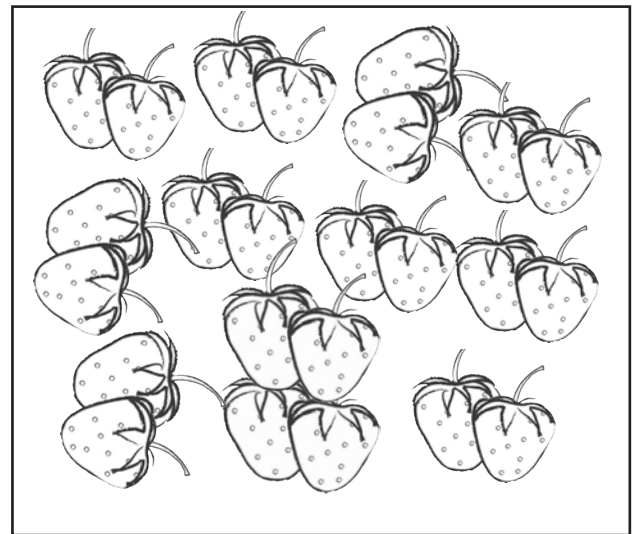
My estimate: _____   Count: _____   My estimate: _____   Count: _____

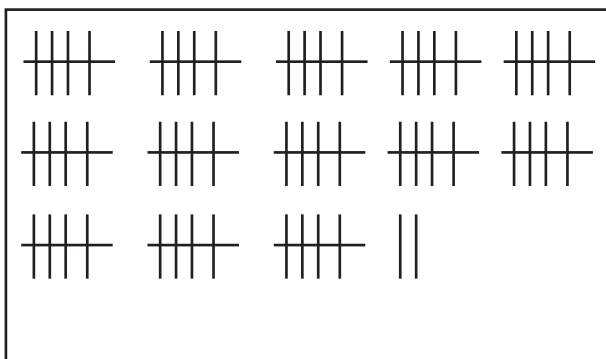My estimate: _____   Count: _____   My estimate: _____   Count: _____

Teacher's Remark(s):

Teacher's Signature and Date:

What number does each set show?

_____   _____
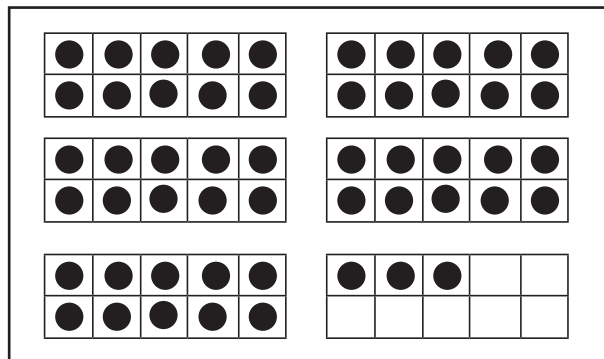
Show the numbers below the sets by drawing counters on the 10-frames.

25   43

Show the numbers below the sets by drawing tally marks.
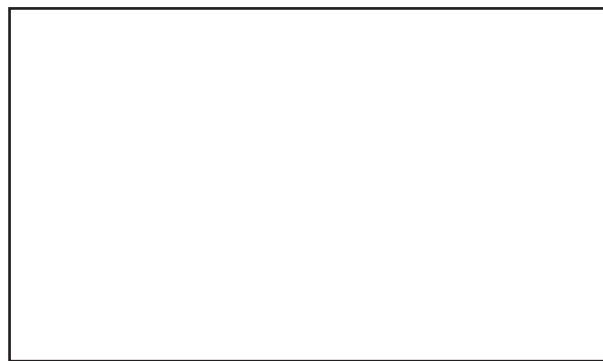
43   17

Teacher's Remark(s):

Teacher's Signature and Date:

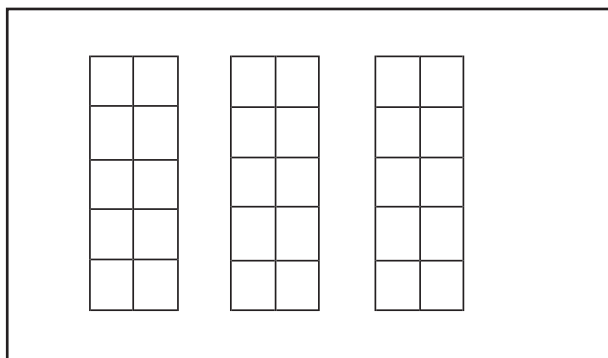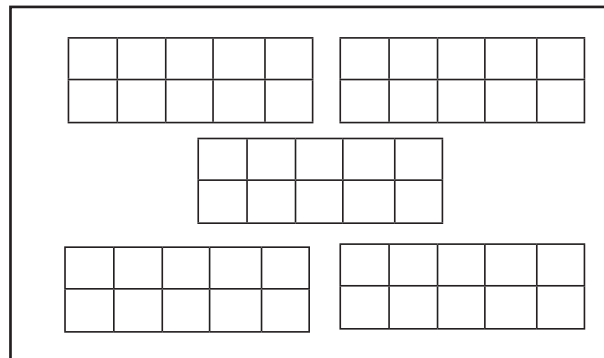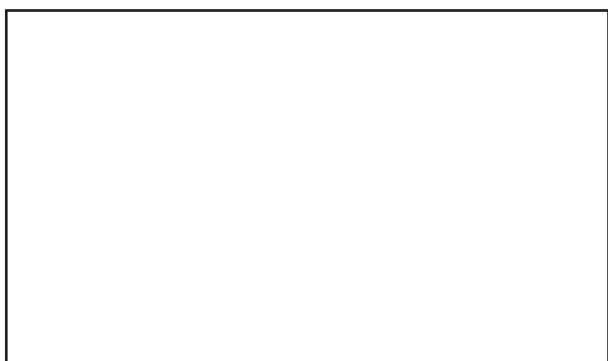Mark each pair of numbers on the number lines. Then, cirlce the greater number.

Example:

| | | | | | | | | | | |
0   1   2   3   4   6   8   10   11

16   28

42   36
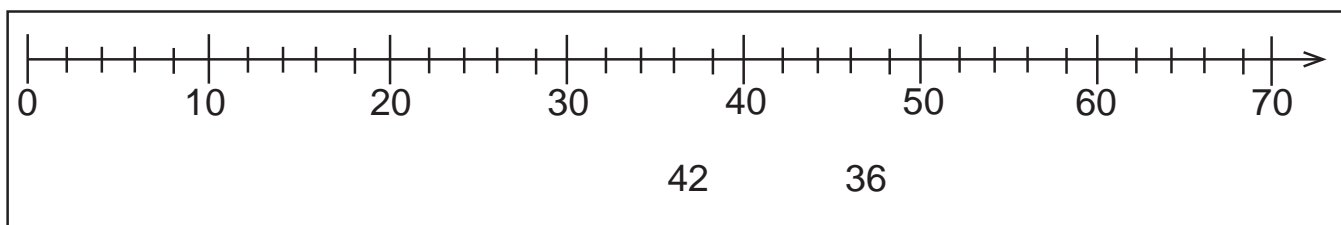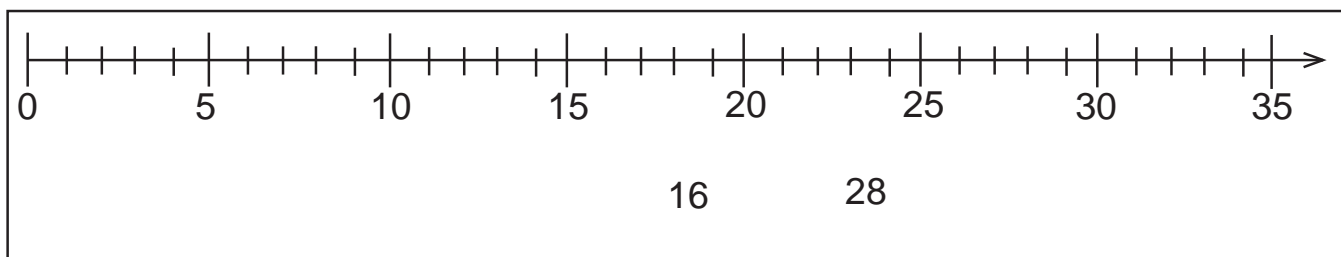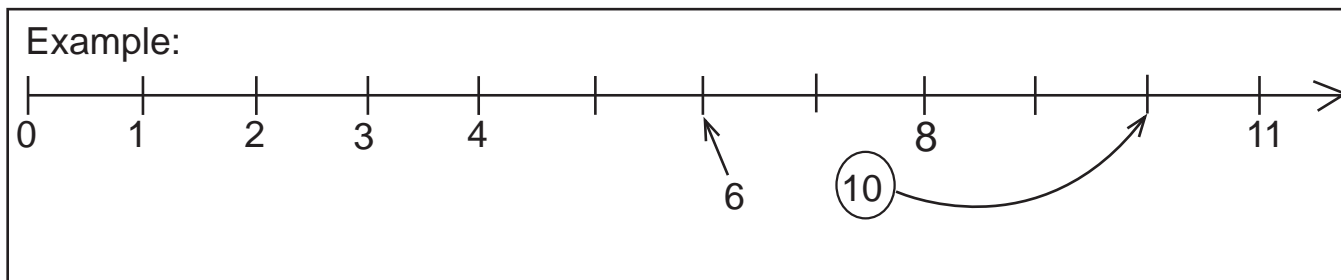
Compare the pairs of numbers and write "is more than" or " is less than" between them.

Example: 25 is more than   20   60 _____ 70

15 _____ 17   15 _____ 10

Compare the pairs of numbers and insert > or < between them.

Example: 25 > 20   60 ____ 70   2 ____ 3

20 ____ 17   5 ____ 10   3 ____ 2

13 ____ 23   51 ____ 49   12 ____ 21

Teacher's Remark(s):

Teacher's Signature and Date:

Write the numbers in the 100-chart, and answer the questions.

1									
			35						
								100

1. What number is 1 more than 35?

   _____

2. What number is 10 more than 35?

   _____

3. What number is 5 less than 70?

   _____

4. Write down two numbers which are more than 95.

   _____

5. Write down all the numbers which are less than 7.

   _____

Teacher's Remark(s):

Teacher's Signature and Date:

Study each of the following number patterns and complete the sentences by writing the words, "repeating", "growing" or "shrinking".

2, 4, 6, 8, 10, ...   This is a _____ pattern.

1, 2, 3, 4, 5, ...   This is a _____ pattern.

1, 2, 1, 2, 1, 2, ...   This is a _____ pattern.

30, 25, 20, 15, ...   This is a _____ pattern.

3, 3, 6, 3, 3, 6, 3, 3, 6, ...   This is a _____ pattern.

5, 10, 15, 20, 25, 30, ...   This is a _____ pattern.

100, 90, 80, 70, ...   This is a _____ pattern.

Create a repeating number pattern.

Create a growing number pattern.

Create a shrinking number pattern.

Teacher's Remark(s):

Teacher's Signature and Date:

Extend the number patterns.

2, 4, 6, 8, ...

5, 10, 15, 20, ...

75, 80, 85, ...

75, 70, 65, 60, ...

15, 14, 13, 12, ...

4, 8, 4, 8, 4, 8, ...

4, 8, 12, 4, 8, 12, 4, 8, 12, ...

1, 3, 5, 7, 9, ...

Create a pattern which starts with 10 and the numbers grow by 10 each time.

Create a pattern which starts with 40 and the numbers grow by 5 each time.

Create a pattern which starts with 40 and the numbers decrease by 5 each time.

Create a pattern which starts with 10 and the numbers grow by 2 each time.

Teacher's Remark(s):

Teacher's Signature and Date:

Write the double for each of the numbers below.

Number	1	2	3	4	5	6	7	8	9	10	11
Double											

Circle the even numbers.

1   2   3   4   5   6   7   8   9   10   11   12

13   14   15   16   17   18   19   20   21   22   23   24

25   26   27   28   29   30   31   32   33   34   35   36

Circle the odd numbers.

1   2   3   4   5   6   7   8   9   10   11   12

13   14   15   16   17   18   19   20   21   22   23   24

Show that 8 is an even number by drawing rectangles.

Show that 5 is not an even number with the drawing of rectangles.

Teacher's Remark(s):

Teacher's Signature and Date:

Make a calendar for the month of February this year, and answer the questions.

Month: February Year: _____						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

1. How many days are there in February this year?

   _____

2. What day is the 1ˢᵗ of February?

   _____

3. What day is the 28ᵗʰ of February?

   _____

4. What dates fall on the Sunday?

   _____

5. On what date did you report to the school this year?

   _____

6. When is the birthday of our King, His Majesty Jigme Khesar
   Namgyal Wangchuck?

   _____

Teacher's Remark(s):

Teacher's Signature and Date:

Make a calendar for the month of March this year, and answer the questions.

Month: March Year: _____						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

1. How many days are there in March?

    _____

2. Write down the dates that fall on the Wednesday of March.

    _____

4. Write in words the following dates.

1st	first		11th	
2nd			12th	
3rd			13th	
4th			21st	twenty-first
5th			22nd	
6th			23rd	
7th			24th	
8th			25th	
9th			26th	
10th			27th	

Teacher's Remark(s):

Teacher's Signature and Date:

Write an addition or a subtraction sentence for each of the stories below.

Example:
1. Three dogs were playing. Three more dogs joined them. Now there are six
   dogs.

$$3 + 3 = 6$$

2. Tenzin has six marbles. His brother gave him 3 more marbles. Now he has
    nine marbles.

3. Seven deer were eating grass in a meadow. Two of them left the meadow
   after sometime. Now there are five deer in the meadow.

4. Maya has ten ngultrums. Mani also has ten ngultrums. Maya and Mani
   together have twenty ngultrums.

5. Yangchen has two chocolates. She gave one chocolate to her brother. Now
    she has one chocolate.

6. Pema has eight pencils. Kumari has 5 pencils. How many more pencils
   does Pema have than Kumari?

Teacher's Remark(s):

Teacher's Signature and Date:

Write a short story each for the following addition and subtraction sentences. You can also draw pictures for your stories.
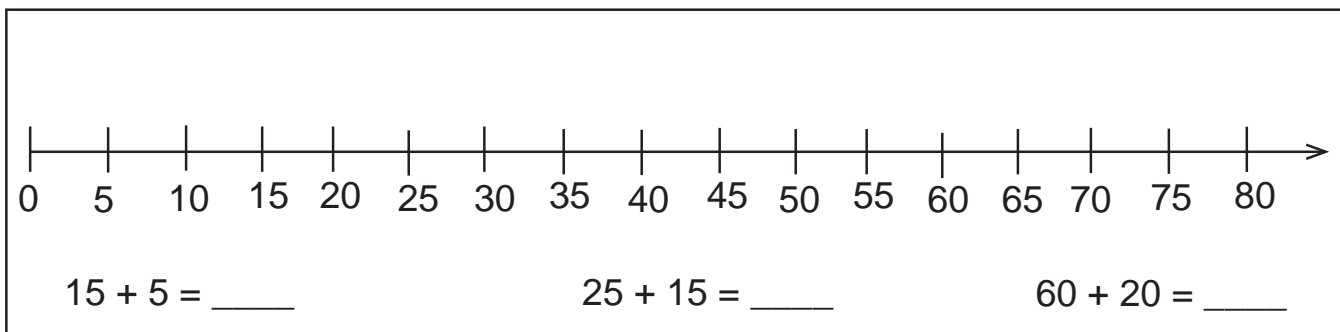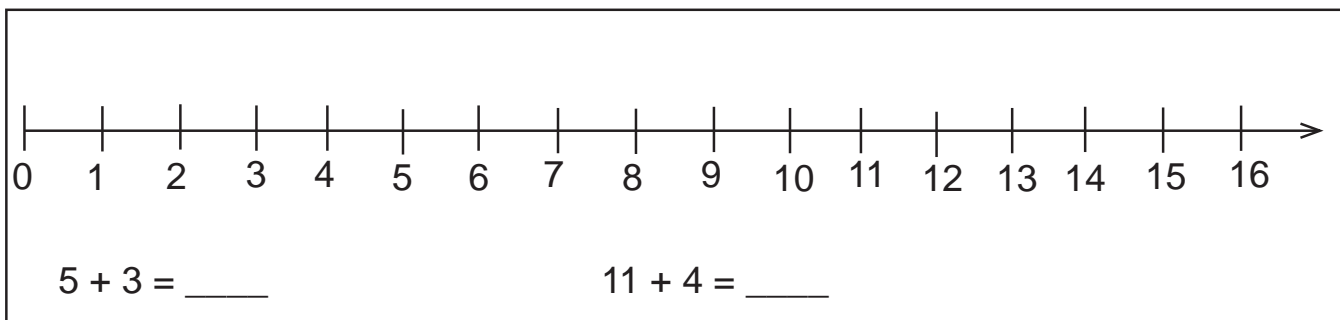
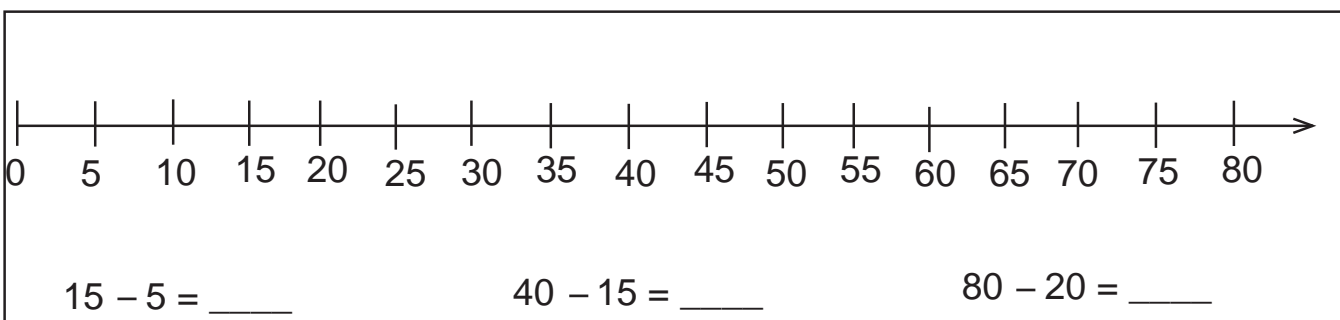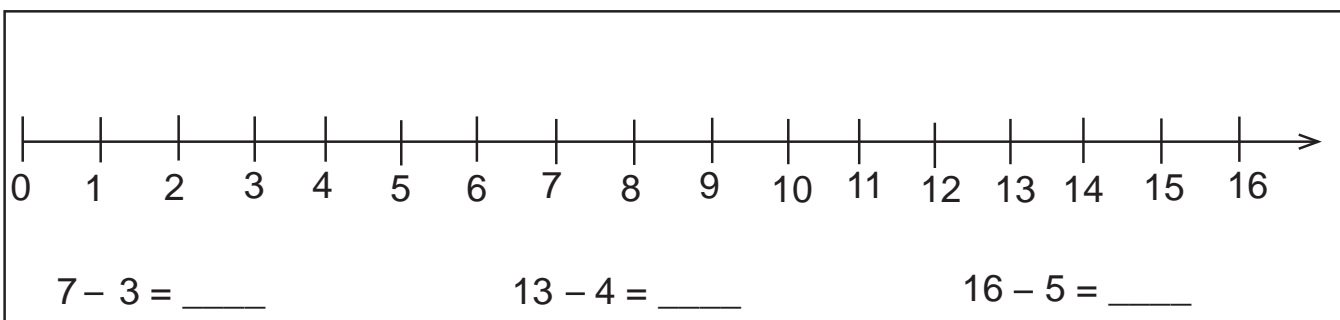---

5 + 2 = 7

---

5 — 3 = 2

---

5 + 5 = 10

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **sum** for the following additions using the number lines.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

5 + 3 = _____   11 + 4 = _____

| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |

15 + 5 = _____   25 + 15 = _____   60 + 20 = _____

Find the **differences** for the following subtractions using the number lines.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

7 − 3 = _____   13 − 4 = _____   16 − 5 = _____

| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |

15 − 5 = _____   40 − 15 = _____   80 − 20 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Write down the **sums** for the following additions.

1 + 1 = _____   6 + 6 = _____

2 + 2 = _____   7 + 7 = _____

3 + 3 = _____   8 + 8 = _____

4 + 4 = _____   9 + 9 = _____

5 + 5 = _____   10 + 10 = _____

Use the above **double facts** to determine the **sums** for the following additions.

3 + 4 = _____   7 + 6 = _____

4 + 5 = _____   7 + 8 = _____

5 + 4 = _____   8 + 7 = _____

5 + 7 = _____   8 + 9 = _____

6 + 5 = _____   9 + 10 = _____

6 + 8 = _____   10 + 9 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Use the given fact to find the difference

1)   2 - 1 = ___1___   2)   4 - 2 = _____

     2 - 2 = _____   4 - 3 = ___1___

     2 - 0 = _____   4 - 1 = _____

3)   6 - 3 = _____   4)   8 - 4 = _____

     6 - 4 = _____   8 - 5 = ___3___

     6 - 2 = ___4___   8 - 3 = _____

5)   12 - 6 = ___6___   6)   14 - 7 = _____

     12 - 5 = _____   14 - 6 = ___8___

     12 - 7 = _____   14 - 8 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Complete the **facts for 10**.

10 = 9 + ____   10 = ____ + 9

10 = 8 + ____   10 = ____ + 8

10 = 7 + ____   10 = ____ + 7
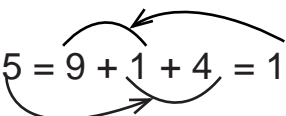
10 = 6 + ____   10 = ____ + 6

10 = 5 + ____   10 = ____ + 5

Use the above **facts for 10** to determine the sums for the following additons. You can show your workings on the sides.

Example: 9 + 5 = _14_   (9 + 5 = 9 + 1 + 4 = 10 + 4 = 14)

9 + 4 = ____

8 + 5 = ____

8 + 6 = ____

7 + 6 = ____

5 + 6 = ____

5 + 7 = ____

5 + 8 = ____

9 + 7 = ____
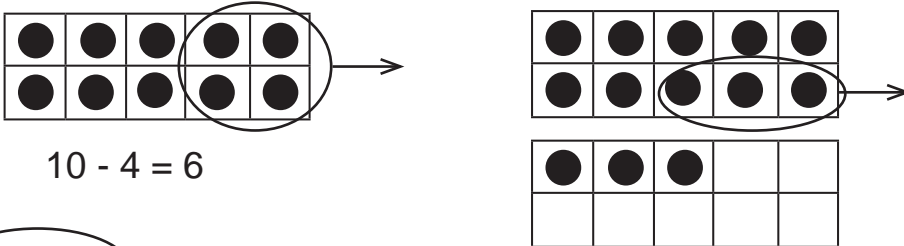
Teacher's Remark(s):
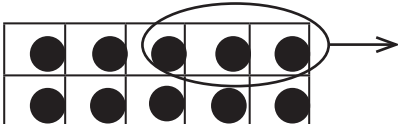
Teacher's Signature and Date:
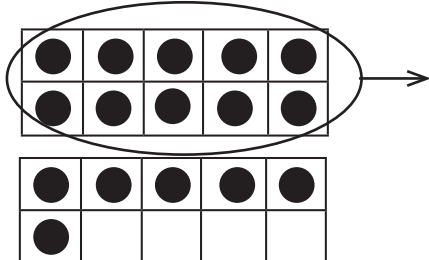
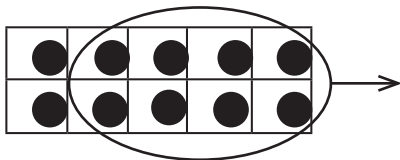Look at the addition **facts for 10**, and complete the related subtraction facts.

9 + 1 = 10	10 - 9 = _____
8 + 2 = 10	10 - 8 = _____
7 + 3 = 10	10 - 7 = _____
6 + 4 = 10	10 - 6 = _____
5 + 5 = 10	10 - 5 = _____
4 + 6 = 10	10 - 4 = _____
3 + 7 = 10	10 - 3 = _____
2 + 8 = 10	10 - 2 = _____
1 + 9 = 10	10 - 1 = _____
0 + 10 = 10	10 - 0 = _____

Write a subtraction sentence for each of the following diagrams.

Example:

10 - 4 = 6

Teacher's Remark(s):

Teacher's Signature and Date:

Find the following **sum**. Show how you solved each problem.

1) 5 + 2 + 3 =

2) 5 + 5 + 8 =

3) 7 + 5 + 5 =

4) 2 + 7 + 8 =
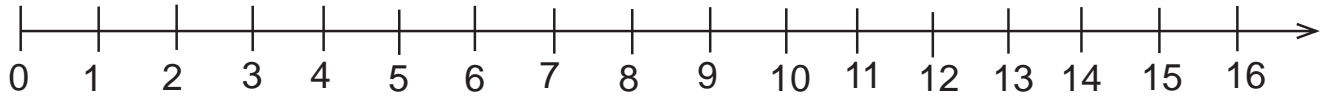
5) 6 + 8 + 4 =

6) 7 + 6 + 3 =

7) 9 + 9 + 1 + 1 =

8) 5 + 4 + 1 =

Teacher's Remark(s):

Teacher's Signature and Date:

Use various strategies to add 8 + 6, as suggested below. Show your workings.

1) Use a number line to add 8 + 6.

```
 |---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--->
 0   1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16
```

2) Use the **double fact for 6** to add 8 + 6.
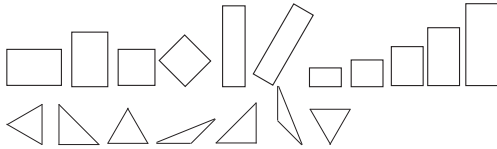
3) Use the **double fact for 8** to add 8 + 6.

4) Use a **fact for 10** to add 8 + 6.

Teacher's Remark(s):

Teacher's Signature and Date:

Solve the following subtraction problems by comparing. Write the subtraction sentence for each. Show your workings.

1) Karma drew 11 rectangles and 7 triangles. How many more rectangles did Karma draw than triangles?

2) There are 16 red cubes and 10 blue cubes in a bag. How many more red cubes than blue cubes are there?

3) A pen costs Nu 10 and a pencil costs Nu 3. How much more does the pen cost than the pencil?

4) There are 12 horses and 6 foals in a field. How many more horses than foals are there? (A baby horse is called a foal.)

5) There are 2 cats and 6 kittens in a house. How many more kittens than cats are there? (A baby cat is called a kitten.)

Teacher's Remark(s):

Teacher's Signature and Date:

Determine the missing number in each of the open addition sentences.

4 + ___ = 10   ___ + 8 = 12

4 + ___ = 9   ___ + 8 = 18

8 + ___ = 10   ___ + 6 = 12

15 + ___ = 20   ___ + 4 = 10

15 + ___ = 16   ___ + 10 = 11

Represent each story by an open addition sentence. Then, determine the missing number in the sentences.

1) 6 birds were sitting on a branch. Some more birds joined them, and there are 10 birds now. How many birds joined later?

2) Some rats were eating cheese in a kitchen. 3 more rats joined them, and there are 8 of them now. How many rats were there in the beginning?

Determine the missing number in each of the following open sentences.

10 = 7 + ___   12 = ___ + 10   14 = ___ + 4

Teacher's Remark(s):

Teacher's Signature and Date:

Determine the missing number in each of the open subtraction sentences.

10 - ___ = 5   9 - ___ = 8

10 - ___ = 9   9 - ___ = 6

12 - ___ = 10   11 - ___ = 6

12 - ___ = 6   7 - ___ = 6

13 - ___ = 10   7 - ___ = 7

15 - ___ = 10   20 - ___ = 15

18 - ___ = 9   20 - ___ = 19

Represent each story by an open subtraction sentence. Then, determine the missing number in the sentences.

1) Kelzang had 12 chocolates. He ate some of them, and now he has 8 chocolates left. How many chocolates did he eat?

2) There are some birds on a roof. 7 of the birds are crows and the rest are pigeons. There are 2 more crows than the pigeons. How many pigeons are there?

Teacher's Remark(s):

Teacher's Signature and Date:

Solve the following addition and subtraction problems.

9 + ___ = 10   13 - ___ = 10

10 + ___ = 15   10 - ___ = 2

___ + 3 = 11   ___ - 1 = 7

___ + 10 = 16   ___ - 2 = 8

12 = 8 + ___   1 = ___ - 7

14 = 7 + ___   2 = ___ - 4

20 = ___ + 18   8 = 16 - ___

Represent each story by an addition or a subtraction sentence.

1) There are 8 cubes in a bag. 6 of the cubes are red and the rest are green.

2) Sita has a collection of 10 ornamental items. 2 of the items are earrings and
    rest are bangles, brooches, finger rings and hair clips.

Teacher's Remark(s):

Teacher's Signature and Date:

Write down all the addition and subtraction sentences related to the given addition or subtraction sentence.

Example:

1) 2 + 3 = 5

   __3__ + __2__ = __5__

   __5__ - __2__ = __3__

   __5__ - __3__ = __2__

2) 6 + 7 = 13

   ____ + ____ = ____

   ____ - ____ = ____

   ____ - ____ = ____

3) 5 + 5 = 10

   ____ - ____ = ____

4) 12 - 4 = 8

   ____ - ____ = ____

   ____ + ____ = ____

   ____ + ____ = ____

5) 15 - 5 = 10

   ____ - ____ = ____

   ____ + ____ = ____

   ____ + ____ = ____

6) 14 - 7 = 7

   ____ + ____ = ____

Teacher's Remark(s):

Teacher's Signature and Date:

Complete the addition table.

+	0	1	2	3	4	5	6	7	8	9
0										9
1										
2						7				
3										
4										
5		6			9					
6								13		
7										
8			11							
9										18

Refer to the addition table above, and solve the following problems.

8 + 9 = _____   18 - 9 = _____

8 + 5 = _____   13 - 7 = _____

7 + 6 = _____   15 - 8 = _____

0 + 5 = _____   9 - 7 = _____
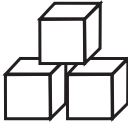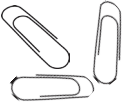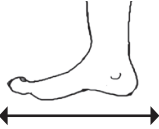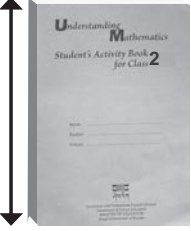
3 + 9 = _____   8 - 5 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Estimate the following lengths in terms of the paper clips and snap cubes provided to you, and record your estimates. Then, measure the lengths with the paper clips and the snap cubes, and record your measurements.

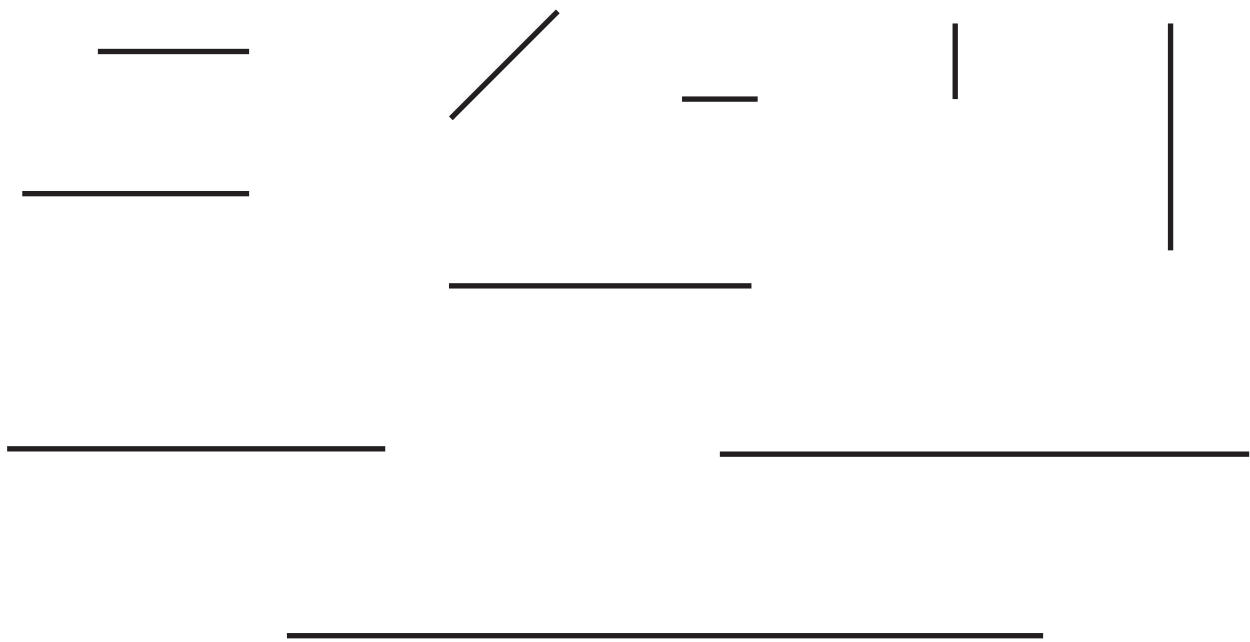| Length	Length using snap cubes	Length using paper clips
My hand span	My estimate: _____ Measurement: _____	My estimate: _____ Measurement: _____
My foot	My estimate: _____ Measurement: _____	My estimate: _____ Measurement: _____
Distance around my wrist	My estimate: _____ Measurement: _____	My estimate: _____ Measurement: _____
My pencil	My estimate: _____ Measurement: _____	My estimate: _____ Measurement: _____
My Activity Book	My estimate: _____ Measurement: _____	My estimate: _____ Measurement: _____

Teacher's Remark(s):

Teacher's Signature and Date:

Use rulers to draw the lines of the lengths specified in centimetres.

1 centimetre	4 centimetre
2 centimetre	5 centimetre
3 centimetre	10 centimetre

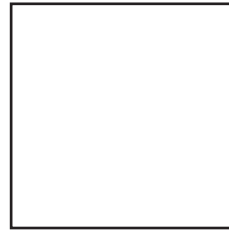Use rulers to measure the lengths of the lines in centimetres, and record them under the lines.
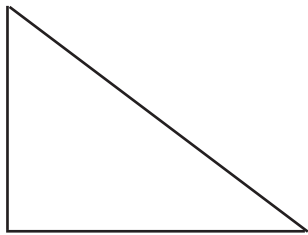
Use rulers to measure the **perimeters** of the following shapes.

Perimeter: _____ cm

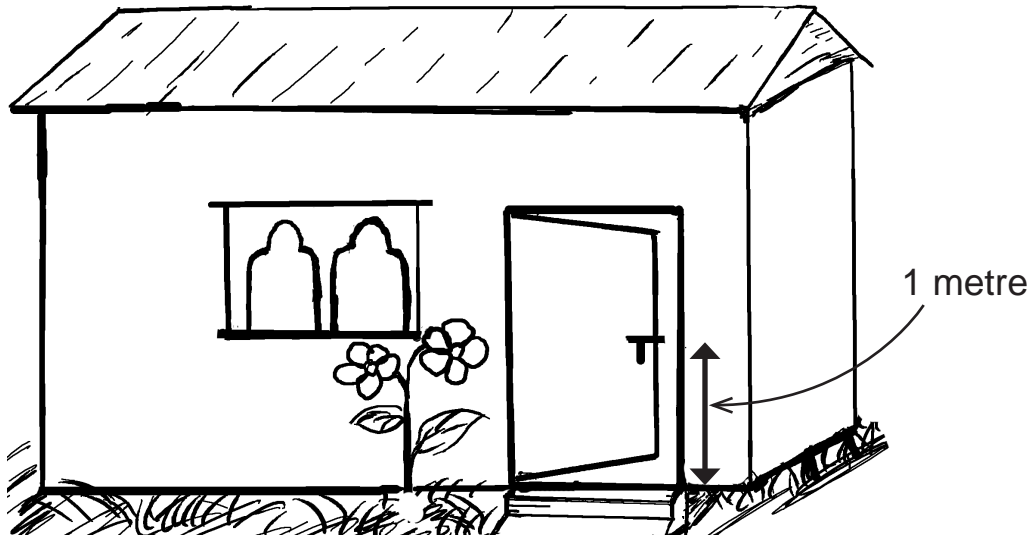Perimeter: _____ cm

Perimeter: _____ cm

Perimeter: _____ cm

Draw a shape that has a perimeter of 10 cm.

Teacher's Remark(s):

Teacher's Signature and Date:

Answer the questions based on the diagram.

1. What would be the height of the door?

    _____

2. What would be the height of the windows?

    _____

3. What would be the height of the flower?

    _____

4. Is the flower taller than you? Why or why not?
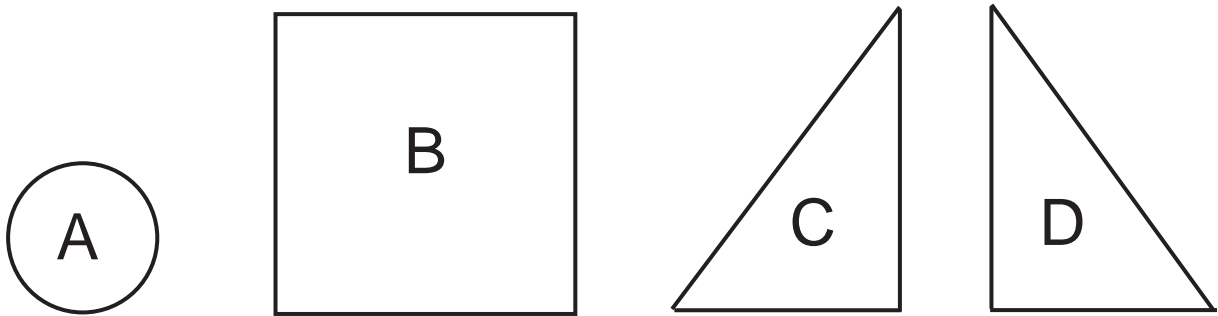
    _____

5. Are you more than 1 metre tall?

    _____

6. Would you be more than 2 metres tall?

    _____

Teacher's Remark(s):

Teacher's Signature and Date:

Look at the following shapes to compare their **areas**, and answer the questions.

1. Complete the following sentences by writing the words, "**more**", "**less**", or "**the same**" in them appropriately.

    Shape B has _____ area than shape A.

    Shape A has _____ area than shape B.

    Shape C has _____ area than shape B.

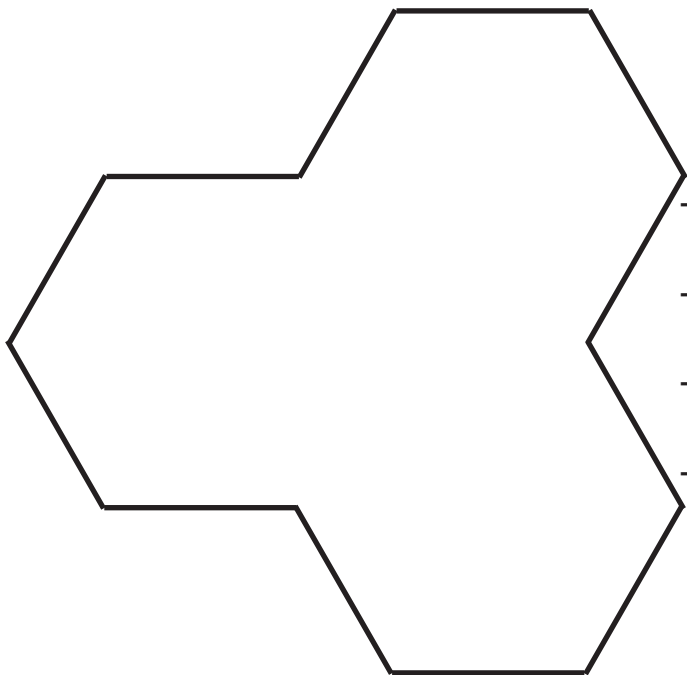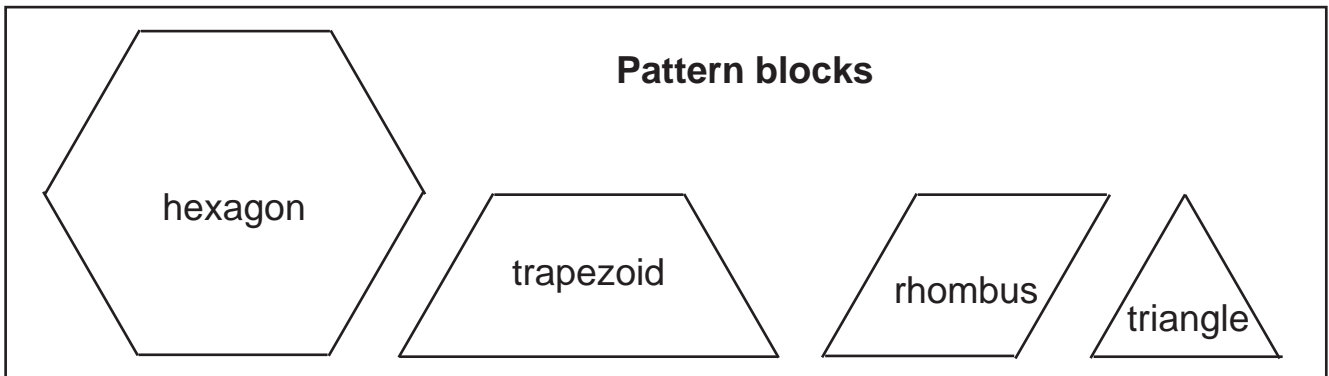   Shape C has _____ area as shape D.

2. Which shape has the largest area?

    _____

3. Which shape has the smallest area?

    _____

Teacher's Remark(s):

Teacher's Signature and Date:

Use your pattern blocks to measure the areas of the following shapes, and express the areas in terms of the blocks used as indicated in the sentences.

Pattern blocks

hexagon

trapezoid

rhombus

triangle

The area of this shape is ___ hexagons.

The area of this shape is ___ trapezoids.

The area of this shape is ___ rhombuses.

The area of this shape is ___ triangles.

The area of this shape is ___ trapezoids.

The area of this shape is ___ rhombuses.

The area of this shape is ___ triangles.

Teacher's Remark(s):

Teacher's Signature and Date:

Look at the 100-chart and complete the sentences.

100-chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Example: 36 is __3__ tens and __6__ ones.

26 is _____ tens and _____ ones.   11 is _____ tens and _____ ones.

76 is _____ tens and _____ ones.   10 is _____ tens and _____ ones.

62 is _____ tens and _____ ones.   20 is _____ tens and _____ ones.

93 is _____ tens and _____ ones.   71 is _____ tens and _____ ones.

29 is _____ tens and _____ ones.   61 is _____ tens and _____ ones.

30 is _____ tens and _____ ones.   16 is _____ tens and _____ ones.

44 is _____ tens and _____ ones.   100 is _____ tens and _____ ones.
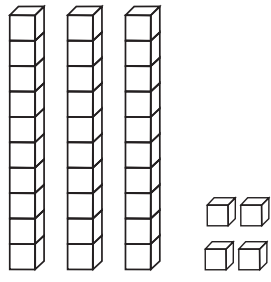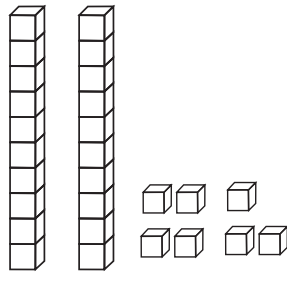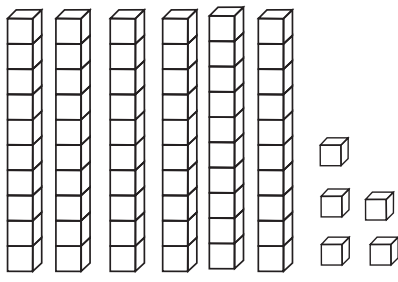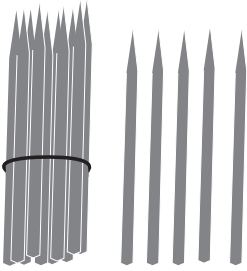
55 is _____ tens and _____ ones.
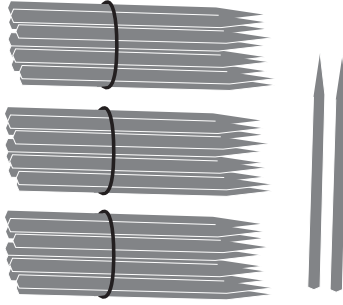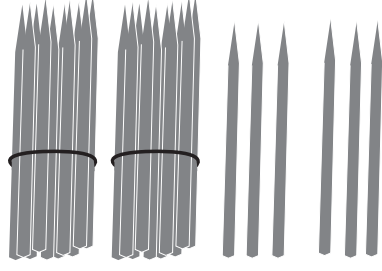
64 is _____ tens and _____ ones.

13 is _____ tens and _____ ones.

Teacher's Remark(s):

Teacher's Signature and Date:

What number is represented by each set of base ten blocks or the pencils?

Example: 34	_____	_____
_____	_____	_____
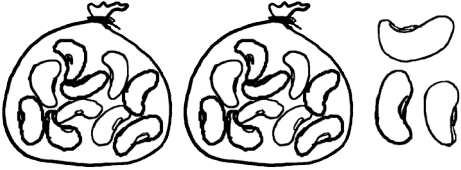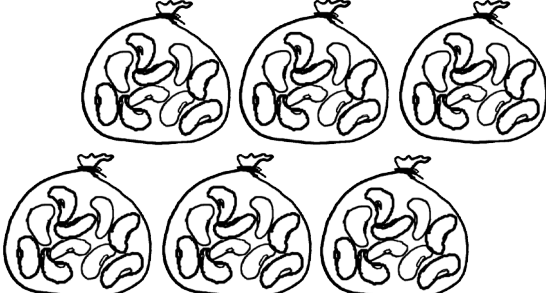
Represent 12 by drawing base ten blocks.	Represent 12 by drawing a bundle of pencils and loose pencils.

Teacher's Remark(s):

Teacher's Signature and Date:

Each bag of bean seeds is a 10. Each individual bean seed is a 1. What number is represented by each set of diagrams?

Example:	
23	_____
_____	_____
_____	_____

Represent 13 by drawing a bag of bean seeds and loose bean seeds.
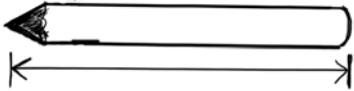
Teacher's Remark(s):

Teacher's Signature and Date:

Use the base ten blocks provided by your teacher to measure the lengths of various objects. Express the lengths as tens and ones, as indicated in the table below.

Base Ten Blocks

ten   one
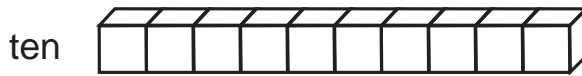
The length we measured (Draw picture and name the object)	How long is that?		How many **ones** long is that?
	How many **tens** long?	And how many **ones** long?	
Example: Pencil	1	3	13

Teacher's Remark(s):

Teacher's Signature and Date:

Write the given numbers in the place value tables.

Example:

46

Tens	Ones
4	6

35

Tens	Ones

61

Tens	Ones

60

Tens	Ones

17

Tens	Ones

88

Tens	Ones

12

Tens	Ones

50

Tens	Ones

5

Tens	Ones

In the number 26, how many tens are there? How many ones are there?

Teacher's Remark(s):

Teacher's Signature and Date:

Write the **sum** for the following additions.

10 + 10 = _____   25 + 10 = _____   20 + 20 = _____

20 + 10 = _____   35 + 10 = _____   30 + 20 = _____

30 + 10 = _____   45 + 10 = _____   40 + 20 = _____

40 + 10 = _____   55 + 10 = _____   50 + 20 = _____

50 + 10 = _____   65 + 10 = _____   60 + 20 = _____

60 + 10 = _____   75 + 10 = _____   80 + 20 = _____

70 + 10 = _____   85 + 10 = _____

80 + 10 = _____

90 + 10 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Write the fraction names for each of the fraction numbers, which represents the shaded parts of each shape.

Example:

$\dfrac{1}{2}$ one-half

$\dfrac{1}{3}$ _____

$\dfrac{2}{3}$ _____
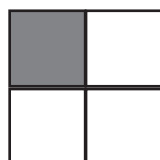
$\dfrac{1}{4}$ _____
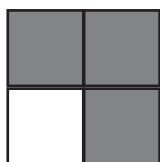
$\dfrac{3}{4}$ _____
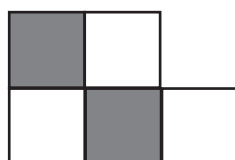
$\dfrac{2}{5}$ _____
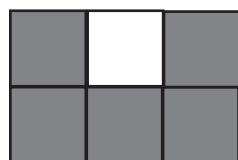
$\dfrac{5}{6}$ _____

Teacher's Remark(s):

Teacher's Signature and Date:

Write the fraction number for the shaded parts of each shape.

Example:

$\dfrac{2}{4}$ ____   ____   ____

____   ____   ____   ____

____   ____   ____   ____

____   ____   ____   ____
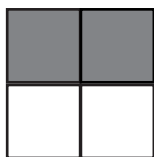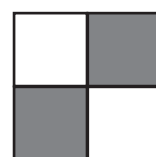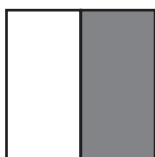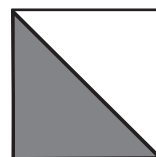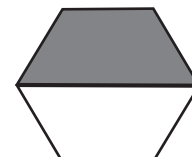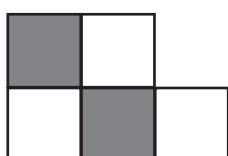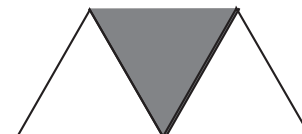
Teacher's Remark(s):

Teacher's Signature and Date:

Shade the parts of the shapes to represent the fractions written below them.
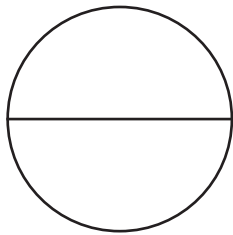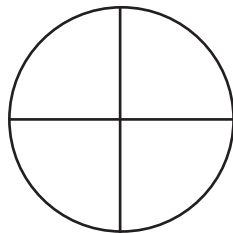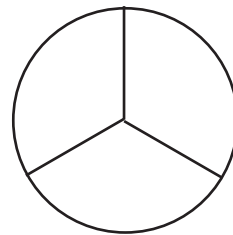
$\dfrac{1}{2}$ $\dfrac{1}{4}$ $\dfrac{2}{3}$
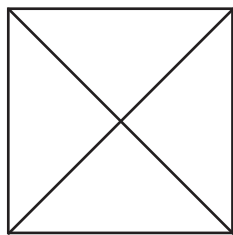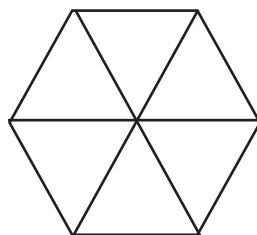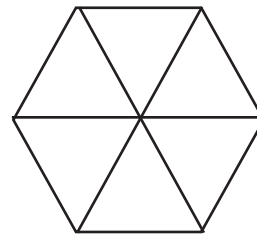
$\dfrac{2}{4}$ $\dfrac{1}{6}$ $\dfrac{5}{6}$
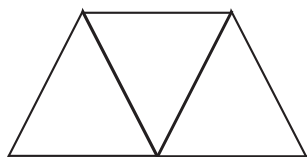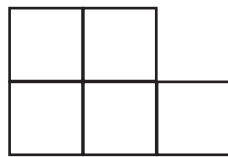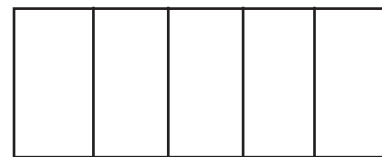
$\dfrac{2}{3}$ $\dfrac{2}{5}$ $\dfrac{4}{5}$

The fraction $\dfrac{2}{3}$ represents the shaded parts of the shape below. Write a fraction

to represent the unshaded part of the shape.

shaded part: $\dfrac{2}{3}$
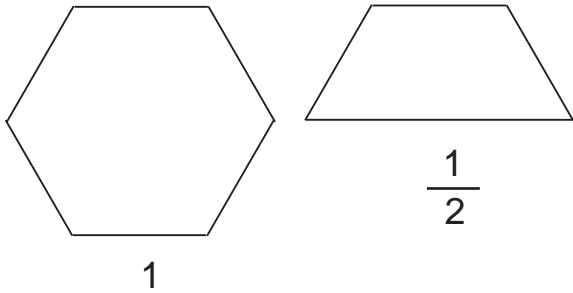
unshaded part: _____

Teacher's Remark(s):
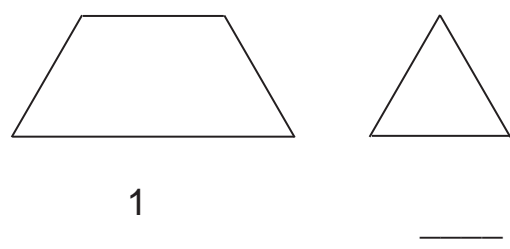
Teacher's Signature and Date:

Look at the pairs of shapes. The larger shape in a pair represents 1 whole shape and the smaller shape is a fraction of the larger shape. Write the fraction number for the smaller shape.
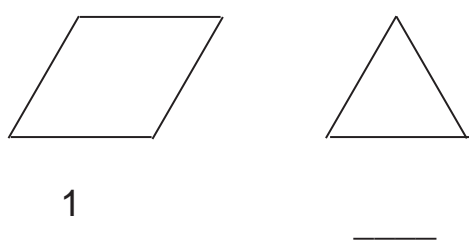
Example:
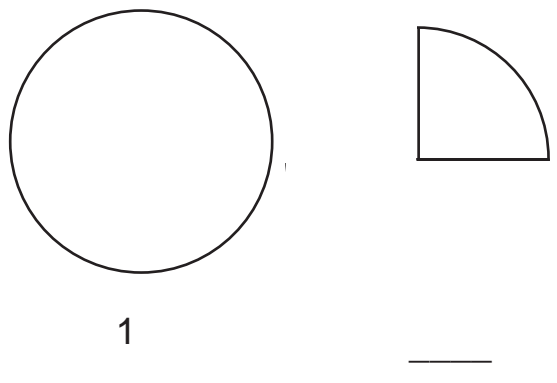
1

$\dfrac{1}{2}$

1

____

1

____

1

____

1

____

Teacher's Remark(s):

Teacher's Signature and Date:

What fraction of the set is the indicated item in each set? Write the fraction number for it.

Example:

$\dfrac{3}{6}$ $\dfrac{1}{6}$ $\dfrac{2}{6}$

_____

_____

_____   _____

_____   _____

_____   _____

_____   _____

Look at the pairs of lines and decide if the pairs are **parallel lines** or **non parallel lines**. Then, write the phrases, "parallel lines" or "non-parallel lines" below them accordingly.

Teacher's Remark(s):

Teacher's Signature and Date:

Cut out the following pairs of lines and sort them into two sets.
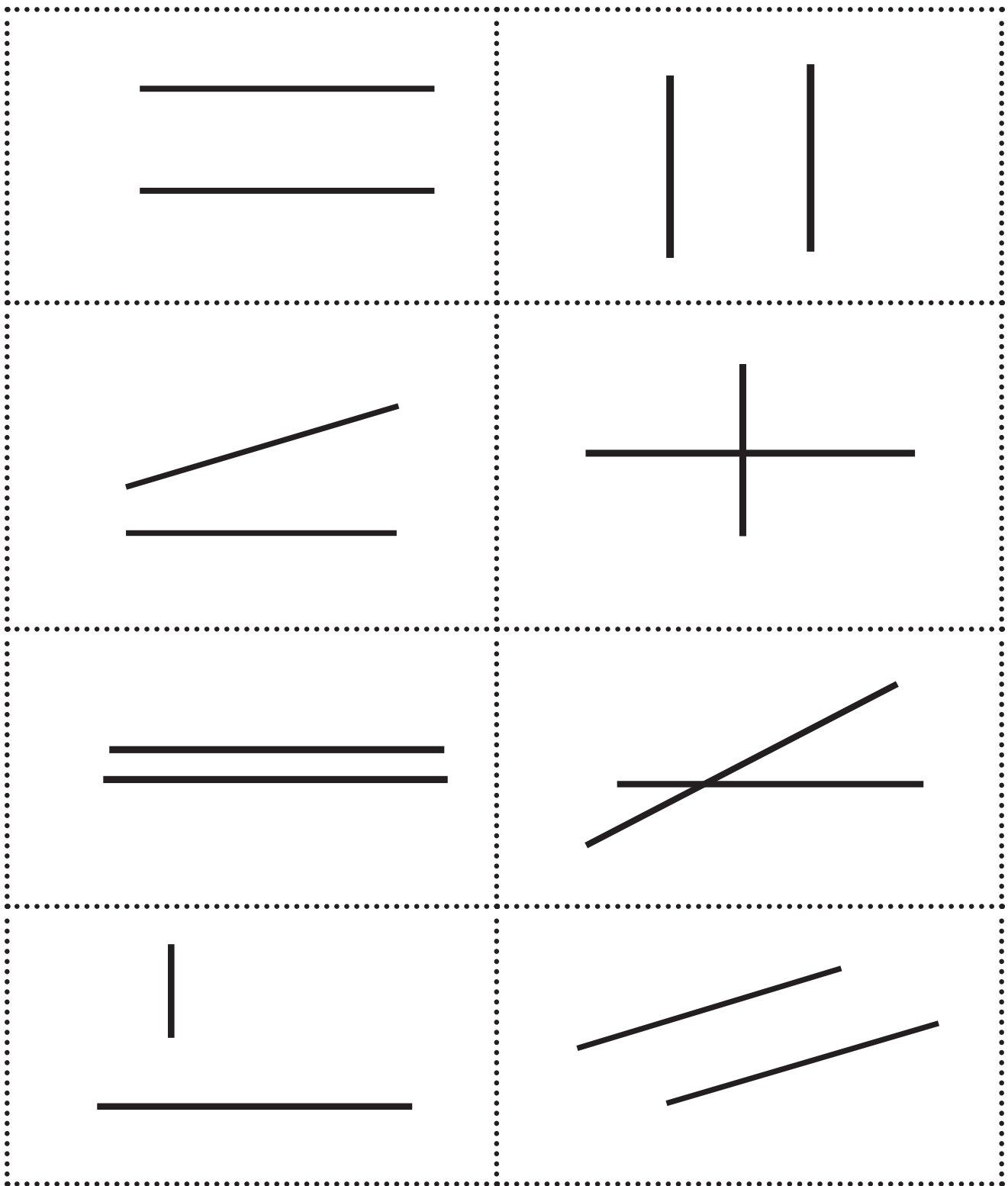
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Cut out the following shapes and sort them into symmetrical and
non-symmetrical shapes.
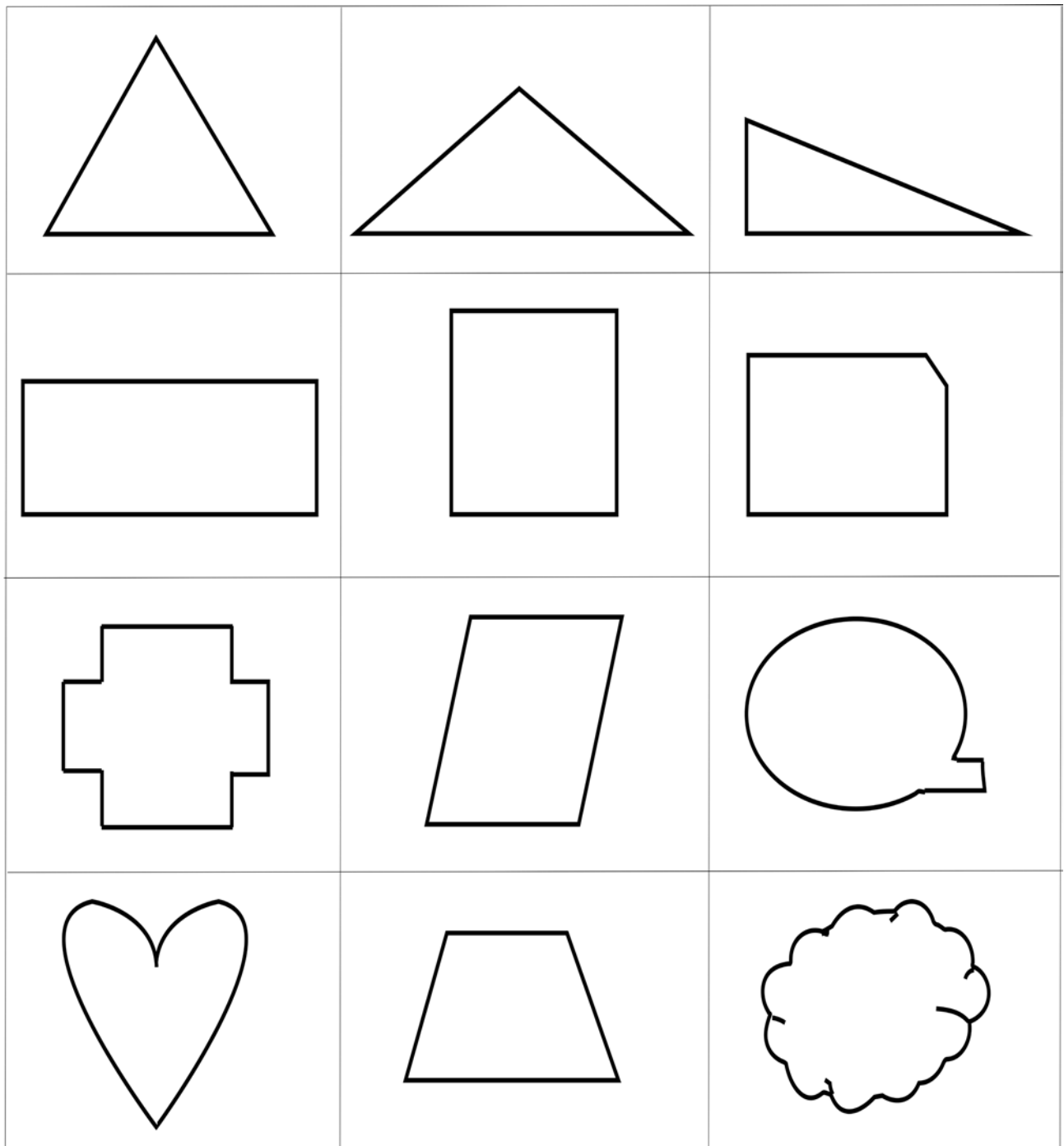
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Draw all the lines of symmetry for each shape, and write the number of lines of symmetry below the shapes.
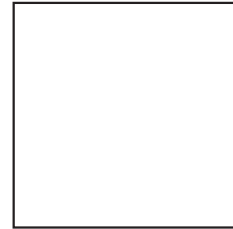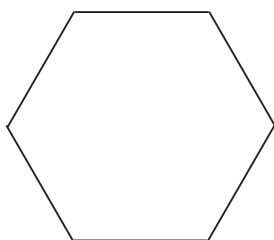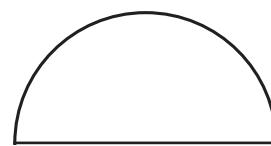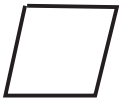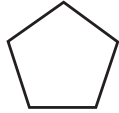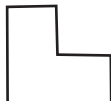
|	
Number of lines of symmetry: _____	Number of lines of symmetry: _____
Number of lines of symmetry: _____	Number of lines of symmetry: _____
Number of lines of symmetry: _____	Number of lines of symmetry: _____

Teacher's Remark(s):

Teacher's Signature and Date:

Fill up the table with the required information for each shape below.

Shapes	Number of sides	Number of corners	Number of pairs of parallel lines	Number of lines of symmetry
This Triangle				
This Triangle				
This Rhombus				
This Rectangle				
This Rectangle (all sides same)				
This Trapezoid				
This Pentagon				
This Hexagon				
This Pentagon				
This Hexagon				

Teacher's Remark(s):

Teacher's Signature and Date:

Look at the following **rectangle**s, and determine which are **squares** and which are not. Write the word "square" under the ones which are squares.
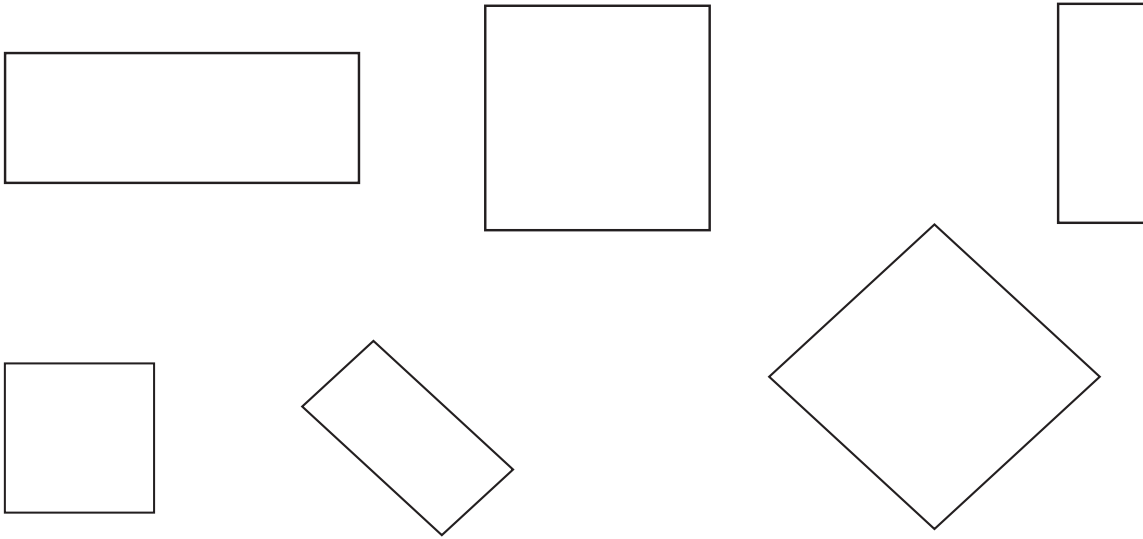
| Draw a square.	Draw a rectangle which is not a square.

Write what you know about squares.

Teacher's Remark(s):

Teacher's Signature and Date:

Name the following 3-D shapes as **prism**, **pyramid**, **cone**, **cylinder** or **sphere**.

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____
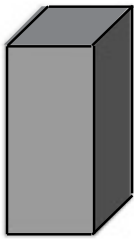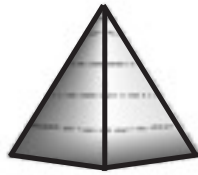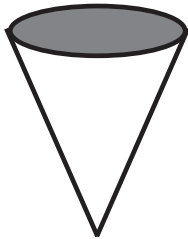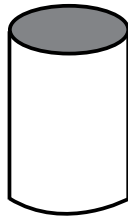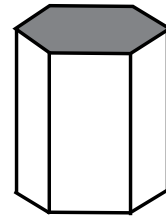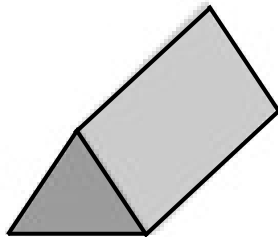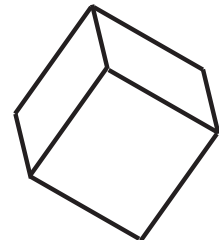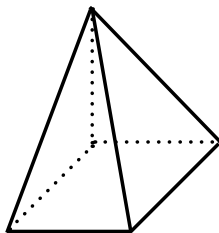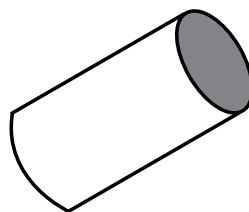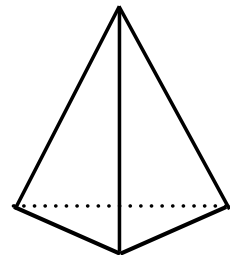
Teacher's Remark(s):

Teacher's Signature and Date:

Draw a cylinder, and label its base and apex.

Draw a cone, and label its base and apex.

Teacher's Remark(s):

Teacher's Signature and Date:

Name the following prisms as **rectangular prism** or **triangular prism**. Label the bases for each prism.

_____   _____
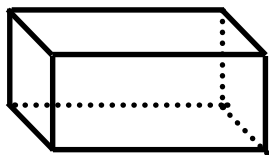
Write what you know about prisms.

Name the following pyramids as **rectangular pyramid** or **triangular pyramid**. Label the **base** and the **apex** for each pyramid.
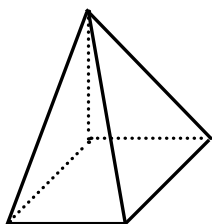
apex

base
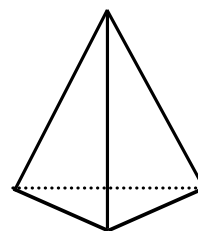
apex
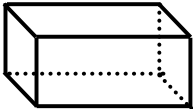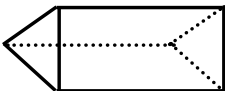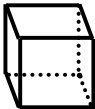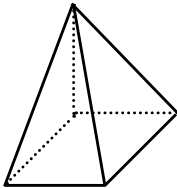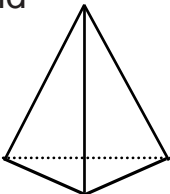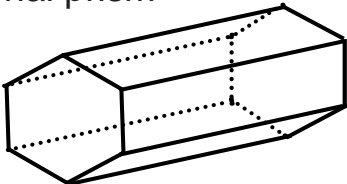
base

_____   _____

Write what you know about pyramids.

Teacher's Remark(s):

Teacher's Signature and Date:

Fill up the table with the required information for each shape below.

Shapes	Number of corners	Number of edges	Number of rectangular faces	Number of triangular faces
Rectangular prism				
Triangular prism				
Cube (Rectangular prism)				
Rectangular pyramid				
Triangular pyramid				
Hexagonal prism				

Teacher's Remark(s):

Teacher's Signature and Date:

Each shape below is a net for a 3-D shape. Name the 3-D shape for each net.
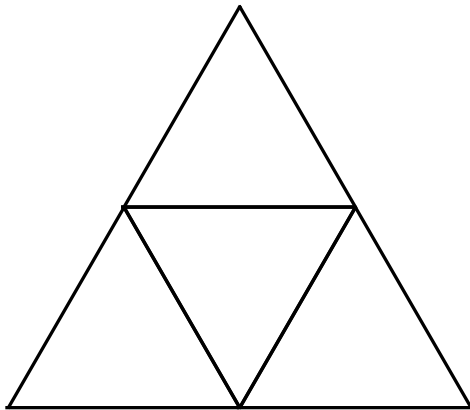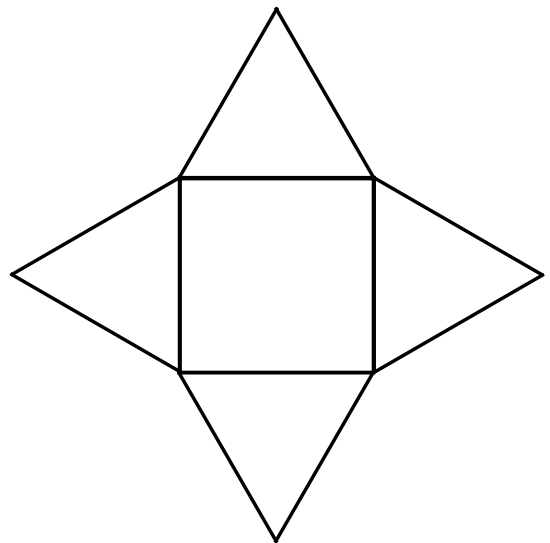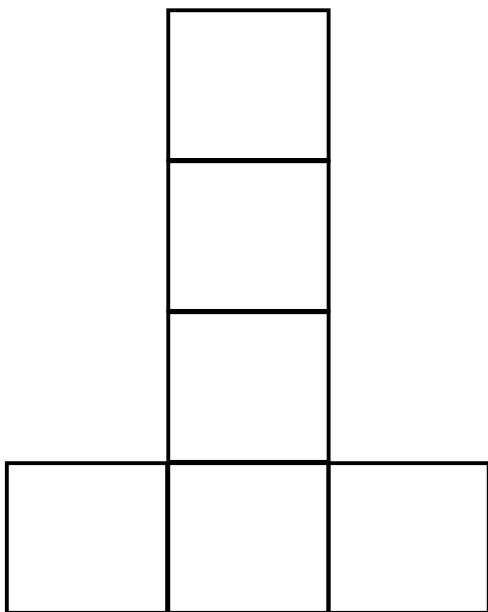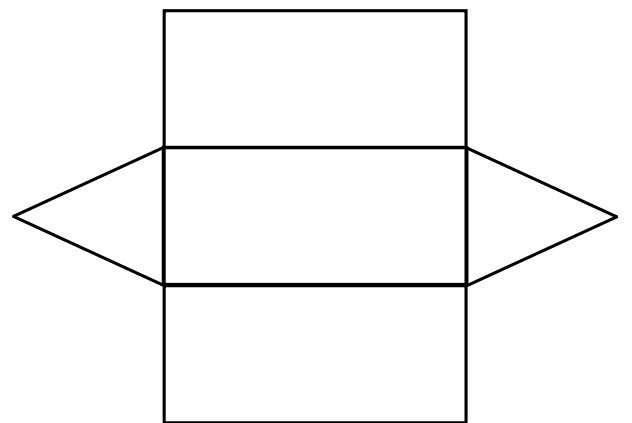
_____   _____

_____   _____

Teacher's Remark(s):

_____

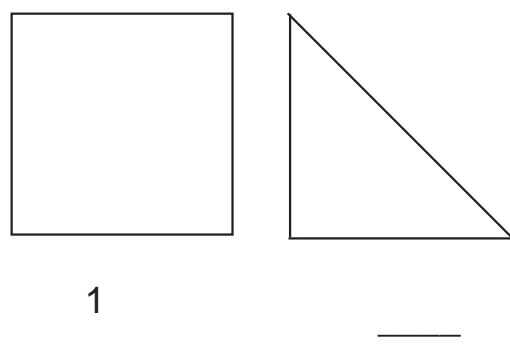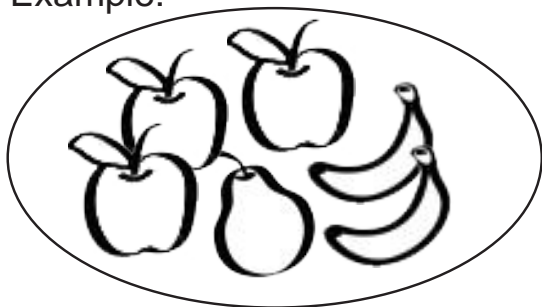Teacher's Signature and Date:

_____

Cut out the following nets to make 3-D shapes. Name the 3-D shape that you get from each of the nets.

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58

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Cut out the following nets to make 3-D shapes. Name the 3-D shape that you get from each of the nets.

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60
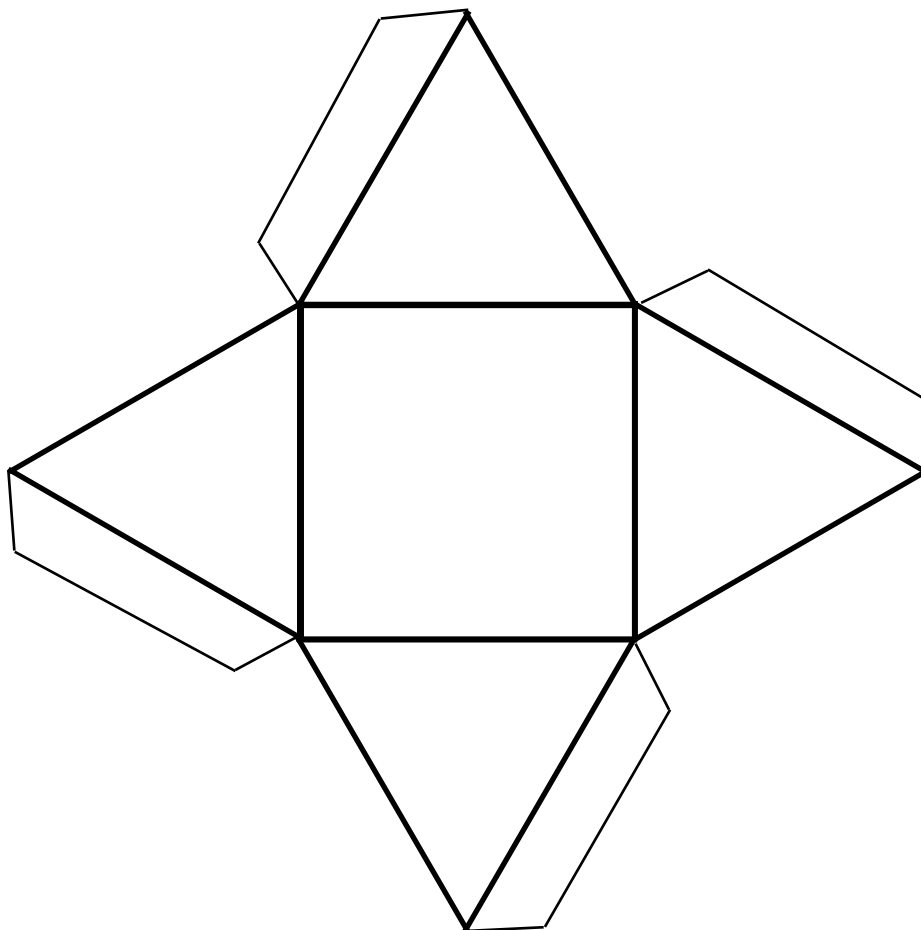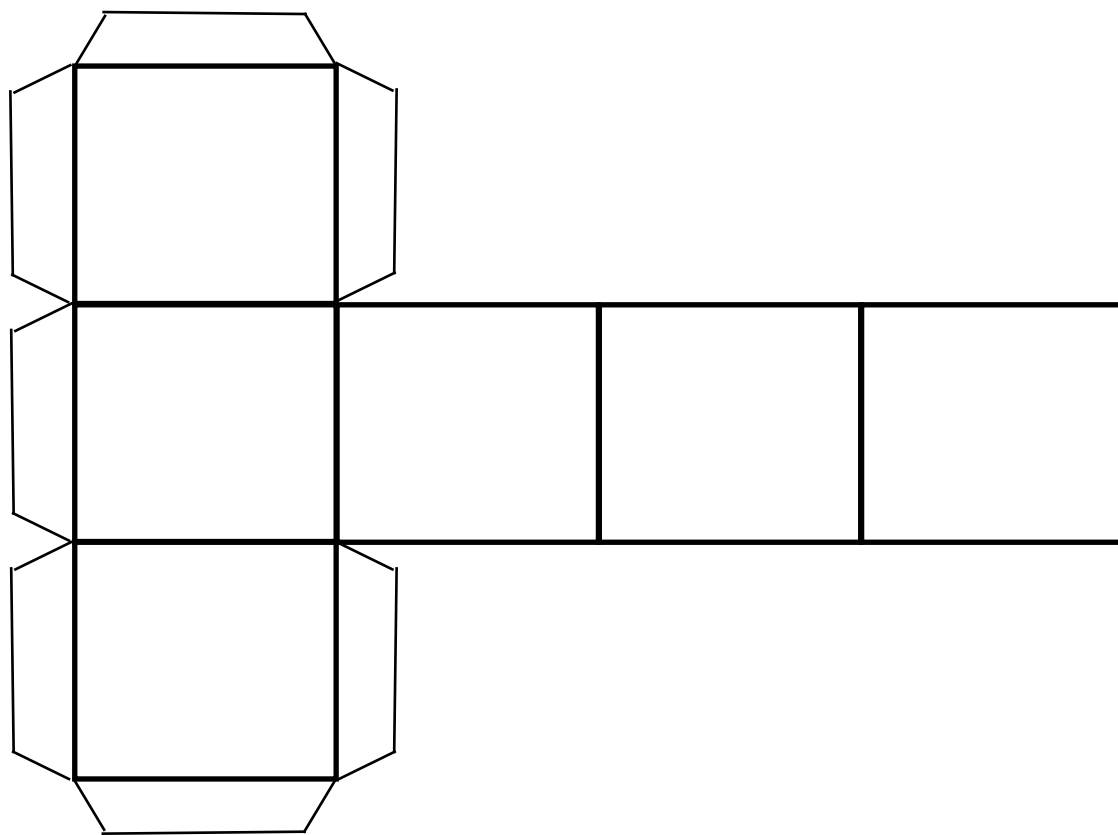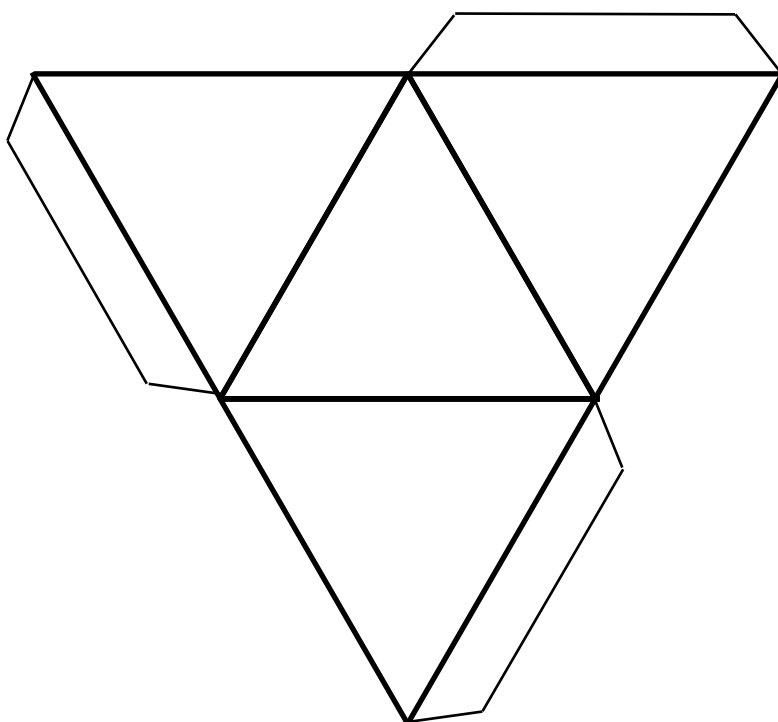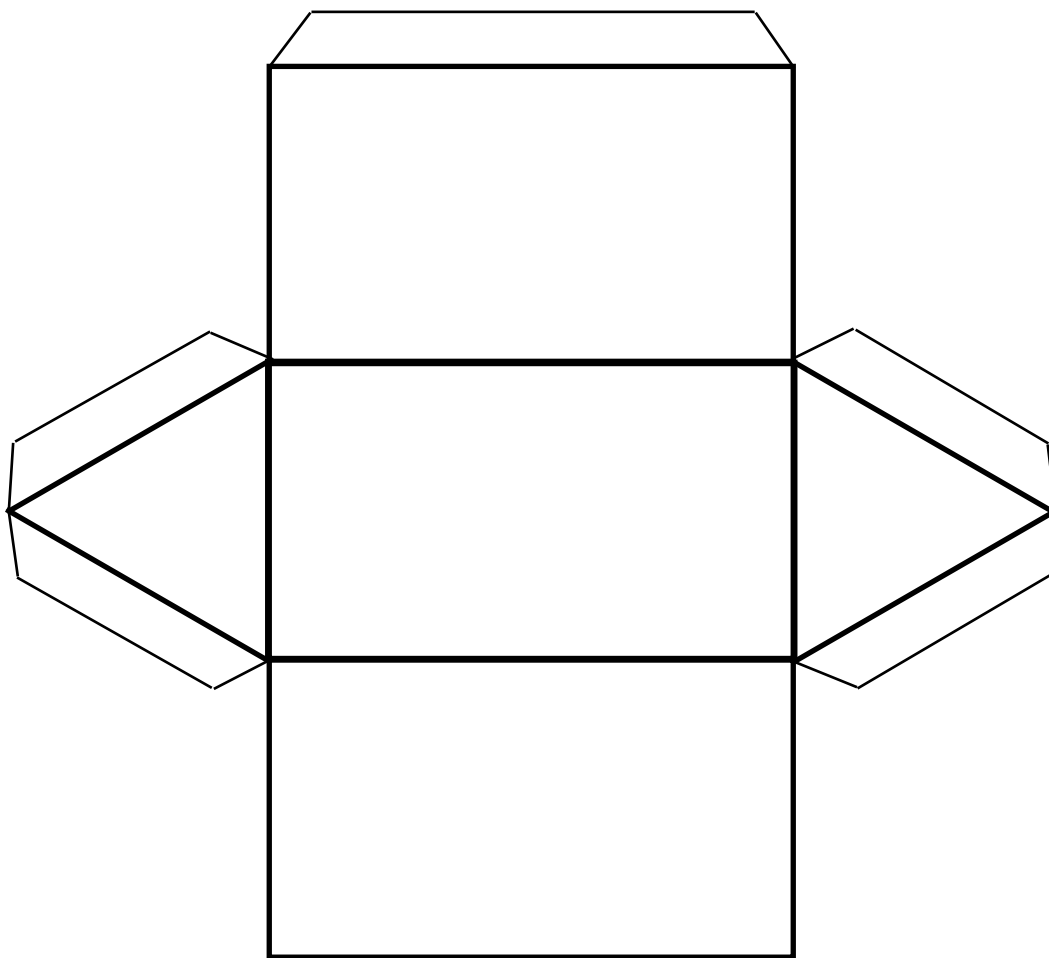
Each of the following diagrams represents 10.

10   10   10   10
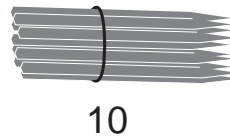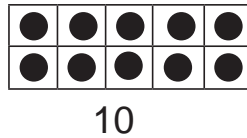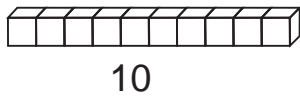
Represent the following sets of diagrams with addition sentences.

Example: $$30 + 20 = 50$$	_____ + _____ = _____
_____ + _____ = _____	_____ + _____ = _____

Complete the following addition sentences.

3 tens + 2 tens = _____ tens   5 tens + 3 tens = _____ tens

7 tens + 2 tens = _____ tens   3 tens + 3 tens = _____ tens

5 tens + 1 ten = _____ tens   5 tens + 5 tens = _____ tens

30 + 20 = _____   50 + 30 = _____

70 + 20 = _____   20 + 20 = _____

50 + 40 = _____   30 + 30 = _____

42 + 10 = _____   36 + 10 = _____

42 + 20 = _____   36 + 30 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **sum** for the following.

      30 + 10 = _____

      30 + 20 = _____

      34 + 10 = _____

      34 + 20 = _____

      34 + 22 = _____

      34 + 25 = _____

      62 + 22 = _____

      73 + 15 = _____

      55 + 33 = _____

      18 + 31 = _____

Find the sum for the following.

      39 + 21 = _____

      63 + 27 = _____

      39 + 26 = _____

      56 + 26 = _____

      56 + 16 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Use the 100-chart to find the **sum** for the following.
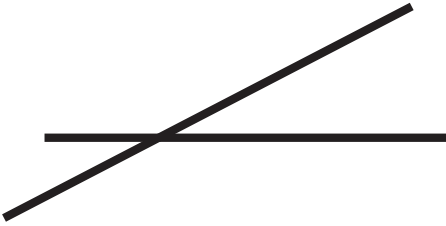
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

34 + 10 = _____

34 + 20 = _____

34 + 34 = _____

55 + 34 = _____

52 + 12 = _____

39 + 21 = _____

63 + 27 = _____

56 + 16 = _____

18 + 31 = _____
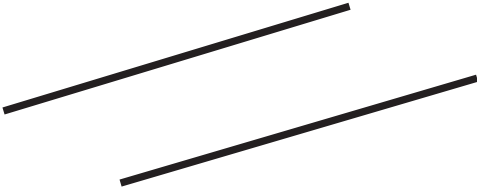
73 + 15 = _____

34 + 34 = _____

62 + 22 = _____

80 + 10 = _____

80 + 20 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **sums** by, first, adding the tens and the ones separately, and then, adding the sums of the tens and the ones.

Example:

$$34 + 22 = 50 + 6 = 56$$

30 + 20 (adding the tens)   4 + 2 (adding the ones)

36 + 32 = _____ + _____ = _____

36 + 41 = _____ + _____ = _____

36 + 24 = _____ + _____ = _____

73 + 23 = _____ + _____ = _____

63 + 27 = _____ + _____ = _____

46 + 24 = _____ + _____ = _____

15 + 15 = _____ + _____ = _____

16 + 16 = _____ + _____ = _____

25 + 25 = _____ + _____ = _____

25 + 24 = _____ + _____ = _____

39 + 39= _____ + _____ = _____

65 + 10 = _____ + _____ = _____

57 + 24 = _____ + _____ = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **sums** by, first, adding the tens and the ones separately, and then adding the sums of the tens and the ones.

Example:

$$
\begin{array}{r}
34 \\
+ 22 \\
\hline
50 \\
6 \\
\hline
56
\end{array}
$$

50 ⟵——— 30 + 20 (adding the tens)

6 ⟵

56 ⟵ 4 + 2 (adding the ones)

$\begin{array}{r} 63 \\ + 24 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ + 12 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ + 24 \\ \hline \end{array}$
$\begin{array}{r} 56 \\ + 16 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ + 16 \\ \hline \end{array}$	$\begin{array}{r} 75 \\ + 10 \\ \hline \end{array}$
$\begin{array}{r} 73 \\ + 23 \\ \hline \end{array}$	$\begin{array}{r} 47 \\ + 24 \\ \hline \end{array}$	$\begin{array}{r} 25 \\ + 25 \\ \hline \end{array}$

Teacher's Remark(s):

Teacher's Signature and Date:

Find the sums for the following additions using place value tables.

Example 1:   34 + 22

Tens	Ones
3	4
+ 2	2
5	6

34 + 22 = 56

Example 2:   43 + 29

Tens	Ones
4	3
+ 2	9
6	12
7	2

10 + 2, or
1 ten + 2 ones

6 tens + 1 ten is 7 tens

43 + 29 = 72

Tens	Ones
6	3
+ 3	8

63 + 38 = _____

Tens	Ones
5	5
+ 1	7

55 + 17 = _____

Tens	Ones
4	7
+ 4	3

47 + 43 = _____

Tens	Ones
1	8
+ 3	8

18 + 38 = _____

Tens	Ones
7	0
+ 1	9

70 + 19 = _____

Tens	Ones
4	4
+ 2	6
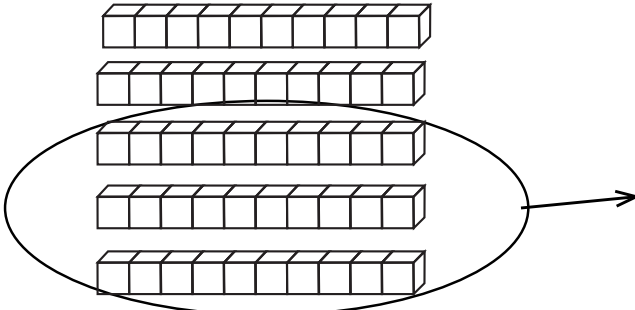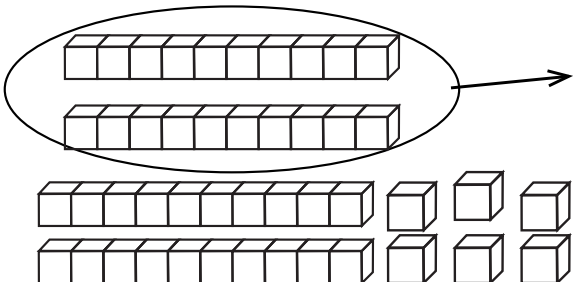
44 + 26 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Represent the second set of diagrams with a subtraction sentence.

10   1

Example:

50 - 30 = 20

_____ - _____ = _____

Complete the following subtraction sentences.

5 tens - 3 tens = _____ tens   7 tens - 3 tens = _____ tens

6 tens - 3 tens = _____ tens   8 tens - 7 tens = _____ ten

10 tens - 7 tens = _____ tens   10 tens - 3 tens = _____ tens

5 tens - 5 tens = _____ tens   2 tens - 1 tens = _____ ten

50 - 30 = _____   40 - 10 = _____   56 - 20 = _____

60 - 30 = _____   42 - 10 = _____   65 - 30 = _____

80 - 70 = _____   42 - 20 = _____   60 - 60 = _____

20 - 10 = _____   42 - 30 = _____   10 - 10 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **differences** by, first, subtracting the tens and the ones separately, and, then, adding the differences of the tens and the ones.

Example: 47 - 23 = (40 - 20) + (7 - 3) = 20 + 4 = 24

difference of the tens ⟶   ⟵ difference of the ones

34 - 22 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

46 - 20 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

46 - 21 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

65 - 55 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

24 - 12 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

47 - 23 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

57 - 55 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

45 - 35 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

97 - 53 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

58 - 26 = (_____ - _____) + (_____ - _____) = _____ + _____ = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **differences** by, first, subtracting the tens and the ones separately, and, then, adding the differences of the tens and the ones.

Example: 57
          - 23
              30 ⟵————— 50 - 20 (difference of the tens)
          + 4 ⟵
              34 ⟵————— 7 - 3 (difference of the ones)

| 34 - 22	46 - 22	65 - 55
24 - 12	47 - 23	57 - 55
79 - 45	58 - 26	75 - 44

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **differences** for the following subtractions using the place value tables.

Example: 57 - 23

Tens	Ones
5	7
- 2	3
3	4

57 - 23 = 34

Tens	Ones
3	4
- 2	2

34 - 22 = _____

Tens	Ones
4	6
- 2	3

46 - 23 = _____

Tens	Ones
2	4
- 1	2

24 - 12 = _____

Tens	Ones
8	7
- 5	3

87 - 53 = _____

Tens	Ones
5	8
- 2	6

58 - 26 = _____

Tens	Ones
5	7
- 5	5

57 - 55 = _____

Tens	Ones
8	7
- 3	5

87 - 35 = _____

Tens	Ones
3	6
- 2	4

36 - 24 = _____

Tens	Ones
7	9
- 6	8

79 - 68 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Find the **differences** for the following subtractions, which require regrouping, using the place value tables.

Example: 62 - 38

Tens	Ones
~~6~~ 5	~~2~~ 12
- 3	8
2	4

Since we cannot subtract 8 ones from 2 ones because 8 is greater than 2, we regroup 62, which is 6 tens and 2 ones, as **5 ten**s and **12 ones**.

Now, we can subtract **8 ones** from **12 ones** to get **4 ones**, and we can also subtract **3 tens** from **5 tens** to get **2 tens**.

62 - 38 = 24

Tens	Ones
7	1
- 2	9

71 - 29 = _____

Tens	Ones
4	3
- 1	8

43 - 18 = _____

Tens	Ones
5	2
- 3	8

52 - 38 = _____

Tens	Ones
6	0
- 2	5

60 - 25 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Solve the following problems by either adding or subtracting the numbers in the stories. Show how you added or subtracted.

1. Karma went to buy some sugar and some salt from a shop. He paid Nu 55 for a packet of sugar and Nu 12 for a packet of salt. How much money did Karma spend altogether?

2. How much more did the sugar cost than the salt in the above story?

3. Lhamo has Nu 95. She gave Nu 25 to her younger sister. Now, how much money is left with Lhamo?

Teacher's Remark(s):

Teacher's Signature and Date:

Fill in the extended 100-chart with numbers beyond 100.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101									
									200

Teacher's Remark(s):

Teacher's Signature and Date:

Write the number words for the numerals.

Numeral	Number word
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Numeral	Number word
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	

Numeral	Number word
22	
23	
24	
25	
26	
27	
28	

Numeral	Number word
29	
30	
31	
32	
33	
34	
35	

Teacher's Remark(s):

Teacher's Signature and Date:

Write the number words for the numerals.

Numeral	Number word
40	
50	
60	
70	
80	
90	
100	
101	
102	
103	
104	

Numeral	Number word
110	
111	
112	
113	
114	
115	
196	
197	
198	
199	
200	

Numeral	Number word
201	
202	
203	
204	
205	
206	
207	

Numeral	Number word
300	
400	
500	
600	
700	
800	
900	

Teacher's Remark(s):

Teacher's Signature and Date:

The following diagrams represent the models for the numbers 1, 10 and 100.

1   10   100

What number does each set of the following diagrams represent?

_____   _____

_____   _____
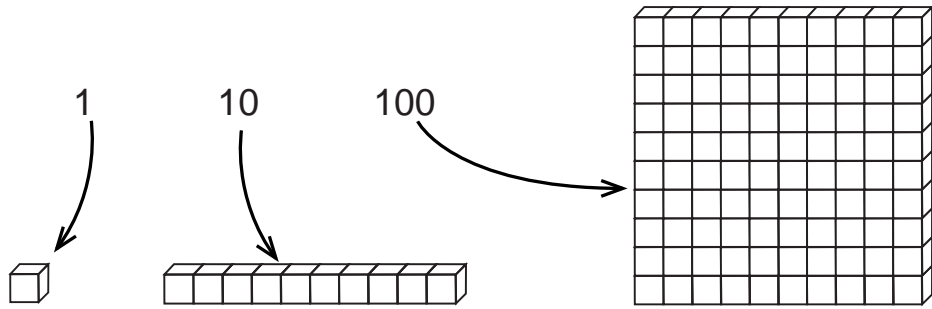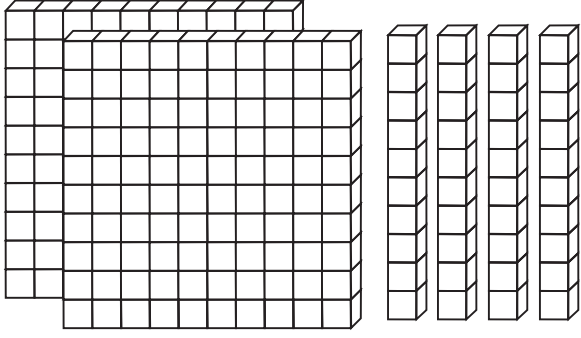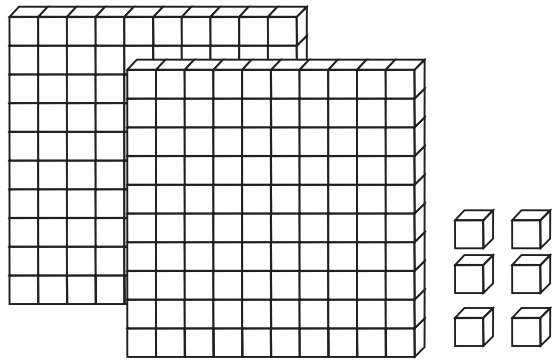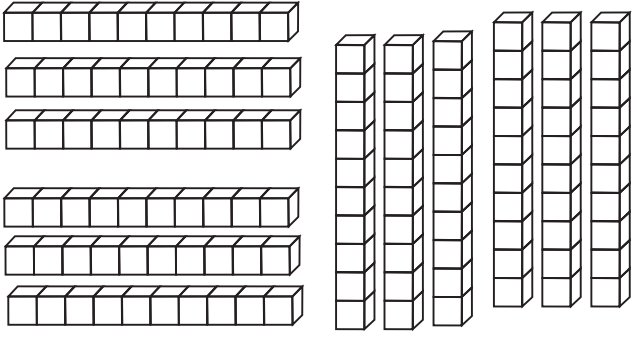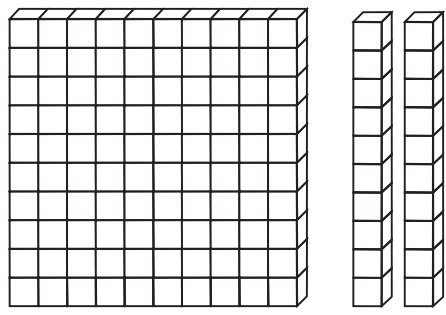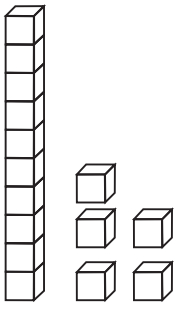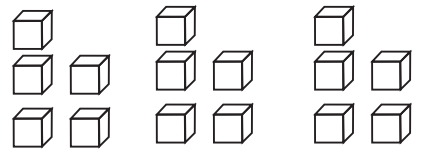
What number does each set of the following diagrams represent?

_____   _____

_____   _____

_____   _____

Teacher's Remark(s):

Teacher's Signature and Date:

Describe the numbers as groups of hundreds, tens and ones.

Example: 526 = 5 hundreds 2 tens 6 ones

236 = _____ hundreds _____ tens _____ ones

258 = _____ hundreds _____ tens _____ ones

797 = _____ hundreds _____ tens _____ ones

450 = _____ hundreds _____ tens _____ ones

902 = _____ hundreds _____ tens _____ ones

 64 = _____ hundreds _____ tens _____ ones

347 = _____

123 = _____

605 = _____

870 = _____

Write the numbers described below.

Example: 8 hundreds 4 tens 6 ones = 846

5 hundreds 3 tens 9 ones = _____

4 hundreds 6 tens 3 ones = _____

7 hundreds 0 tens 5 ones = _____

0 hundreds 7 tens 3 ones = _____

8 hundreds 5 tens 0 ones = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Describe the following numbers as groups of tens.

Example: 20 = 2 tens   70 = ____ tens   120 = ____ tens

30 = ____ tens   80 = ____ tens   130 = ____ tens

40 = ____ tens   90 = ____ tens   140 = ____ tens

50 = ____ tens   100 = ____ tens   150 = ____ tens

60 = ____ tens   110 = ____ tens   10 = ____ tens

Describe the following numbers as groups of hundreds, tens and ones.

Example: 146 = 1 hundred 4 tens 6 ones

235 = ____ hundreds ____ tens ____ ones

154 = _____

260 = _____

Describe the following numbers as groups of tens and ones.

Example: 146 = 14 tens 6 ones

235 = ____ tens ____ ones

154 = _____

260 = _____

Teacher's Remark(s):

Teacher's Signature and Date:

Extend the following number patterns.

100, 200, 300, 400, _____, _____, _____, _____, _____

25, 50, 75, 100, 125, _____, _____, _____, _____, _____

175, 200, 225, 250, _____, _____, _____, _____, _____

400, 500, 600, _____, _____, _____, _____

10, 20, 30, 40, _____, _____, _____, _____, _____ , _____

80, 90, 100, 110, 120, _____, _____, _____, _____, _____

200, 210, 220, 230, _____, _____, _____, _____, _____

900, 800, 700, _____, _____, _____, _____, _____, _____

90, 80, 70, _____, _____, _____, _____, _____, _____

200, 175, 150, _____, _____, _____, _____, _____

Create a number pattern which starts with 200 and the numbers increase by 100 each time.

Create a number pattern which starts with 125 and the numbers increase by 25 each time.

Teacher's Remark(s):

Teacher's Signature and Date:

Show or indicate where the following numbers would be on the number line.

150, 310, 499, 205, 350, 450, 700

Example: 150

```
|-------|-------|-------|-------|-------|-------|-------|----->
0      100     200     300     400     500     600     700
```
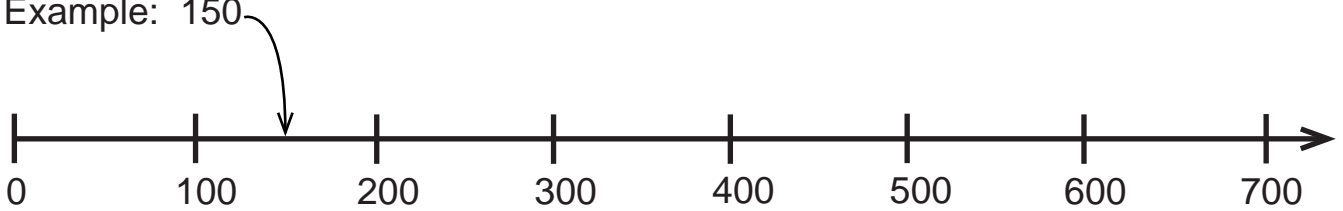
Show or indicate where the following numbers would be on the number line given below.

115, 129, 135, 153, 171

```
|-------|-------|-------|-------|-------|-------|-------|----->
100    110     120     130     140     150     160     170
```
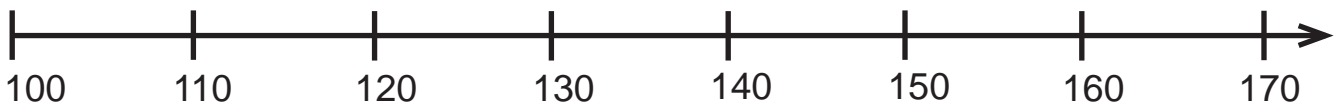
Make a number line and show the following numbers on it.

0, 50, 100, 150, 200, 250, 300

Teacher's Remark(s):

Teacher's Signature and Date:

Compare the pairs of numbers and write "is greater than", "is less than", or "is equal to" between them.

250 _____ 199   123 _____ 97

99 _____ 100   651 _____ 651

500 _____ 87   720 _____ 270

50 _____150   800 _____ 800

Compare the pairs of numbers and write the signs >, <, or = in the boxes between them.

40 ☐ 30   123 ☐ 96

30 ☐ 40   651 ☐ 651

30 ☐ 30   96 ☐ 100

214 ☐ 314   900 ☐ 900

314 ☐ 99   555 ☐ 600

770 ☐ 690   670 ☐ 669

Teacher's Remark(s):

Teacher's Signature and Date:

The bar graph below shows the pet animals the students in a class have. Answer the questions based on the graph.
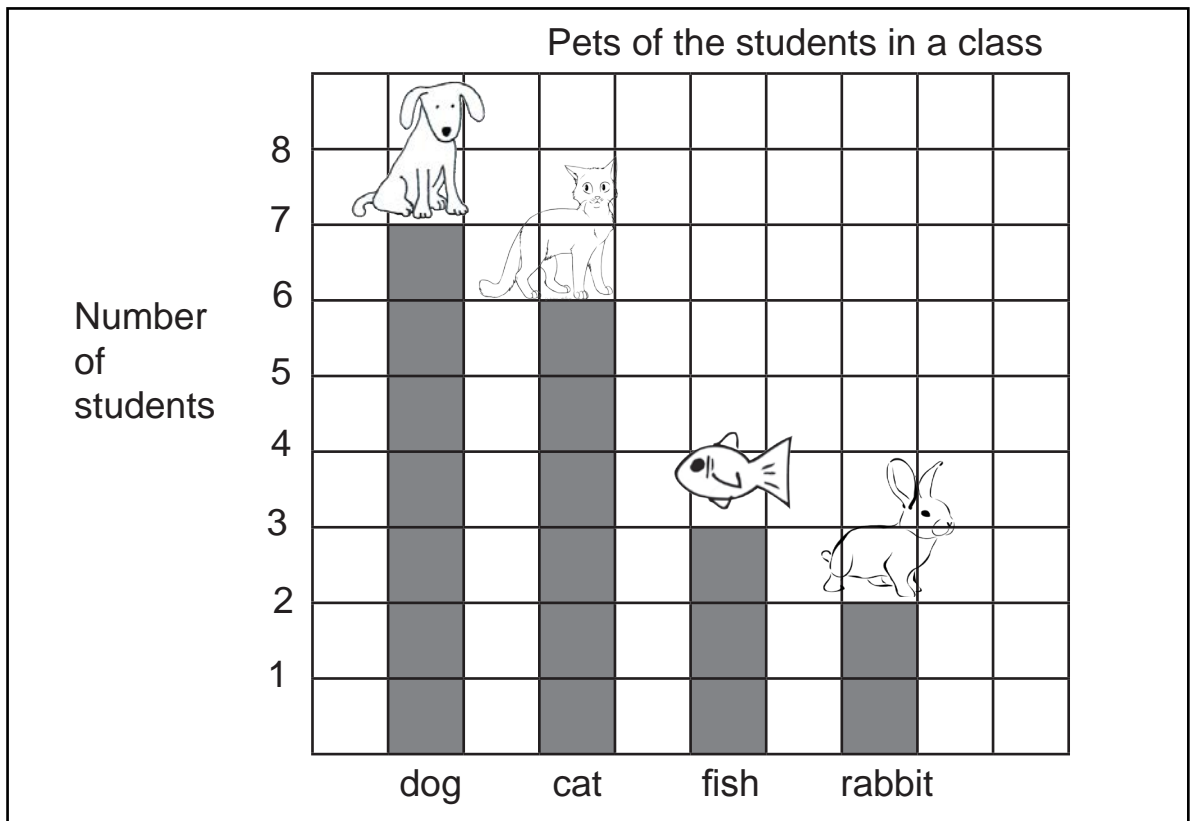
1. Name the pet animals that the students in the class have?

    _____

2. Which pet is owned by the most number of students in the class?

    _____

3. How many students have fish as their pet?

    _____

4. What is the title of the bar graph?

    _____

Teacher's Remark(s):

Teacher's Signature and Date:

The bar graph below shows the favourite fruits of the students in a class. Answer the questions based on it.

Favourite fruits of the students in a class

Number of students
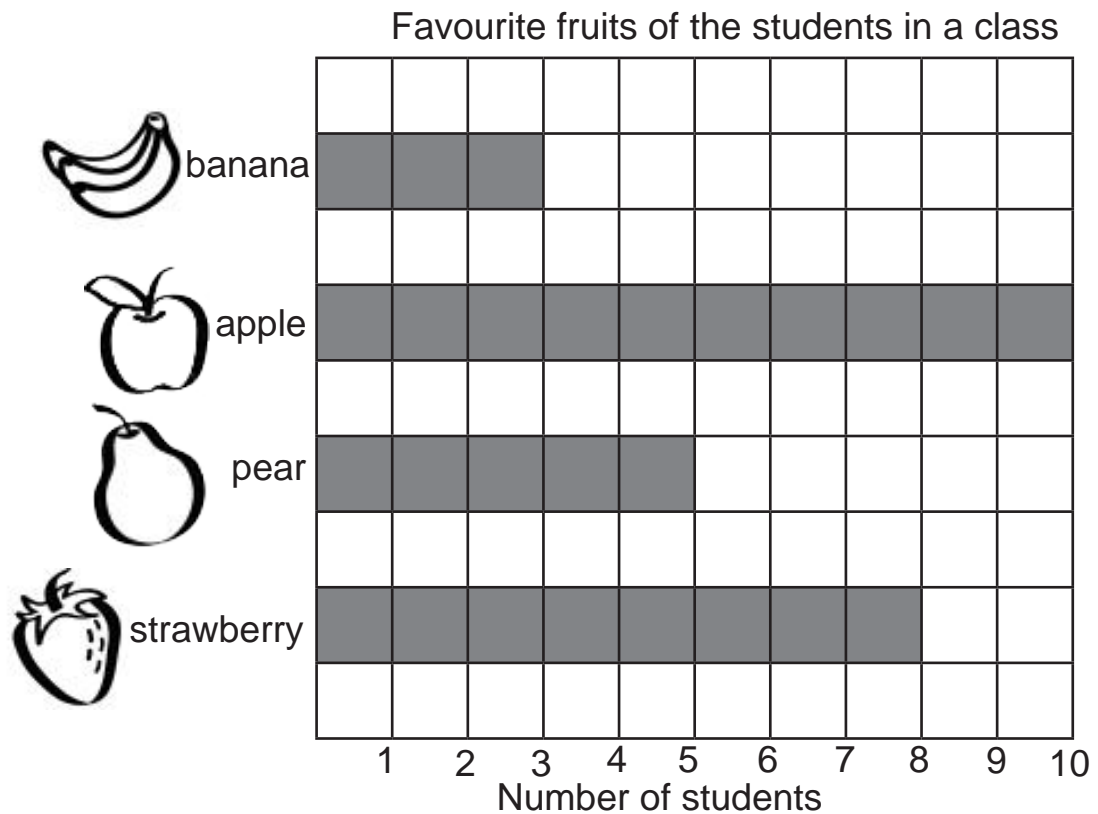
1. Are the bars in the graph vertical or horizontal?

_____

2. How many students had said that apple is their favourite fruit?

_____

3. What does the shortest bar tell?

_____

4. How many students are there in this class as per this graph?

_____

5. What is your favourite fruit?

_____

Teacher's Remark(s):

Teacher's Signature and Date:

Make a bar graph for the number of sisters the students in your class have on the grid below. Do not forget to write the **title** and the **labels** for your graph.
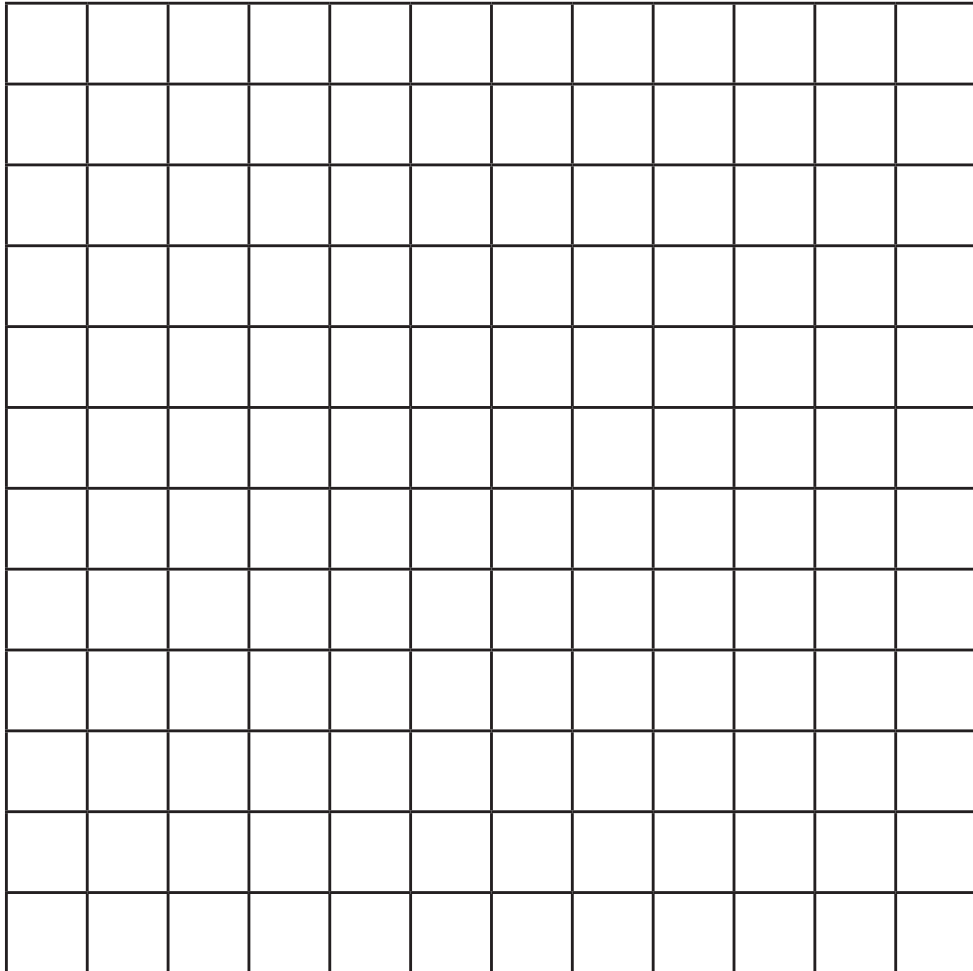
Teacher's Remark(s):

Teacher's Signature and Date:

Make a bar graph for the data you have collected about your friends during an earlier lesson on the grid provided below. Do not forget to write the **title** and the **labels** for your graph. You can make your bars either horizontal or vertical.
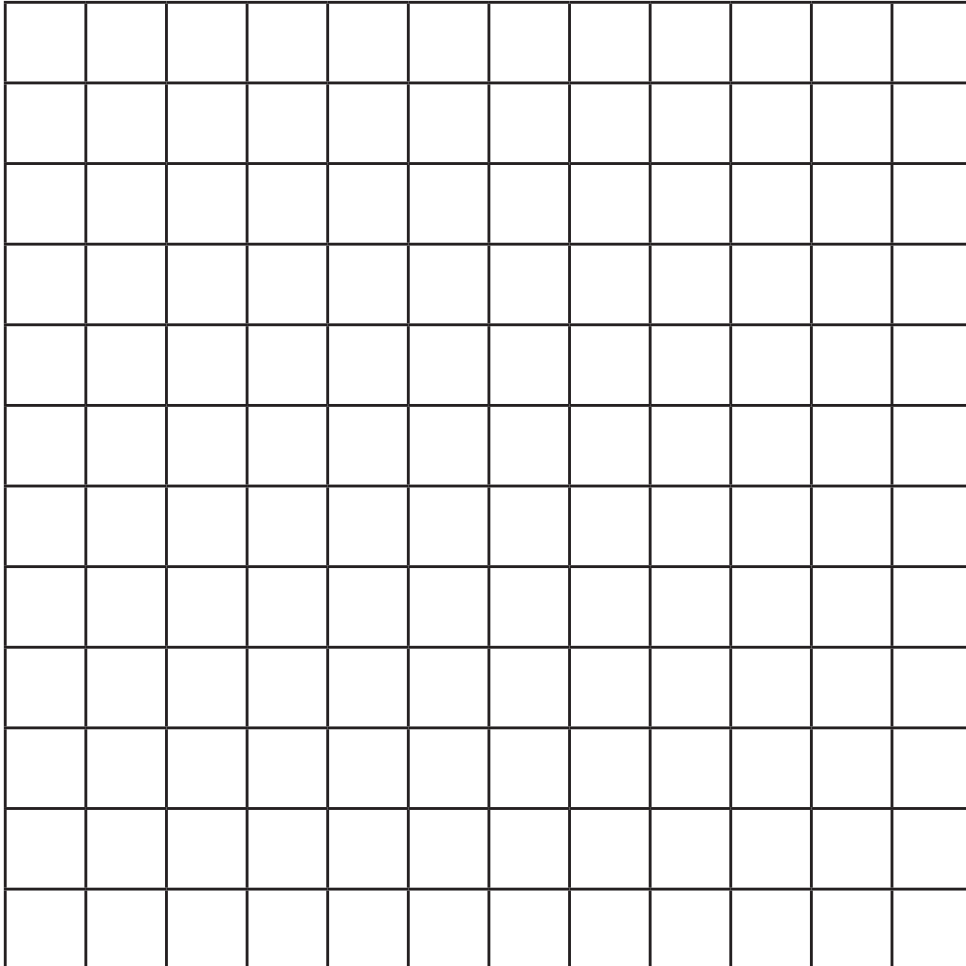
Teacher's Remark(s):

Teacher's Signature and Date:

What is the probability of each of the following situations happening. Read the statements and write one of these words (**certain, impossible, likely, unlikely**) after the each statement.

1. A yak will be a student in your class next year. _____

2. Tomorrow will be a sunny day. _____

3. Crows will become white when they grow old. _____

4. Some of your friends will become teachers in the future. _____

5. All of your friends will become teachers in the future. _____

6. Someday humans will grow wings and fly like birds. _____

7. If you put a stone in water, it will not sink. _____

8. It will snow this winter in your school. _____

9. One day you will fly in the Druk Air. _____

10. His Majesty the King will visit your school this year. _____

Write a statement for which you think the probabilty will be **certain**.

Write a statement for which you think the probabilty will be **impossible**.

Teacher's Remark(s):

Teacher's Signature and Date:

Palden rolled a pair of dice again and again, and recorded the **sums** of the numbers rolled each time as shown below. Answer the questions that follow.

Sum	
1	
2	||
3	||
4	⊬⊦⊦
5	|
6	⊬⊦⊦ |

Sum	
7	⊬⊦⊦ ⊬⊦⊦ |
8	⊬⊦⊦
9	
10	||
11	|
12	|

1. How many times had Palden rolled the dice?

    _____

2. What sum did Palden get the most number of times?

    _____

3. If he rolls the dice one more time, what would most likely be the sum?

    _____

4. As you can see, Palden has not got 9 as a sum. Do you think he can get 9 as a sum if he rolls the dice some more times?

    _____

5. Can Palden ever get 13 as a sum for his pair of dice? Why

    _____

Teacher's Remark(s):

Teacher's Signature and Date:

Look at the diagrams below and answer the questions that follow.
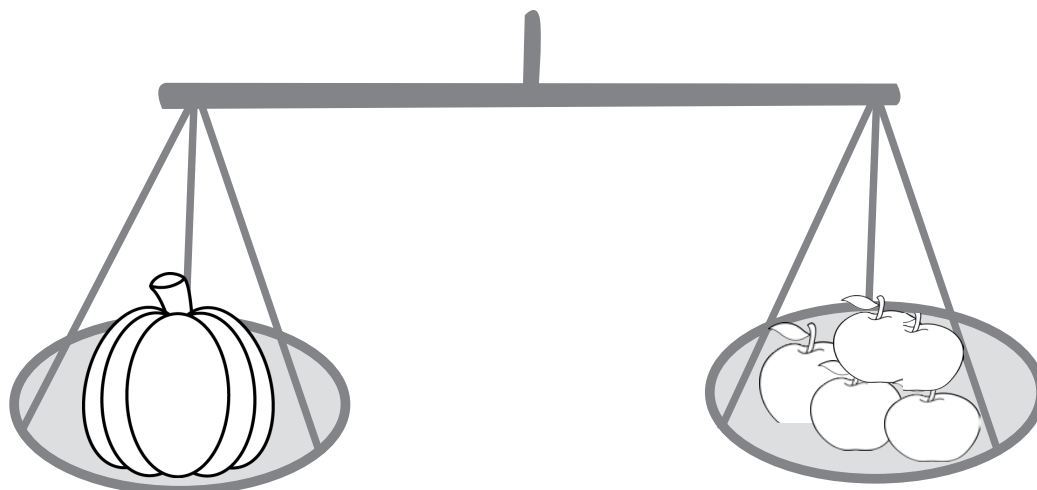
1.   What is the **mass** of the pumpkin?

The **mass** of the pumpkin is _____ apples.
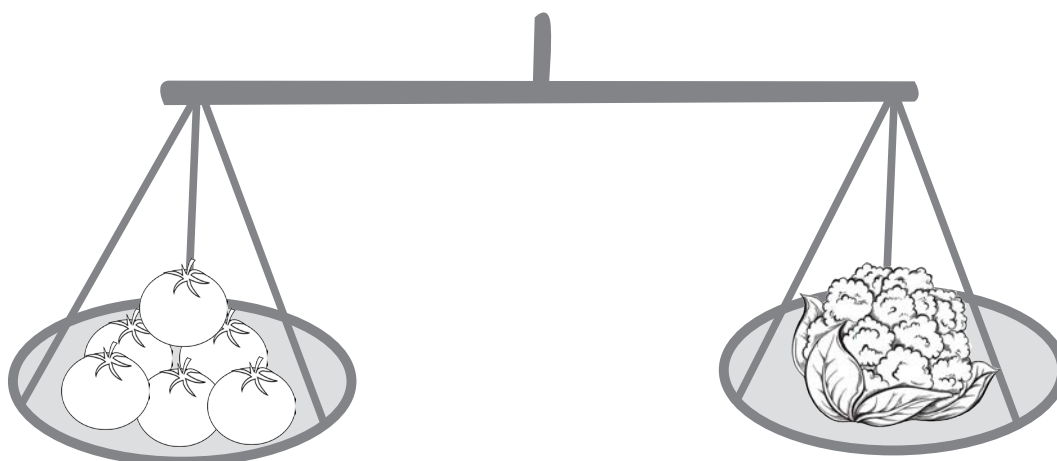
2.   What is the **mass** of the cauliflower?

_____

Teacher's Remark(s):

Teacher's Signature and Date:

Look at the diagrams below and answer the questions that follow.

Question: What is the mass of the potatoes?

Answer: _____

_____

1 Kilogram

Question: How many kilograms of rice are there in this sack?

Answer: _____

Net Wt. : 25 kg

Draw a picture of an object that has a **mass** of less than 1 kilogram.

Teacher's Remark(s):

Teacher's Signature and Date:

Look at the diagrams below and answer the questions that follows.

A bottle of apple juice can fill three glasses.

Glasses

Apple Juice

1. What is the **capacity** of the bottle?

   The capacity of the bottle is _____ glasses.

A rectangular box can accomodate exactly 60 identical cubes.

Cube

Box
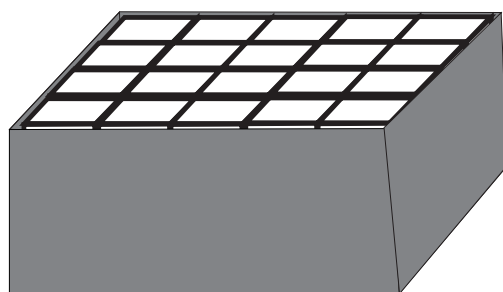
2. What is the **capacity** of the box?

   _____

Teacher's Remark(s):

Teacher's Signature and Date:

This jug can hold exactly 1 litre of water. So, the capacity of the jug is 1 litre.
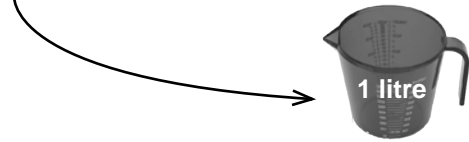
1 litre

This bucket can hold exactly 10 jugful of water.

Question: What is the **capacity** of the bucket?

Answer: The capacity of the bucket is _____ litres.

Look at the following pictures of the containers and choose the appropriate capacity for each, by ticking the phrase "More than 1 litre" or "Less than 1 litre".

More than 1 litre

Less than 1 litre

More than 1 litre

Less than 1 litre

DewFresh

More than 1 litre

Less than 1 litre

More than 1 litre

Less than 1 litre

Fortune
FILTERED
Groundnut
Oil

Teacher's Remark(s):

Teacher's Signature and Date:

Answer the following questions.

1. How many days are there in a week?

    _____

2. Write the names of the days in a week.

    _____

    _____

3. What day comes before Wednesday?

    _____

4. How many months are there in a year?

    _____

5. What is the 1st month of the year?

    _____

6. What is the 11th month of the year?

    _____

7. Write the names of the 4 seasons.

    _____

8. During which season do you have a long holiday from the school?

    _____

Teacher's Remark(s):

Teacher's Signature and Date:

Write the time shown by each clock.
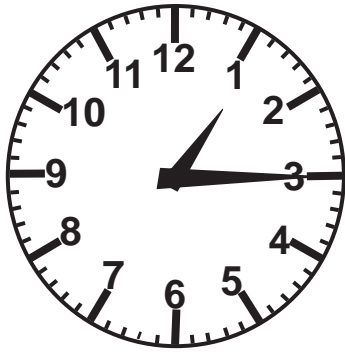
_____ minutes past _____ o'clock
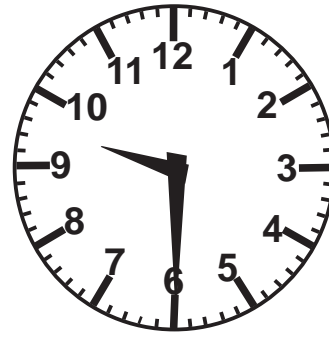
_____ minutes past _____ o'clock

_____ minutes past _____ o'clock

_____

_____

_____
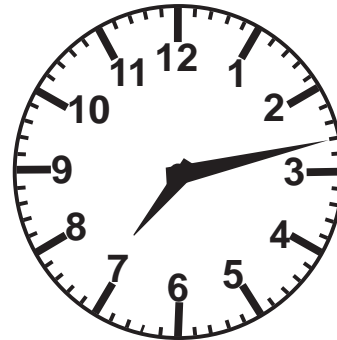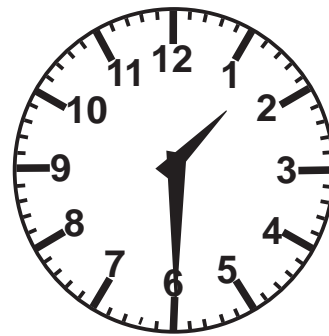
Teacher's Remark(s):

Teacher's Signature and Date:

Draw the **minute hand** and the **hour hand** on each clock to show the time described below the clocks.
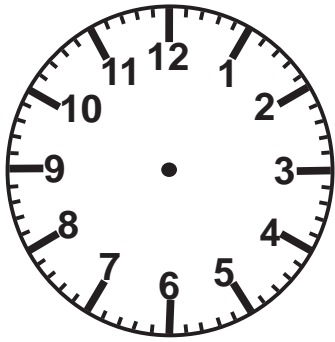
15 minutes past 8 o'clock
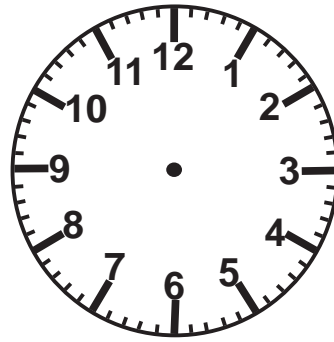
30 minutes past 3 o'clock
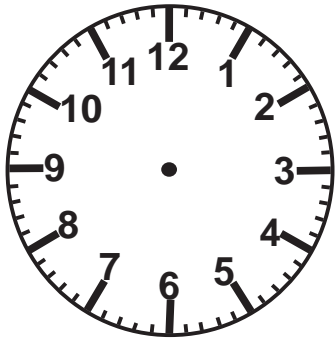
45 minutes past 10 o'clock
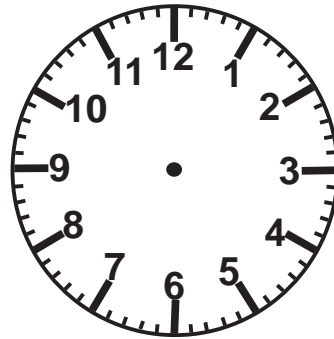
15 minutes past 10 o'clock
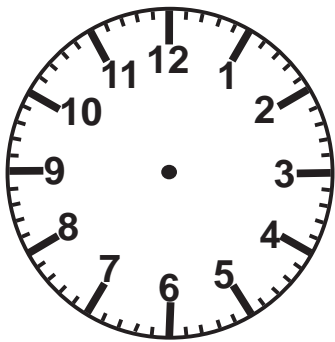
Half past 2 o'clock
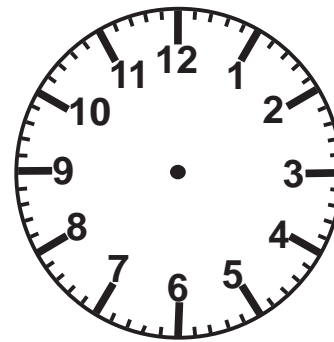
7 o'clock

Teacher's Remark(s):

Teacher's Signature and Date:

Write the times described below in digital clock format.

Example: 30 minutes past 9 o'clock	9:30
15 minutes past 6 o'clock	
0 minutes past 11 o'clock	
50 minutes past 4 o'clock	
5 minutes past 4 o'clock	

Describe the times written in the digital clock format.

Example: 6:05	5 minutes past 6 o'clock
6:45	
5:15	
10:20	
10:00	

Teacher's Remark(s):

Teacher's Signature and Date:

Read the following stories and determine the time taken for the activities in them.

1. A football match started at 4.30 and ended at 6:00 last Sunday evening.
    How many hours was the match played?

2. A baby slept from 1:30 to 2:30 in the afternoon. How long did the baby
    sleep?

3. Kaka studies from 5:00 to 6:30 in the evenings. How many hours does
    Kaka study?

4. Arjun walked from his house to the town. He started from his house at
    9 o'clock and reached the town at 30 minutes past 11 o'clock.
    How many hours did Arjun walk?

Teacher's Remark(s):

Teacher's Signature and Date:

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Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 1   NUMBERS TO 100

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Have 10-frames, counters and a calendar for the month ready. Present the student with a number, say 25, and tell/ask: **Show me this number on the calendar. What date does it show? What day is the 25th of this month? Skip count by 5s backward from 25 to 0. How can you show 25 on 10-frames? Which number is more: 25 or 18? How can you show that? Or, How do you know that 25 is more than 18? Which of these two numbers, 18 and 25, is an even number? Can you show it is an even number?** Present shrinking pattern (like; 12, 10, 8, …), and ask: **Can you extend this pattern? What kind of a pattern is this? Can you create/make a simple growing pattern? Explain how the pattern works.**	The student is able to: - Say the dates in ordinal number form. - Read and relate dates with days on a calendar. - Skip count by 5s. - Represent numbers on 10-frames. - Compare numbers and say which is more/less. - Identify even numbers. - Show/represent even numbers. - Identify simple growing and shrinking patterns. - Extend simple patterns. - Create simple patterns.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 1

CA marks from Chapter 1 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 2   ADDITION AND SUBTRACTION STRATEGIES

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Provide the student with a set of snap cubes in two colours (e.g., 5 red cubes and 6 blue cubes), and a blank paper. And, ask: **Can you write an addition sentence for this set of cubes?** Use appropriate probing questions, if required. Have the student describe what each of the numbers in the sentence means. Have the student write the related addition and subtraction sentences, by asking questions such as: **Can you write this addition sentence in another way? How are these two addition sentences different? Why is the sum the same? Can you write a related subtraction sentence for this addition sentence? How do you know that 11 − 5 = 6? What is another subtraction sentence for this situation?** Have the student write an addition sentence using two different numbers, other than 5 and 6, for which the sum is 11. Ask him/her to tell how he/she determined the sum. Have the student write a subtraction sentence using two different numbers, other than 11 and 5, for which the difference is 6. Ask him/her to tell how he/she determined the sum.	The student is able to: - Represent a part-part-whole situation with an addition sentence. - Describe what each number in an addition sentence means. - Use the commutative property of addition. - Write the related addition and subtraction sentences for an addition sentence. - Write more than one addition fact for the same sum. - Use an appropriate strategy to add two numbers. - Write more than one subtraction fact for the same difference. - Use an appropriate strategy to find the difference of two numbers.

Comments and Marks
Strengths: Areas of Need: Follow up Steps: Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 2
CA marks from Chapter 2 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 3   MEASURING LENGTH AND AREA

Interview-based Performance Task (Please refer the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Have a 2-D shape drawn on a piece of paper, as shown below, some trapezoidal, rhomboidal and triangular pattern blocks ready. The shape should be such that it can fit 2 trapezoids, or 3 rhombuses, or 6 triangles on it. Ask the student: **Can you measure the area of this shape with one of these pattern blocks? So what is the area of this shape? Can you now measure the area with another of these blocks? What is the area using this unit? Has the area of the shape changed when you measured it with different units? Why has the number changed?** Present the student with a rectangle that is 2 cm by 3 cm, and a ruler. Ask: **How many centimetres long do you think is this side of the rectangle** (indicating to one of the sides of the rectangle)**? Measure the side n centimetres using the ruler. So, how lon is the side? Can you measure and write the perimeter of this shape in centimetres?** Ask the student to draw a line that is 5 centimetres with the help of the ruler.	The student is able to: - Measure the area of a shape with non-standard units. - Describe the area of a shape in non-standard units. - Understand and tell that the area of a shape does not change even if we use different units to measure it. - Measure an area in more than one non-standard unit. - Make reasonable estimate of the length of a line in centimtres. - Measure the lenthg of a line using a ruler correctly and express the lenght in centimetres. - Measure and record the perimeter of a shape in centimetres. - Draw a straight line for a given length in centimetres.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 3

CA marks from Chapter 3 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 4   PLACE VALUE

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Have a place value chart with the columns for tens and ones, base ten blocks (tens and ones) ready. Provide the student with a 2-digt number, say 64, by writing it down on a paper, and ask: **What is this number?** **Can you say this number in terms of tens and ones?** **Can you show this number with these blocks?** **Why is the tens on the left of the ones?** **Now, please put these block in this place value chart.** **If we add 20, or 2 tens to 64, what will be the sum?** **Write here 64 + 20 = 84.** **What number in 64 has changed when you added 20? Why did that happen?** **Why did 4 not change when adding 20 to 64?**	The student is able to: - Describe a number in terms of tens and ones. - Represent a number with base ten materials correctly. - Tell why the tens blocks are shown on the left of the ones blocks. - Place models for a number correctly on the place value chart. - Find the sum for adding 10s to a number correctly. - Explain why only the tens digit change when 10s are added to a number.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 4

CA marks from Chapter 4 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 5   FRACTIONS

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Present the student with a diagram as shown here. Present a blank paper as well. Say: **Tell me a fraction related to this picture? Write your fraction on this blank paper. What does (4) mean in your fraction? What does 6 mean? What fraction of the shape is (not shaded)?** Present the student with a diagram of a set of shapes as shown here. Ask: **Can you write a fraction for this set of shapes? What does the (2) mean? What does 6 mean? What is the same about this set and the shape above? What is different about this set and the shape above?**	The student is able to: - Identify an appropriate fraction for a shape divided into equal parts. - Say the fraction name correctly. - Write a fraction number correctly. - Describe what the numerator and the denominator in a fraction mean related to a shape divided into equal parts. - Represent a part of a set with an appropriate fraction. - Describe what the numerator and the denominator of a fraction mean in connection with a set. - Describe the similarities between a set and a shape.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 5

CA marks from Chapter 5 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 6   GEOMETRY

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Provide the student with models of a prism and a pyramid. Ask questions such as: **Which one of these is a prism? Which one is a pyramid? What is different about a prism and a pyramid? Show me the apex of this pyramid. How many edges can you count on this pyramid? What is the shape of the base of this pyramid? So, what is the name of this pyramid? What is the name of this prism?** Provide the students a cylinder, and ask: **What is the same about this cylinder and this prism? What is different about the cylinder and the prism?** Provide the student with cutouts of a rectangle which is not a square and a square. Tell: **These are both rectangles. Can you tell me what is different about these two rectangles? What do you call a rectangle that has all its 4 sides the same in length? This long rectangle has 2 lines of symmetry. Can you show me the lines of symmetry in it by folding the shape? Now how many lines of symmetry are there in this square? How many pairs of parallel lines are there in a rectangle? Can you show them?**	The student is able to: - Identify prisms and pyramids. - Name prisms and pyramids according to the shape of their bases. - Tell the difference between a prism and a pyramid. - Describe the similarities between a prism and a pyramid. - Count the number of corners and edges in a 3-D shape. - Compare and describe the similarities and difference between a prism and a cylinder. - Recognise a square as a rectangle that has all the 4 sides equal in length. - Tell the difference between a square and a rectangle which is not a square. - Determine the lines of symmetry in a simple shape. - Recognise the pair of parallel lines in a rectangle.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 6

CA marks from Chapter 6 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 7   TWO-DIGIT ADDITION AND SUBTRACTION

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Ask the students: **What is the sum of 50 and 20? How did you add 50 + 20? Can you write the addition sentence for 50 + 20 including their sum?** **How much more is 50 than 20? How do you know the difference? Write the subtraction sentence for 50 – 20 including their difference.** Provide the student with a 2-digit addition on a place value table to solve, such as the one shown here. Ask related questions. | Tens	Ones
6	5
+ 2	8
	| Ask the student to solve a 2-digit subtraction on a place value table, such as the one provided here. Ask related questions. | Tens	Ones
6	5
– 2	8
			The student is able to: - Add multiples of 10 mentally. - Describe the strategy used in adding 2-digit numbers. - Subtract multiples of 10 mentally. - Explain the strategy used in subtracting multiples of 10. - Add 2-digit numbers with regrouping on a place value table. - Subtract 2-digit numbers with regrouping on a place value table.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 7

CA marks from Chapter 7 (Marks out of 10): _____

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Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 8   NUMBERS GREATER THAN 100

Interview-based Performance Task (Please refer the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Have base ten blocks and a blank paper ready. Write a 3-digit number (e.g. 236) on the paper, and ask the student: **Represent this number with the base ten blocks. How can you describe 236 as groups of hundred, tens and ones? How can you represent 236 by using only the ten and ones blocks and not using any hundred blocks? Now describe 236 in terms of only tens and ones. Write 236 in words.** Write another number (e.g. 250) next to 236, as shown here: 236 250. Ask: **Which is greater: 236 or 250? Why? Which number is less then? Write the symbol: > or < between these two numbers.** Write the following sequences on the paper, and ask the student to complete them. Ask how they know the remaining numbers in each of the sequences. 300, 400, 500, _____, _____, _____ 125, 150, 175, 200, _____, _____, _____, _____	The student is able to: - Model a 3-digt number with base ten blocks in more than one way. - Describe a 3-digit number in terms of hundreds, tens and ones. - Describe a 3-digit number in terms of only tens and ones. - Write a 3-digit number in number words. - Compare 3-digit numbers and say which is greater and which number is less. - Use the greater than sign and less than sign correctly. - Skip count numbers in 100s. - Skip count numbers in 25s

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:
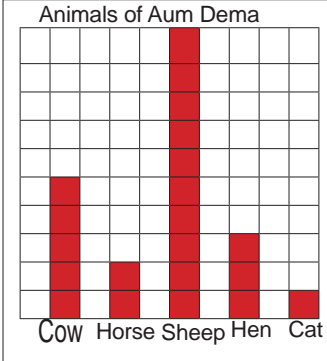
Summary of the Summative Assessment for Chapter 8

CA marks from Chapter 8 (Marks out of 10): _____

114

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 9   DATA AND PROBABILITY

Interview-based Performance Task (Please refer to the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Make a bar graph as shown here on a paper. Explain what it shows briefly and ask the student questions such as: **How many types of animals does Aum Dema have? How many cats does she have? Which animal does she have the greatest number of? What is the title of this bar graph?** Put about 3 red cubes and 15 blue cubes in a feely bag or a container, with the full knowledge of the student. Mix the cubes thoroughly. Tell the student to say a probability word (certain, impossible, possible, likely, unlikely) for the statements you will make related to drawing out cubes from the container without looking. Ask the student to tell the reason for the choice of the words for each situation. **I will draw out a blue cube.** **I will draw out a red cube.** **I will draw out a black cube.** **I will draw out either a blue cube or a red cube.**	The student is able to: - Read information from a bar graph. - Identify and tell the title of a bar graph. - Predict the outcome of an experiment using probability words such as impossible, possible, certain, likely and unlikely. - Explain the reasons for the predictions made.

Animals of Aum Dema bar graph with categories: Cow, Horse, Sheep, Hen, Cat

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 9

CA marks from Chapter 9 (Marks out of 10): _____

Summative Assessment Recording Sheet

Student Name: _____ **Roll no.:** _____ **Section:** _____

CHAPTER 10   MEASURING MASS, CAPACITY AND TIME

Interview-based Performance Task (Please refer the Introduction to the Teacher's Guide for Class 2 for the marking scheme while using the Interview-based Performance Task.)

Task and Interview prompts	Key concepts and skills to look for
Have some rice (or sand), an empty plastic bag, a pan balance, and 1 kg weight (or 1 kg mass such as a package of salt). Tell/ask the student: **Put about a kilogram of rice in this plastic bag. How do you know that it is about 1 kilogram? How can you measure it so that you have exactly 1 kilogram of rice here? Can you measure 2 kilograms of rice in another plastic bag?** Have a container which has a capacity of 1 litre such as a mineral water bottle, a larger container, a bucket of water, a jug and a funnel if possible. Tell the student that the bottle has a capacity of 1 litre. Ask/tell the student: **What would be the capacity of this (larger) container? How can you measure it? What is the capacity of it?** Draw a diagram of an analog clock showing a time such as half past 3 o'clock. Ask/tell the student: **What time does this clock show? What is another way of saying this time?**	The student is able to: - Estimate a mass of 1 kilogram reasonably. - Measure mass in kilograms. - Predict or estimate the capacity of a container in litres reasonably. - Measure the capacity of a container in litres. - Describe or express the capacity of a container in litres appropriately. - Read the times from and analog clock. - Tell a time in terms of "__ minutes past __ o'clock". - Tell the time in digital clock format such as "two thirty" for 2:30.

Comments and Marks

Strengths:

Areas of Need:

Follow up Steps:

Teacher's Signature and Date:

Summary of the Summative Assessment for Chapter 10

CA marks from Chapter 10 (Marks out of 10): _____