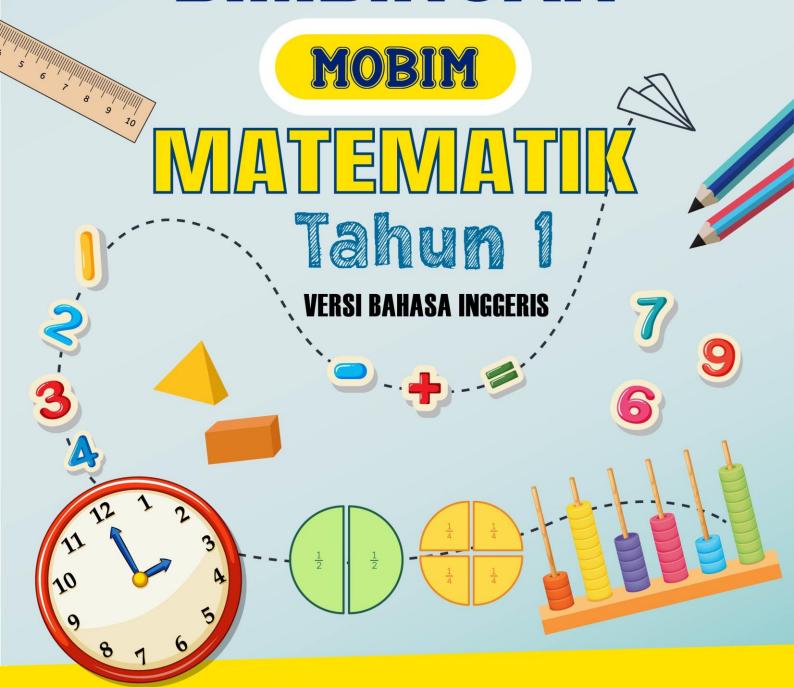


MODUL BIMBINGAN





MODUL BIMBINGAN (MOBIM) MATHEMATICS YEAR 1

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MODUL BIMBINGAN (MOBIM) MATEMATIK TAHUN 1 VERSI BAHASA INGGERIS ISBN 978-967-420-720-5

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RUKUN NEGARA

BAHAWASANYA Negara kita Malaysia mendukung cita-cita hendak; Mencapai perpaduan yang lebih erat dalam kalangan seluruh masyarakatnya; Memelihara satu cara hidup demokratik;

Mencipta satu masyarakat yang adil di mana kemakmuran negara akan dapat dinikmati bersama secara adil dan saksama;

Menjamin satu cara yang liberal terhadap tradisi-tradisi kebudayaan yang kaya dan pelbagai corak;

Membina satu masyarakat progresif yang akan menggunakan sains dan teknologi moden;

MAKA KAMI, rakyat Malaysia, berikrar akan menumpukan seluruh tenaga dan usaha kami untuk mencapai cita-cita tersebut berdasarkan atas prinsip-prinsip berikut:

KEPERCAYAAN KEPADA TUHAN
KESETIAAN KEPADA RAJA DAN NEGARA
KELUHURAN PERLEMBAGAAN
KEDAULATAN UNDANG-UNDANG
KESOPANAN DAN KESUSILAAN



FALSAFAH PENDIDIKAN KEBANGSAAN

"Pendidikan di Malaysia adalah suatu usaha berterusan ke arah lebih

memperkembangkan potensi individu secara menyeluruh dan bersepadu

untuk melahirkan insan yang seimbang dan harmonis dari segi intelek,

rohani, emosi dan jasmani, berdasarkan kepercayaan dan kepatuhan

kepada Tuhan. Usaha ini adalah bertujuan untuk melahirkan warganegara

Malaysia yang berilmu pengetahuan, berketerampilan, berakhlak mulia,

bertanggungjawab dan berkeupayaan mencapai kesejahteraan diri serta

memberikan sumbangan terhadap keharmonian dan kemakmuran

keluarga, masyarakat dan negara."

Sumber: Akta Pendidikan 1996 (Akta 550)



DEFINISI KURIKULUM KEBANGSAAN

Kurikulum Kebangsaan 3.

(1) Kurikulum Kebangsaan ialah satu program pendidikan yang termasuk

kurikulum dan kegiatan kokurikulum yang merangkumi semua

pengetahuan, kemahiran, norma, nilai, unsur kebudayaan dan kepercayaan

untuk membantu perkembangan seseorang murid dengan sepenuhnya dari

segi jasmani, rohani, mental dan emosi serta untuk menanam dan

mempertingkatkan nilai moral yang diingini dan untuk menyampaikan

pengetahuan.

Sumber: Peraturan-Peraturan Pendidikan (Kurikulum Kebangsaan) 1997

[PU(A)531/97.]





KATA ALU-ALUAN

Assalamualaikum dan Salam Sejahtera

Alhamdulillah dengan izin dan limpah kurnia-Nya, Bahagian Pembangunan Kurikulum (BPK) telah berjaya menghasilkan Modul Bimbingan (MOBIM) Matematik Tahun 1 sebagai panduan pelaksanaan pengajaran dan pembelajaran (PdP) berdasarkan peruntukan waktu yang telah ditetapkan. Modul ini diharap dapat digunakan sebagai panduan dan pencetus idea kepada guru dalam merancang dan melaksanakan aktiviti PdP yang menarik dan berkesan bagi mata pelajaran Matematik Tahun 1, khususnya dalam mengintegrasikan beberapa Standard Kandungan atau Standard Pembelajaran dalam satu sesi pengajaran.



Contoh PdP dalam modul ini menggunakan pendekatan pengajaran dengan bahan maujud, bergambar dan abstrak atau Concrete, Pictorial, Abstract (CPA) dalam pembelajaran matematik. Kajian telah menunjukkan pendekatan CPA ini sangat berkesan dalam membina kefahaman dan membantu penguasaan murid dalam matematik.

MOBIM Matematik Tahun 1 ini diharap dapat menjadi panduan kepada guru dalam mempelbagaikan strategi dan kaedah PdP dengan berkesan dan mewujudkan suasana pembelajaran yang menyeronokkan kepada murid. Selain itu, modul ini diharap dapat membantu guru dalam mengintegrasikan pengetahuan dan mengukuhkan kemahiran asas matematik murid dengan berkesan.

BPK merakamkan setinggi-tinggi penghargaan dan terima kasih kepada semua pihak yang terlibat secara langsung atau tidak langsung dalam penyediaan modul ini, khususnya kepada mantan Pengarah BPK, Tuan Haji Azman yang telah menerajui usaha ini. Semoga modul yang dihasilkan ini dapat memberi manfaat kepada semua pihak, khususnya guru dan murid dalam usaha meningkatkan kualiti pendidikan negara.

Sekian, terima kasih

DR. RUSMINI BINTI KU AHMAD

Pengarah Bahagian Pembangunan Kurikulum Kementerian Pendidikan Malaysia



INTRODUCTION

Modul Bimbingan (MOBIM) Mathematics Year 1 focuses on meaningful learning through the teaching and learning (PdP) strategies and approaches using Concrete, Pictorial and Abstract (CPA) method in learning mathematics.

Module Objectives

This module is to guide teachers to:

- 1. implement the curriculum with the existing allocated time;
- 2. understand the curriculum and interpret the Dokumen Standard Kurikulum dan Pentaksiran (DSKP) effectively;
- 3. use the CPA approach to strengthen pupils' mathematical knowledge and skills; and
- 4. plan a structured lesson through the integration of several appropriate learning standards.

Organisation of MOBIM Mathematics

The guidelines provided in MOBIM Mathematics Year 1 are based on Content Standard (CS) and Learning Standards (LS) in the Dokumen Standard Kurikulum dan Pentaksiran (DSKP) Mathematics Year 1 KSSR (Revised 2017).

This module is in line with the DSKP as a supporting material to the textbook which that are developed based on several approaches through organised content and integration of several topics.

Each topic in this module comprises sample lesson plan, suggested activities, notes to and resources for teacher's references and worksheets for pupils.

The compilation of the content in this module has taken into account the time allocation for Mathematics Year 1 as stated in the *Surat Pekeliling Ikhtisas KPM Bilangan 8 Tahun 2016* which is a minimum of 96 hours per year. The suggested PdP duration the for the learning standard covered are also specified in this module.

How To Use MOBIM

This module is a guide and suggestions to assist teachers in achieving goals with allocation of time and available resources while implementing Year 1 Mathematics curriculum. Therefore, teachers are advised to teach according to the topics and curriculum's content that has been compiled in this module. The suggested activities may be modified based on the needs and readiness of the pupils, and the facilities in the schools.

Teachers are encouraged to apply the following approaches in PdP:

1. Mastery Learning Approach

Teachers need to ensure pupils had mastered the required basic knowledge before introducing to the new skills. Re-teaching or follow up actions need to be given to the pupils who have not mastered certain skills. However, the re-teaching or follow up actions should be taken using different strategies from the previous lesson.

2. Progressive Learning Approach

Teachers need to introduce mathematical concept from basic to complex, form concrete (objects or pictures) to abstract, and from contextual to constructive.

3. Fun Learning Approach

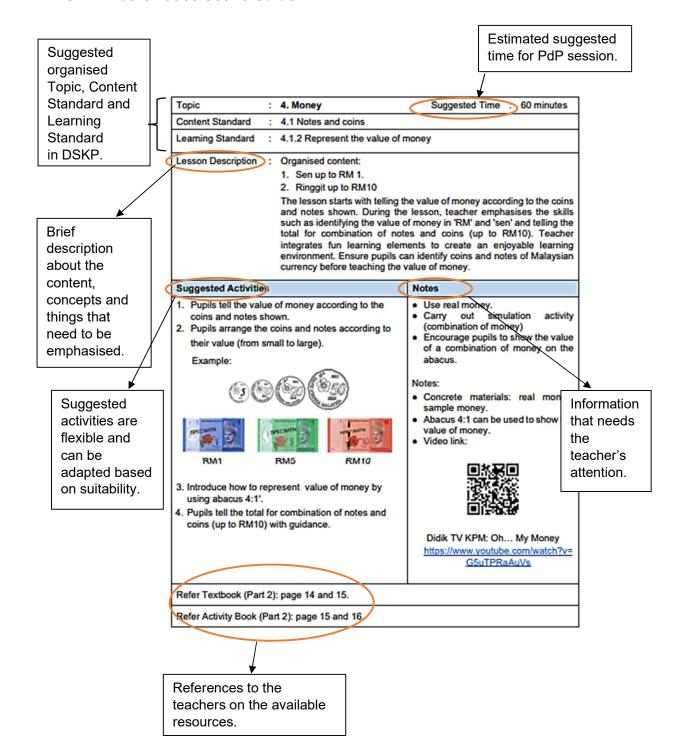
Teachers need to instill the learning interest among the pupils. Interesting activities approches, such as hands-on and exploration should be implement through effective teaching. Teachers are encouraged to apply the element of fun learning through the singing, gaming and using interesting materials in teaching.

4. Integrating Skills Approach

Teachers need to integrate other skills according suitability. For example, when teaching 'addition', teachers should apply count on method.



MOBIM Mathematics User's Guide





Suggested Activity

Suggested activity in this module is based on the CPA (Concrete, Pictorial, Abstract) approach to help the pupils to understanding and mastering mathematical concept before introducing to the mathematical sentences or abstract statement. The suggested activity is flexible and can be adapted by teacher to suit with pupils' abilities, school's facilities and availability of teaching aids in school. Teacher may also modify the activity based on teacher's creativity and innovation.

Notes

This part contains notes or guidance related to suggestion of teaching aids, limitation of content, explanation for term or terminology and other notes that can help to achieve Learning Standard.

Worksheet

Every topic is attached with pictorial worksheet to help pupils to apply their understanding and mastering the mathematical concepts. Exercise in the worksheet also attached with sample solution which is arranged in progressive order from low to high level. Teacher can use the questions as sample and set their own questions as additional exercises for the pupils. Answers for the worksheets are provided.

Assessment

Assessment process takes place throughout the PdP session. Teacher needs to plan and assess pupils holistically by observing all aspects during PdP session. Determination the mastery level of the pupils should refer to the Learning Standard in DSKP Mathematics Year 1 and reporting it accordingly the specification of Classroom Assessment (PBD) existing regulations in effect.



Topic	:	1.0 Whole Numbers Up To 1	00	Suggested time : 60 minutes
Content Standard	:	1.1 Quantity intuitively 1.7 Estimate		
Learning Standard	:	1.1.1 State the quantity by cor 1.7.1 Give reasonable estimat	•	S .
Lesson Explanation	:	Organised content: 1. Compare the quantity of two groups of objects. 2. Give reasonable estimation for the quantity of objects. The lesson starts by comparing the quantity of two groups of objects using the words many or few, equal or not equal and more or less. During the lesson, the teacher focuses on the reasonable estimation of the quantity of objects. Teacher emphasises on the relationship between the word less than, more than, equal with the quantity. Teacher integrates fun learning elements during the lesson involving the use of few, more or less, less than, more than and equal.		
Suggested Activitie	s:		No	otes:
 Suggested Activities: Pupils are guided to understand the words less, more, less than, more than, equal and not equal. Pupils compare the quantity of two groups of concrete materials. Pupils compare the quantity of two groups in various form (Example.: pictorial):		•	Activity (based on situation) by using fingers, compare between the numbers of fingers on the right hand and left hand, one finger and three fingers – for reinforcement on more or less. Compare less or more between two groups of objects (same categories) to understand the concept of less and more. Integrated and enriched LS: 1.1.1 and 1.7.1 Concrete materials: beads, marbles, ice-cream sticks, sweets/candy etc. Pictures of objects (same and different categories). Games, songs or puzzles. Sample worksheet: Worksheet 1	
Refer Textbook (Part	: 1)	: page 2 to 4.		
Refer Activity Book (Par	t 1): page 1 to 5.		

ACTIVITY I

INTRODUCTION OF CONCEPT MORE AND LESS. (many, few, less, more and equal or not equal)

Use the situation in the classroom. Compare the quantity verbally.

- i. Between the number of teacher's table and the number of pupils' tables.
- ii. Between the number of teacher's chair and the number of pupils' chairs.
- iii. Between the group of teachers and the group of pupils.
- iv. Between the group of boys and the group of girls.
- v. Between the number of doors and the number of windows.
- vi. Between the number of pencils and the number of erasers (say less, more and equal).

Worksheet I

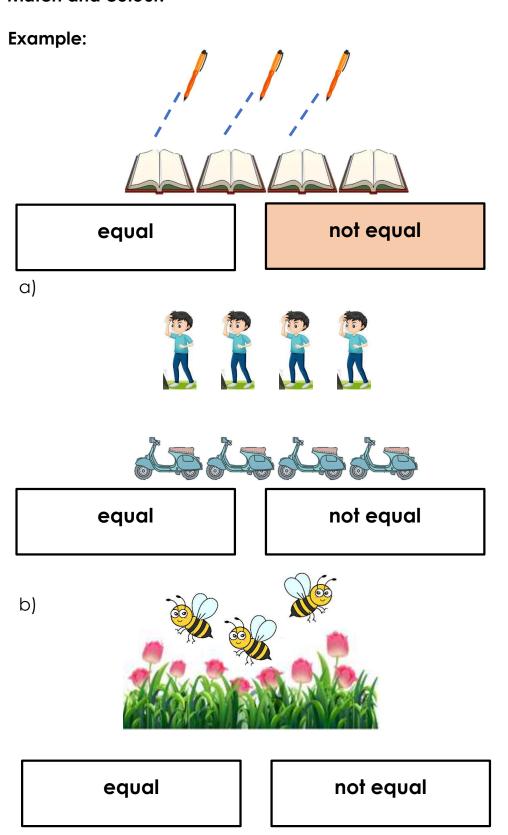
Name:	Class:

A. State verbally which is more and less (A or B).

a)		
	А	В
b)	666	6666
	Α	В
c)		
	А	В
d)		
	А	В
e)		
	А	В

f) В Α g) Α В

B. Match and colour.



Topic	:	1.0 Whole Numbers Up To 100	Suggested time: 60 minutes
Content Standard	:	1.2 Number value	
Learning Standard	:	1.2.1 Name the numbers up to 1001.2.2 Determine the number values	
Lesson Explanation	:		

Lesson starts with pupils' prior knowledge of numbers. During the teaching and learning session, teacher needs to focus on the counting skills and naming the number of objects. Teacher integrates fun learning elements.

Ensure that pupils have mastered counting, naming the number of objects, and comparing the value of two numbers.

Introduction:

1. Pupils show pencils/fingers or any surrounding objects according to the number mentioned by the teacher.

Activity 1:

- 1. Prepare straws (any suitable materials).
- Pupils count the number of straws shown by the teacher.
- 3. Paste the straws on the whiteboard.
- 4. Paste the number and word cards according to the number of straws.
- 5. Repeat the activity until number 10.

Activity 2 (in pairs):

- 1. Distribute marbles, plastic bags and marker pens to pupils. Pupils count the marbles.
- 2. Pupils write numbers from 1 to 10 on plastic bags.
- 3. Pupils put the marbles into the plastic bag according to the number on the plastic bag.
- 4. Pupils show plastic bags based on the number mentioned by the teacher.
- Pupils compare the quantity for two groups of marbles.
- 6. Repeat the activity by comparing other numbers.

Notes:

- Concrete materials: number cards, word cards, plastic bags, marker pens, Dienes blocks, building blocks, straws, balls, marbles, icecream sticks, leaves, candies, aquarium stones and others.
- Abacus 4:1 can be used to count.
- Teacher can choose appropriate suggested activities.
- Activity can be varied based on pupils' abilities.

Activity 3:

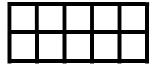
- 1. Prepare the building blocks.
- 2. Take a number card / word card.
- 3. Pupils arrange the building blocks based on the number shown.

Activity 4:

- 1. Distribute a piece of blank paper.
- 2. Pick the number / word card.
- 3. Pupils draw objects / shapes based on the number shown.
- 4. Repeat the activity for other numbers.
- 5. Pupils compare two groups of drawn objects.

Activity 5:

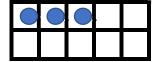
1. Distribute 10 square grids and stickers.



- 2. Pick a number card.
- 3.



4. Pupils paste the stickers on the 10 square grid.



- 5. Repeat the activity using other numbers.
- 6. Pupils pick two pieces of 10 square grid.
- 7. Pupils compare the value of two numbers.

Activity 6:

- 1. Prepare number cards.
- 2. Pick up two number cards.
- 3. Pupils compare the value of two numbers.

Refer Textbook (Part 1): page 5 to 7.

Refer Activity Book (Part 1): page 6 to 9.



Topic	:	1.0 Whole Numbers Up To 10	00	Suggested time : 120 minutes
Content Standard	:	1.3 Write numbers		
Learning Standard	:	1.3.1 Write numbers in numer	als	and words.
Lesson Explanation	:		on	nd words up to 10
		Write numbers in numerals	ar	id words up to 10.
			ı W	knowledge on numbers. During the riting numbers in numerals and words learning elements.
		Ensure that pupils have manumerals and words.	ste	red the skill of writing numbers in
Suggested activities	s:		N	otes
Introduction: 1. Pupils stand up a i. birth month;	ınd	count based on:	•	Concrete materials: counters (bottle caps, ice scream stick), number cards and word cards.
,	r (E	Example: red); and	•	Abacus 4:1 can be used to count.
iii. pupils with spe			•	Explain that numeral is a symbol for a number or quantity of objects.
Activity 1:	4	hainn an daoith an ann a	•	Teacher can choose appropriate suggested activities.
 Show the correct technique and writing numbers Pupils write 0 in numerals in the air using the correct technique. 		•	Activity can be varied based on pupils' abilities.	
3. Repeat activity un		number 10.		
Activity 2 (in pairs):				
1. Pupils A writes a	nu	mber on the back of pupil B.		
2. Pupil B says and paper.	wri	ites the number on a piece of		
3. Pupils take turns	to I	repeat the activity.		
Activity 3:				
1. Prepare number				
2. Pupils match the on the board.	nu	mber card with the word card		
Teachers and pup together.	pils	read and spell the numbers		
4. Repeat the activit	y v	vith other numbers.		

Activity 4: 1. Prepare counters. 2. Show a group of counters and pupils write the number of counters in numerals and words. 3. Repeat the activity with different quantities. Refer Textbook (Part 1): page 8 to 10. Refer Activity Book (Part 1): page 10 to 21.

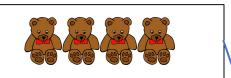
opic : 1.0 Whole Numbers Up To 100	Suggested time: 120 minutes
ontent Standard : 1.2 Number value 1.5 Number sequence 1.9 Number patterns earning Standard : 1.2.1 Name the numbers up to	
1.2.2 Determine the number val 1.5.1 Count numbers. 1.5.2 Complete any number sec 1.9.1 Identify pattern for a given 1.9.2 Complete various simple r	quence. number series.
Lesson starts with counting num the teacher needs to focus on 10). Teacher integrates fun lea	ence up to 10. In ascending and descending order. bers from 1 to 10. During the session, counting numbers in sequence (1 to arning elements. Ensure that pupils before they complete the number
uggested Activities	Notes
 Pupils sing 1, 2, 3 song with their teacher. Pupils are shown a number line card. Pupils follow the teacher to say the number in order. Pupils place counters (as appropriate) according to the number found on the cup. Pupils count the number of the objects on the picture cards. Pupils match objects with their number on the domino cards. Pupils arrange the number cards in ascending and descending order. 	Use the activity of counting objects and writing numbers. Number line card 1 2 3 4 5 6 7 8 9 Domino Card MULA **O** **Counters, object cards, domino cards, number cards Sample worksheet: Worksheet 2 to 4
efer Textbook (Part 1): page 5 to 6.	

Name: _____

Class: _____

Count and match.

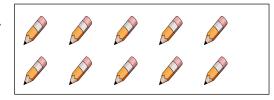
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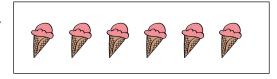
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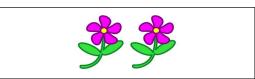
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5.



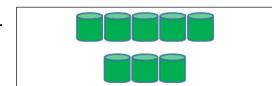
6.



7.



8.



3

|

5

8

Ю

6

4

2

Name: _____ Class: _____

Count and write the numbers in ascending order.

Example

:









I)









2)









3)









4)









5)









Name: _____

Class: _____

Count and write the numbers in descending order.

Example

:



7





I)









2)









3)









4)









5)









Topic	:	1.0 Whole Numbers Up to 10	00 Suggested Time : 120 minutes
Content Standard	:	1.2 Number value	
Learning Standard	:	1.2.1 Name the numbers up to 1.2.2 Determine the number v	
Lesson Explanation		the lesson, teacher emphas numbers in numerals and w learning elements. Ensure pupils have master	en number. h its numbers. numbers. r knowledge, numbers up to 10. During ises on counting, naming and writing ords up to 20. Teacher integrates fur ed counting and quantifying objects yen number, comparing the value of two
Suggested Activitie	s		Notes:
on the paper cup. Activity 1: 1. Prepare some pic. 2. Paste the pictures. 3. Pupils count the p. 4. Pupils state the q. 5. Paste/write numb. objects.	nd ran ac ctur s or coict uar	paper cups. domly. cording to the number written es or objects. r objects on the board. ures or objects.	 Concrete materials: paper cups, straws, building blocks, balls, marbles, ice cream sticks, candies etc. Abacus 4:1 can be used to count. Teachers can choose appropriate suggested activities. Activities can be varied according to the pupils' abilities.
Example: 11	nt l	by making groups of 10. Is up to 10 and arrange the sups of 10.	

Activity 3:

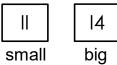
- 1. Prepare 50 square grid cards on the board.
- 2. Colour the 50 square grids according to the number given.
- 3. Pupils count the coloured squares together with teacher's guidance. Example: 10 and 2, 10 and 5.
- 4. Repeat the activities with different numbers.
- 5. Pupils compare the value of two numbers shown by the teacher.
- 6. Pupils repeat the activity using the square grid in the exercise book.

Example: ī ī. т ī Ī. I T ī ī ī Т ī. т Щ 12 15 10 and 2 10 and 5

Activity 4:

- 1. Prepare number cards from number 11 to 20.
- 2. Teacher holds up two number cards.
- 3. Pupils compare the value of two numbers showed by teacher.

Example:



4. Repeat the activity by comparing other numbers.

Refer Textbook (Part 1): page 17 to 19.

Refer Activity Book (Part 1): page 25 to 27.

Suggested Time : 120 minutes

Торіс	•	1.0 Whole Numbers op to 10	•	ouggested fille . 120 millates
Content Standard	:	1.2 Number value1.5 Number sequence1.9 Number patterns		
Learning Standard	:	 1.2.1 Name the numbers up to 100. 1.2.2 Determine the number values up to 100. 1.5.1 Count numbers. 1.5.2 Complete any number sequences. 1.9.1 Identify pattern for a given number series. 1.9.2 Complete various simple number patterns. 		
Lesson explanation	:	number line card. During te should focus on counting num must also teach number patte	numb achin bers rns w 1 to	oers from 11 to 12 based on the g and learning sessions, teacher in sequence from 1 to 20. Teacher while counting the numbers. Ensure 20 before completing the number
Suggested Activities		Not	es	
 Pupils hold number cards 11 to 20 in front of the class. Class state the number pointed by the teacher. This activity will be repeated with another pupil. Example: Teacher points to pupils with card number 12. Class will say the number 12 out loud. Pupils stand in sequence from 11 to 20. Pupils stand in descending order. Pupils complete the missing numbers in ascending or descending order (Worksheet 6). Pupils arrange numbered bottle caps according to the patterns requested by the teacher (count in ones, twos, fours and fives). 		N II • C ca b	Jumber line	
Refer Textbook (Part 1): page 17 to 19.				
Refer Textbook (Part	: 1)	: page 17 to 19.		

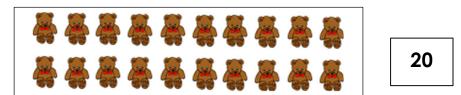
: 1.0 Whole Numbers Up to 100

Topic

Name: _____ Class: _____

Count and write the answer.

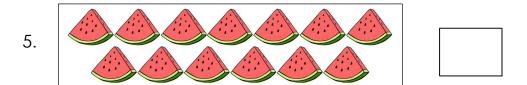
Example:











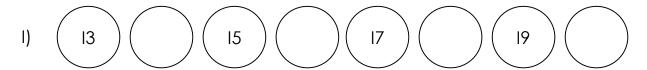
6.

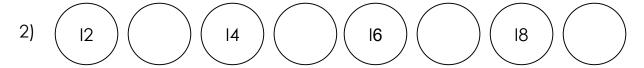
Name: _____ Class: _____

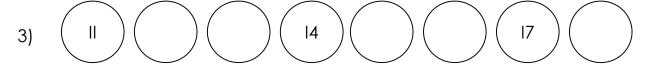
A. Complete the number sequences.

Example:









4) (13) (16) (19)

B. Complete the missing numbers in ascending or descending order.

Name: _____ Class: _____ Count and match the number. ١. 19 2. \parallel 3. 17 4. 14 5. 15 6. 12 7. 13

Topic	:	1.0 Whole Numbers Up to 100	Suggested Time : 60 minutes
Content Standard	:	1.6 Place value	
Learning Standard	:	1.6.1 State the place value and di	git value of any number.

Lesson Explanation : Organised content:

- 1. State the place value and digit value up to 20.
- 2. State the place value and digit value up to 50.
- 3. State the place value and digit value up to 100.

Lesson starts with pupils' prior knowledge on whole numbers. During teaching and learning sessions, teacher should emphasise on the method of writing place value and digit value up to 20. Place value should be written in word either ones or tens while digit value should be written in numerals. Teacher integrates fun learning elements.

Ensure pupils have mastered counting and writing numbers in numerals up to 20.

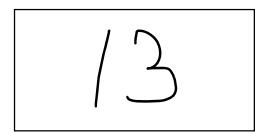
Suggested Activities

Introduction:

1. Pupils write and show the number of objects according to the number stated by the teacher.

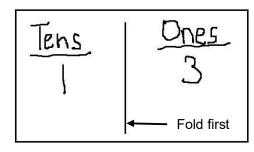
Activity 1 (in pairs):

 In pairs, pupils arrange and write the number of paper cups on a paper.
 Example:



2. Pupils draw a symmetry line on paper and write ones and tens (place value).

Example:



Notes

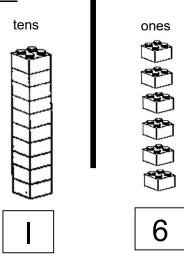
- Concrete materials: building blocks, ice-cream sticks, straws, rubber bands, counting frames.
- Abacus 4:1 used to count and state the value.
- Affirmation:
 - i. Only ones and tens are written in words.
 - ii. Place value must be determined from the right (ones).
 - iii. Write tens and ones on the number.
 - iv. Digit value must be written in numerals.
 - v. The number for tens must be in two digits and ones must be in one digit.
- Sample worksheet: Worksheet 8

Activity 2 (in groups):

- 1. Prepare building blocks (any suitable materials).
- 2. Pupils arrange the building blocks according to the given numbers.
- 3. Pupils must create a new block combination after completing 10 blocks.
- 4. Put the building blocks on a manila card provided. Then, put the number card.

Example: 16

Place value



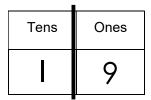
- 5. Emphasis to pupils the place value of each digit in 16 is:
 - i. tens for digit 1.
 - ii. ones for digit 6.
- 6. Write a number on a paper. Then, write the digit value.

tens ones

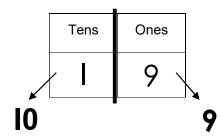


Activity 3 (individually):

1. Write the given number in the exercise book. Draw a middle line and write the place value.



2. Write the given number. Then, write the digit value.



Digit value of 1 is 10. Digit value of 9 is 9.

3. Pupils complete the given activity in their exercise book.

Refer Textbook (Part 1): page 25 and 26.

Refer Activity book (Part 1): page 44 to 45.

Name:	Class:

Write the place value and the digit value of the underlined digits.

	13	Place value	Ones
	l <u>3</u>	Digit value	3
1)	<u>l</u> 5	Place value	
')	<u>I</u> O	Digit value	
2)	1 <u>7</u>	Place value	
2)	1 <u>7</u>	Digit value	
3)	1 <u>9</u>	Place value	
3)	1 <u>7</u>	Digit value	
4)	<u>l</u> 2	Place value	
4)	<u>i</u> Ζ	Digit value	
51	20	Place value	
5)	2 <u>0</u>	Digit value	

Topic :	1.0 Whole Numbers Up to 1	00 Suggested Time : 120 minutes					
Content Standard :	1.3 Write numbers						
Learning Standard :	1.3.1 Write numbers in numer	als and words.					
Lesson Explanation : Organised content: 1. Write numbers in words and numerals within 20. Lesson starts with pupils' prior knowledge on numbers in the 10. During teaching and learning sessions, teacher needs to el the skill of writing numbers in numerals and words. Teacher in fun learning elements. Ensure pupils have mastered writing numbers in numerals and							
Suggested Activities		Notes					
spell them. 2. Show how to write the correct technique. Activity 2 (in pairs): 1. Prepare a piece of became and words. 3. Pupils take turn in research and words. 1. Prepare flash cards. 2. Show the flash cards. 2. Show the flash cards. 3. Pupils write numbers quantity of objects of activity 4 (in groups): 1. Prepare the number number cards 11 to 2. Pupils work in group	er words eleven to twenty and the numbers 11 to 20 using the plank paper. Other pupil writes in numerals expeating the activity. It is to the pupils. It is and words based on the number hash card. I word cards eleven to twenty, 20 and manila cards. It is number and place the word card in number. I cards.	 Concrete materials: flash cards, blank paper, number word card, number card and manila card. Abacus 4:1 can be used to count. Explain that numbers are symbols for numbers or numbers of objects. Teachers can choose appropriate suggested activities. Example of Activity 3: Thirteen 					
Refer Textbook (Part 1)							

Refer Activity Book (Part 1): page 28 to 37.

Topic	:	2.0 Basic Operations	Suggested Time : 120 minutes						
Content Standard	:	2.1 Concepts of addition and subtra	action						
Learning Standard	:	 2.1.1 Use and vary the relevant vocabulary in context of addition and subtraction. 2.1.2 Introduce the symbol of addition, subtraction and 'equal to'. 2.1.3 Use the symbol of addition, subtraction and 'equal to', to write number sentence based on the given situation. 							
Lesson Explanation	:	Varying vocabulary that involves Introduce the symbol of addition Use the symbol of addition and Lesson starts with a simulation a progression of addition and activitic teaching and learning session, tea	n and 'equal to'. 'equal to'. nd Q&A on activities involving the es using concrete materials. During acher emphasises on mastering the s. Teacher integrates fun learning						

Suggested Activities	Notes
 Teacher talks about daily routine situations and relates with the vocabulays of addition such as combine, group, altogether, total, etc. Example: There are 6 oranges in the basket. 3 more oranges are added to the basket. 6 oranges and 3 oranges make 9 oranges altogether. Pupils recognise the vocabulary related to the addition operation through the given situation. Pupils create a story using vocabulary related to the addition operations. Pupils are introduced to addition and 'equal to' symbols to write number sentences. 	 Use daily routine situations and relate with the combination of objects or numbers to understand the concept of addition. Integrated and enriched Learning Standard: 2.4.1 Concrete materials: counters/ oranges. Sample worksheet: Worksheet 9 and 10
Refer Textbook (Part 1): page 56 and 57.	
Refer Activity Book (Part 1): page 69 to 71.	

lame:	Class:

Write 'add' or 'equal to'.

I.	Example:
''	
	4 and 2 is 6. 4 add equal to
2.	****
	4 and 4 is 8.
	48
3.	
	5 and I make 6.
	5 6
4.	* * * * *
	I more than 6 is 7.
	6 7
5.	
	The sum of 7 and 3 is 10.
	7310

Name: _____ Class: _____

2.

4.

Write the symbols '+' and '='.

١. Example:

7 and 2 is 9.

9 2

2 more than 4 is 6.

3.

Total of 5 and 3 is 8.

5

8 3

6 add 1 is 7.

6

7

5.

6 add 3 is equal to 9.

6

6.

4 and 3 is 7.

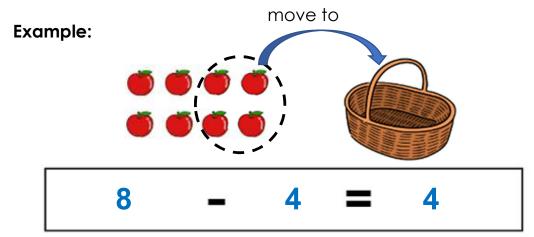
Topic	:	2.0 Basic Operations	Suggested Time : 120 minutes						
Content Standard	:	2.1 Concepts of addition and subtraction							
Learning Standard	:	2.1.1 Use and vary the relevant vocabulary in context of addition and subtraction.2.1.2 Introduce the symbol of addition and 'equal to'.2.1.3 Use the symbol of addition, subtraction and 'equal to', to write number sentence based on the given situation.							
Lesson Explanation	:	Varying vocabulary that involute the symbol of subtracts. Use the symbol of subtracts. Lesson starts with a simulation progression of subtraction a During teaching and learning mastering the vocabulary of suffun learning elements.							
Suggested Activitie	S		Notes						
relates with the votake out, move to subtract, balance, Example: There are 9 orang 3 oranges were to There are 6 orang 2. Pupils recognise to	ges ges he	s in the basket. en out from the basket.	 Use a story by taking out some objects from the same group to understand the concept of subtraction. Integrated and enriched LS: 2.4.1 Concrete materials: counters, oranges. Sample worksheet: Worksheet 11 						
Pupils create a st the subtraction op		using vocabulary related to ations.							
4. Pupils are introduction symbols to write r		d to subtraction and 'equal to' nber sentences.							
Refer Textbook (Part	: 1)	: page 74 and 75.							
·									

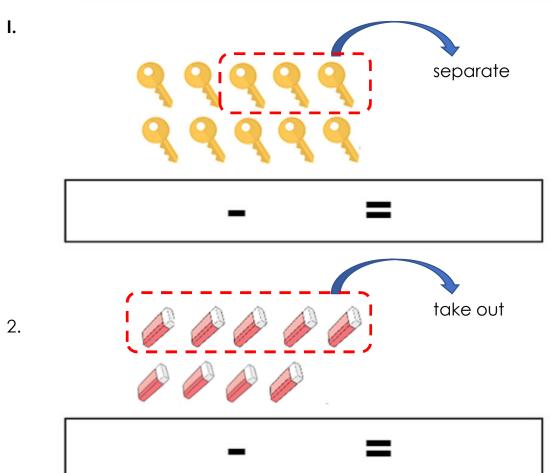
Refer Activity Book (Part 1): page 88 to 93.

Worksheet II

Name: _____ Class: _____

Solve it.





Topic : **2.0 Basic Operation** Suggested Time : 120 minutes

Content : 2.2 Add within 100

Standard

Learning Standard : 2.2.2 Add two numbers with the sum within 100.

Lesson Explanation : Organised content:

Add within 10.
 Add within 18.

Lesson starts with the sum within 10 and followed by 18. During the lesson, teacher emphasises the mathematical process of counting, writing and adding numbers. Teacher integrates fun.

Ensure pupils have mastered addition within 18 before teaching addition within 50 and 100.

Suggested Activities

 Pupils count objects based on the number cards using concrete materials (Dienes blocks and straws).





Dienes Blocks

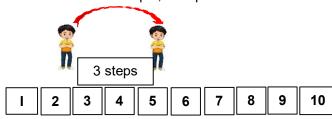


abacus

- 2. Pupils count the sum for two groups of concrete materials (the sum within 10).
- 3. A pupil stands in one of the number boxes. Then, the pupil jumps out to the left while counting the number shown. The pupil tells the number of the box that he/she stands in.

Note:

Teacher states the total steps that the pupil needs to move. For example, 3 steps to the left.



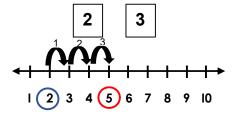
Notes

- Combine two groups of the same objects to count and find the sum.
- Integrated and enriched LS: 1.2.1, 1.4.1 and 2.1.3
- Concrete materials: Dienes block, beads, marbles, ice-cream sticks, sweets, etc.
- Number line and abacus 4:1 can be used to add.
- Vocabulary: group, combine, altogether, total
- Sample worksheet:
- Worksheet 12 to 17
- Teacher explains the term 'jump-out' to the right.
- Count two numbers to make a bigger sum.
- Teacher can use hoops.
- Video link:



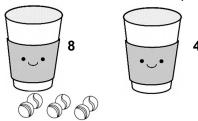
Fun with addition
https://www.youtube.com/watch?v=uh
HcHXFnNKw

In groups, pupils are given 2 number cards.
 Pupils count the number using the number line.
 Example: Number line



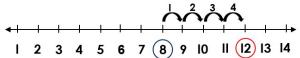
5. Introduce the method of writing a number sentence for addition. Pupils are given a card to write the number sentence.

6. Pupils find the sum for two groups of concrete materials up to 18. Pupils will be given 2 cups and some marbles. Pupils put the marbles into the cups based on the numbers given. Pupils count the number of marbles from both cups.



7. In group, pupils are given two number cards. Pupils count the number using the number line (up to 18).

Example: Number line



8. Introduce the method of writing a number sentence for addition. Pupils are given cards to write number sentence.

9. Pupils repeat the above activity to find the sum within 18.

Refer Textbook (Part 1): page 56 to 62

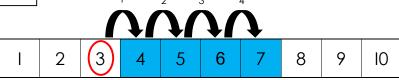
Refer Activity Book (Part 1): page 72 to 77

Worksheet I2

Name: _____ Class: _____

Colour and find the answers.

Example:



						V			
1	2	3	4	5	6	7	8	9	10

2	3	4	5	6	7	8	9	10

1 2	3 4	5	6	7	8	9	10
-----	-----	---	---	---	---	---	----



I	2	3	4	(5)	6	7	8	9	Ю
---	---	---	---	-----	---	---	---	---	---

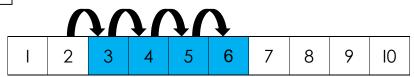
5) 2 + = 5

I	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

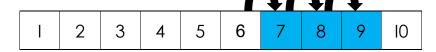
6) 6 + = IO

1 2 3 4 5 6 7 8 9 10		I	2	3	4	5	(6)	7	8	9	10
----------------------	--	---	---	---	---	---	------------	---	---	---	----

7) + 4 = 6



8) + 3 = 9

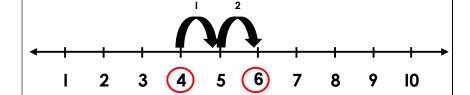


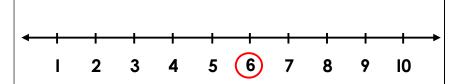
Worksheet I3

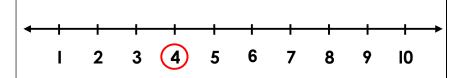
Name: _____ Class: _____

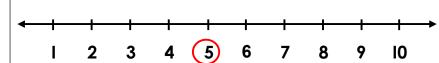
Draw the arrows and find the answers.

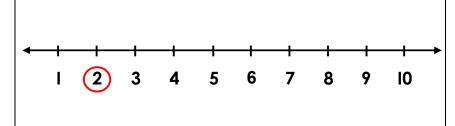
Example:











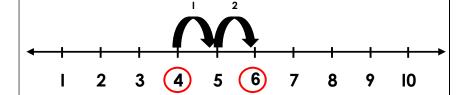
Worksheet I4

Name: _____

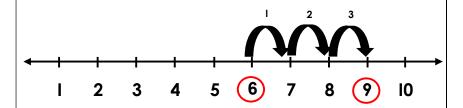
Class: _____

Draw the arrows and find the answers.

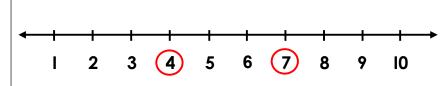
Example:



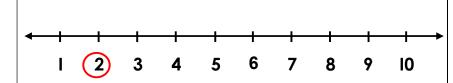
I) 6 + = 9



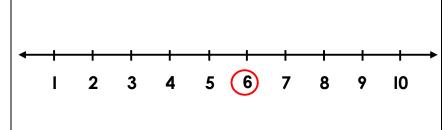
2) 4+ = 7



3) 2 + = 8



4) 6 + = 10

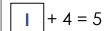


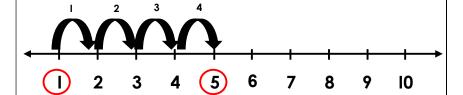
Name: _____

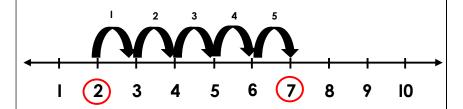
Class: _____

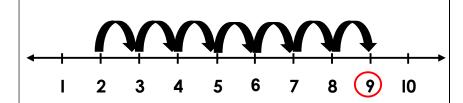
Draw the arrows and find the answers.

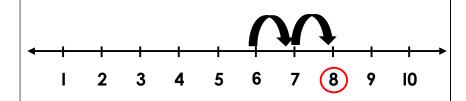
Example:

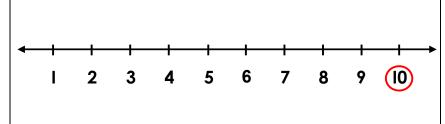










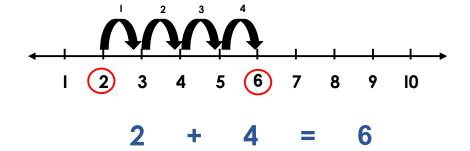


Name: _____

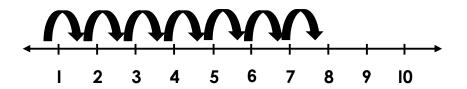
Class: _____

Write the number sentence based on the number line.

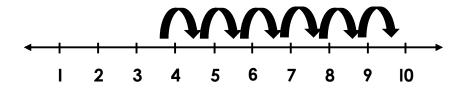
Example:



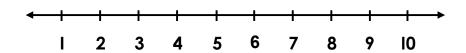
3)



4)



5) Draw the arrow and solve it.



Name: _____ Class: _____

Write the number sentence based on the number line.

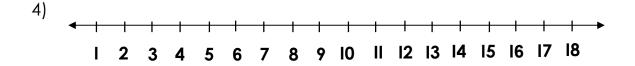
Example: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

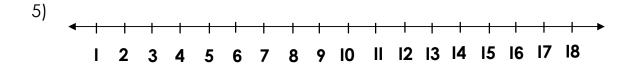
1)
1 2 3 4 5 6 7 8 9 10 II 12 13 14 15 16 17 18

2)
I 2 3 4 5 6 7 8 9 10 II 12 13 14 15 16 17 18

3)

1 2 3 4 5 6 7 8 9 10 II 12 13 14 15 16 17 18





within 18. During teaching and learning sessions, teacher emphasises on mathematical processes and skills such as counting numbers, writing numbers and subtracting numbers. Teacher integrates fun learning elements. Ensure pupils have mastered subtraction within 18 before teaching

subtraction within 50 and 100.

Suggested activities:

- Teacher starts with the addition activity and followed by the subtraction activity by relating pupils' prior knowledge.
- 2. Pupils look at and count the number of objects up to 10 on the picture cards shown by the teacher.
- 3. Pupils state the number of objects up to 10 on the picture cards shown by teachers.
- 4. Pupils state the number of objects taken out by the teacher up to 10 on the picture cards.
- 5. Pupils state the subtraction shown by the teacher using the number line.
- 6. Pupils who are unable to master the subtraction up to 10 will repeat the steps 2 until 5.
- 7. Introduce the subtraction within 18 (the basic facts of subtraction) without regrouping.
- 8. Pupils are encouraged to state spontaneously the basic facts of subtraction.
- Pupils who have mastered the subtraction skills will be introduced to writing the subtraction number sentences.
- 10. Pupils find the balance of the concrete materials or objects on the picture cards.
- 11. Pupils who are unable to subtract will repeat step 10.

Notes

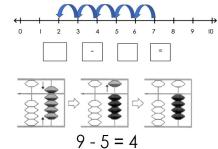
- Use the activity of separating or taking out objects for the counting process and find the difference.
- Teacher relates the addition with the subtraction operation.

Example:

$$9 - 5 = 4$$

Notes:

- Concrete materials: Dienes blocks, beads, marbles, ice cream sticks, candies, erasers, rulers, pebbles, etc.
- A number line and abacus can be used for subtraction.



Calculating with an abacus is encouraged.

Sample worksheet:

Worksheet 18 to 22

- The teacher needs to scan the QR code before guiding the pupils to complete the activity on Worksheet 21.
- QR code for Worksheet 21:



Refer Textbook (Part 1): page 74 to 81.

Refer Activity Book (Part 1): page 88 to 96.

Name:

Class: _____



Example:

$$9 - 4 = 5$$



Subtract within

10

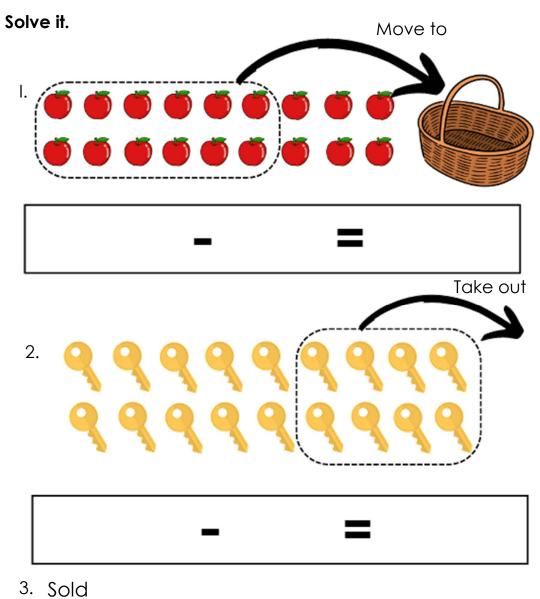


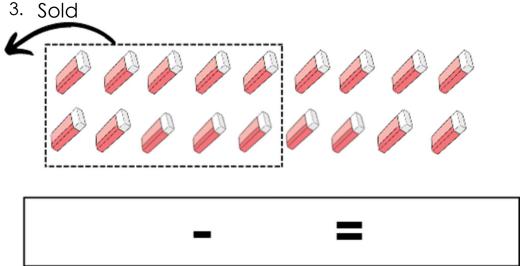






Name: _____ Class: _____

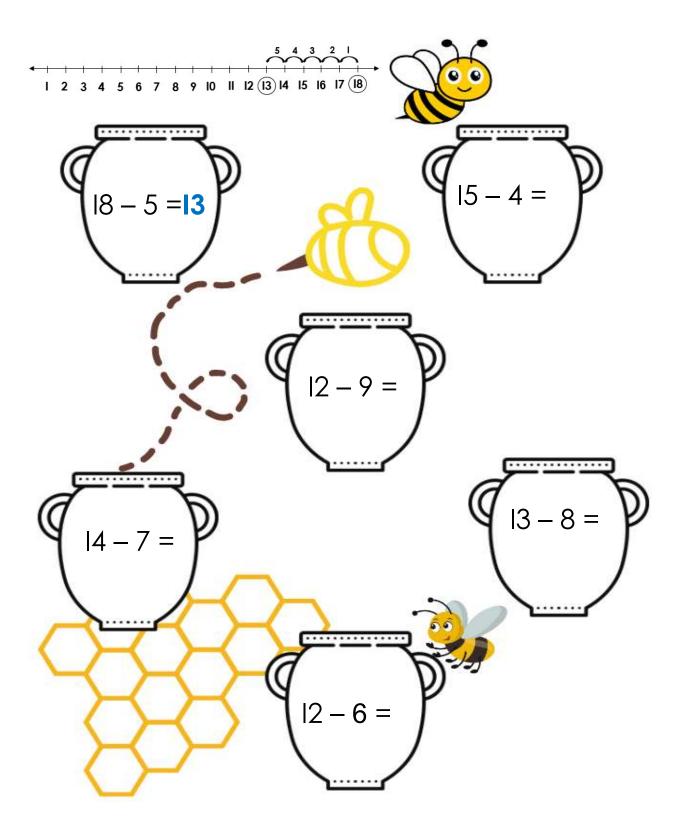




Name: _____

Class: _____

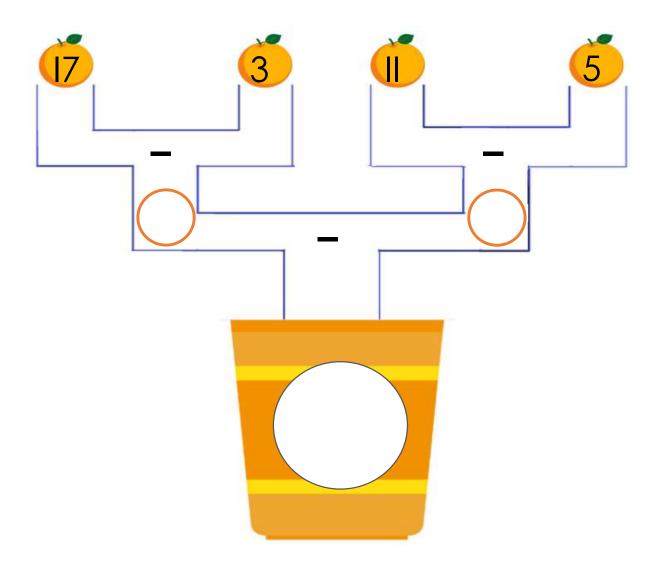
Solve it.



Name: _____ Class: _____

Find the difference.





	Workshied 22
Name:	Class:
Complete the number sentence	5.
I.	
BE CO.	
There are fish in an around	field were taken out
There are fish in an aqua	
There are fish left in the a	aquarium.
2.	
2.	
Carly Carly	
2/1	
There are cups.	cups were broken.
There are cups not broke	

Topic	:	1.0 Whole Numbers Up to 100	Suggested time :	120 minutes
Content Standard	:	1.6 Place value		
Learning Standard		1.6.1 State the place value and dig	git value of any numbe	

Lesson Explanation : Organised content:

- 1. State the place value and digit value of any number within 50.
- 2. State the place value and digit value of any number within 100.

Lesson starts with pupils' prior knowledge on numbers. During teaching and learning session, teacher emphasises the skills of counting, naming and writing numbers in numerals. Teacher integrates fun learning elements. Ensure pupils have mastered counting and writing numbers in numerals.

Notes

Suggested Activities

Introduction:

 Pupils write the number and show the number of objects based on the number mentioned by the teacher.

Activity 1 (in pairs):

- 1. Pupils in pairs, tie some ice cream sticks and write the total number on a piece of paper.
- 2. Pupils draw a vertical line in the middle of the number and write the words "ones" and "tens" (place value).

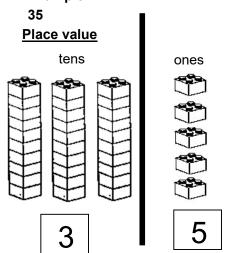
Activity 2 (in groups):

- 1. Prepare building blocks.
- 2. Pupils arrange building blocks based on the number given. Create a new block combination when it reaches 10.
- 3. Place the building blocks on the manila card. Then, place the number card.

Concrete materials: Dienes blocks, ice cream sticks, cups, straws, rubber bands, counting frames.

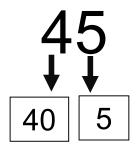
- Abacus 4:1 can be used to count and identify the place value.
- Assertion:
 Finding the place value must be determined from the right (ones).

Example:



4. Write the number on a piece of paper. Then, write the value of the digits.

Digit value

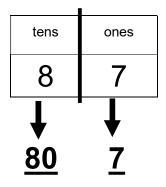


Activity 3 (individually):

- 1. Use an exercise book.
- 2. Write the number given. Then draw a vertical line in the middle and write the place value of each digit.

tens	ones
8	7

3. Write the digit value of each digit.



4. Pupils complete the activity in the exercise book.

Refer Textbook (Part 1): page 25 and 27.

Refer Activity Book (Part 1): page 45.

Suggested Time : 120 minutes

Content Standard		
	: 1.2 Number value	
	1.2.1 Name the numbers up to1.2.2 Determine the number of1.3.1 Write numbers in numer	alues up to 100.
Lesson Explanation	 Name the number up to 50 Show the quantity of the g Match group of objects with Compare the value of two Write numbers in numerals Lesson starts with pupils' prior the teaching and learning less the objects, naming and writing Teacher integrates fun leaders Ensure pupils have mastered based on objects, showing the 	iven numbers. th its numbers. numbers. s and words. knowledge on numbers within 20. During son, teacher emphasises the counting of any numbers in numerals and words within
Suggested Activities		Notes
Activity 1: 1. Pupils count the stra	" together (Textbook page 11).	 Concrete materials: straws, picture cards, 50 square grid papers, number cards, jars, Abacus 4:1 can be used to count. Teacher can choose appropriate suggested activities.
3. Pupils paste the pict straws) on the board4. Pupils count the obj5. Show the method of and words.	nt the straws in groups of 10. ture cards (same quantity of d. ects on the picture cards. f writing numbers in numerals s with other picture cards.	 Activities and worksheets can be varied based on pupils' abilities. Sample worksheet: Worksheet 23 to 26

: 1.0 Whole numbers up to 100

Topic

Activity 3 (Lucky Draw Game):

- 1. Prepare number cards in a jar.
- 2. Distribute some blank papers to pupils.
- 3. Pupils are called randomly to take a number from the jar. Pupils say the number taken in numerals and words.

Activity 4:

- 1. Prepare number cards in a box.
- 2. Pupils are called randomly to take two number cards from the box.
- 3. Other pupils compare the two numbers.
- 4. Repeat the activities with other numbers.

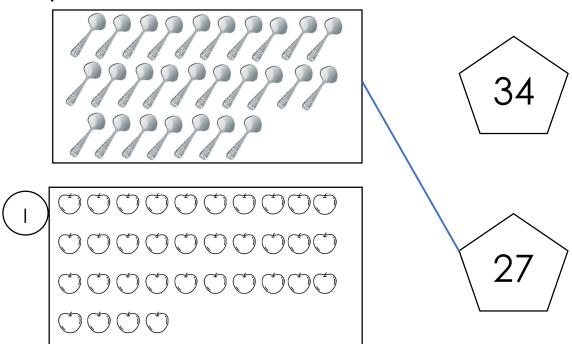
Refer Textbook (Part 1): page 21 to 23.

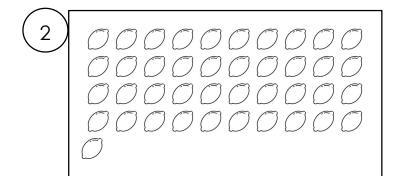
Refer Activity Book (Part 1): -

Name: _____ Class: _____

Match.

Example:



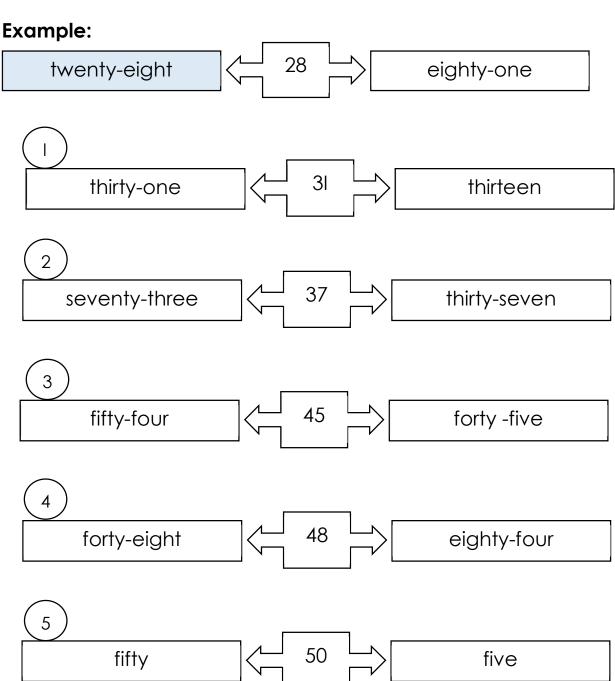






Name: _____ Class: _____

Colour the correct answer.



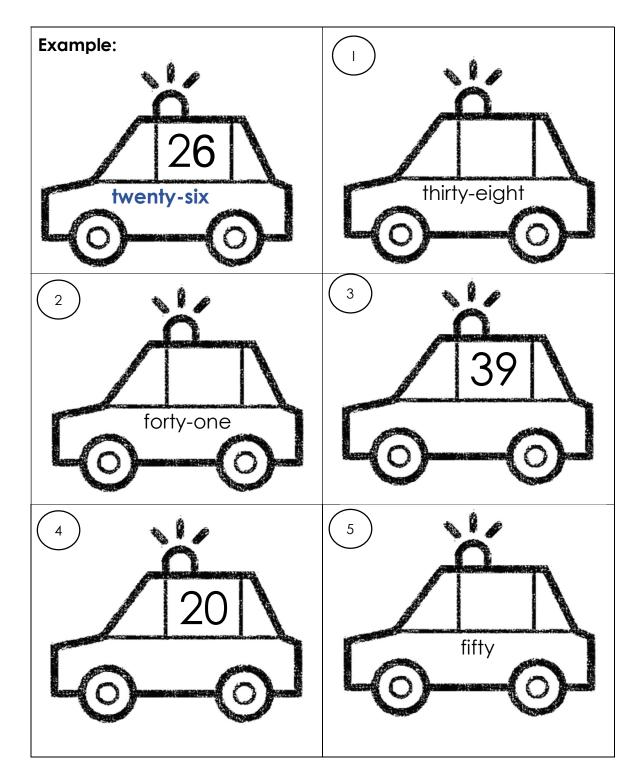
Name: _____ Class: _____

Write the numbers in words.

Example: 24	28
twenty-four	twenty
2 3I	3 39
thirty	thirty
42	5 47

Name: Class:

Write in numerals or in words.



Topic	:	1.0 Whole Numbers Up To 1	Suggested Time : 120 minutes	
Content Standard	:	1.2 Number value1.5 Number sequence1.9 Number patterns		
Learning Standard Lesson Explanation	:	 1.2.1 Name the numbers up to 100. 1.2.2 Determine the number values up to 100. 1.5.1 Count numbers. 1.5.2 Compare any number sequence. 1.9.1 Identify pattern for a given number series. 1.9.2 Complete various simple number patterns. Organised content: Count numbers up to 50. Complete any number sequence. Identify number patterns within 50. Arrange various objects in ascending and descending order. Lesson starts with counting in tens until 50. During the lesson, the teacher will emphasis counting numbers in sequence 1 to 50. Teacher teaches number patterns of twos, fours, fives, and tens up to 50. Teacher integrates fun learning elements. Ensure pupils recognise numbers up to 50 before they complete the number sequence. 		
Suggested Activitie	s		Notes	
 Pupils sit in groups. Teacher places the 'Hopscotch' game mat written with some numbers up to 50 on the floor. Pupils play the 'Hopscotch' game. Pupils jump on the mat and say the numbers. Pupils throw the bean bag three times on the mat and write down the numbers on a piece of paper. Pupils arrange the numbers written in ascending and descending order. Teacher prepares number pattern cards (refer Activity Sheet 1). Pupils identify the number patterns on the cards given (twos, fours, fives or tens). 		p to 50 on the floor. cotch' game. at and say the numbers. h bag three times on the mat umbers on a piece of paper. Imbers written in ascending r. Imber pattern cards (refer	'Hopscotch' game	

Refer Textbook (Part 1): page 21 to 34.

Refer Activity Book (Part 1): page 38, 39, 43, 44, 49, 50, 51 and 53 to 58.

Activity Sheet I

Example of number pattern cards.

10	12	14	16

28	32	36	40
----	----	----	----

25	30	35	40
----	----	----	----

20	30	40	50
----	----	----	----

Name: _____ Class:____

Fill in the blanks.

Example:

21, **22**, 23, **24**, 25, **26**, 27, **28**, 29, **30**

- I. II, ____, I3, ____, I5, ____, I7, ____, I9, ____
- 2. 20, ____, 22, ____, 24, ____, 26, ____, 28, ____
- 3. 42, ____, 44, ____, 46, ____, 48, ____, 50, ____
- 4. 3, ____, 5, ____, 7, ____, 9, ____, II, ____
- 5. 35, ____, 37, ____, 39, ____, 41, ____, 43, ____
- 6. 40, ____, 42, ____, 44, ____, 46, ____, 48 ____
- 7. 10, ____, 12, ____, 14, ____, 16, ____, 18, ____
- 8. 30, ____, 32, ____, 35, ____, 37, ____,
- 9. 16, ____, 18, ____, 20, ____, 22, ____, 24, ____
- 10. 24, ____, 26, ____, 29, ____, 31, ____,

Name: _____ Class: _____

Complete the number patterns with correct numbers.

i) Count in twos in ascending order.



ii) Count in fours in ascending order.



iii) Count in fives in ascending order.



iv) Count in tens in ascending order.

Name:		C	class:	
Arrange the numbers in ascending or descending order.				
26	5 23	25	27	
i. Ascending	order			
ii. Descendin	g order			
2) 39		29	49	
i. Ascending	order			
ii. Descending	g order			

Name: Class:

Count and colour the correct numbers.

Example		13
		31
I)		34
		53
2)		21
		12
3)		36
		45
4)	角角角角	50
		40
5)		41
		25
6)		25
		29

Topic	:	2.0 Basic Operations	Suggested Time	:	180 minutes
Content Standard	:	2.2 Add within 100.			
Learning Standard	:	2.2.2 Add two numbers with the sum within 100.			

Lesson Explanation : Organised content:

counters

regrouping with the sum up to 50).

3. In groups, pupils count the total of two groups of objects and show their answers (addition without

1. Addition without regrouping within 50.

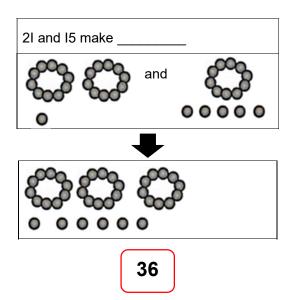
2. Addition by regrouping within 50.

Lesson starts with addition without regrouping within 50 (2-digit numbers with 1-digit number and 2-digit numbers with 2-digit numbers) and followed by addition with regrouping within 50 (2-digit numbers with 1-digit number and 2-digit numbers). During the lesson, teacher emphasizes on mathematical skills such as counting and writing numbers based on its place value for addition. Teacher integrates fun learning elements.

Ensure pupils have mastered addition without regrouping within 50

before teaching addition by regrouping within 50. **Notes Suggested Activities** 1. Teacher starts the lesson with basic facts in • Use the combination of numbers for addition. addition without regrouping (within 50). 2. Pupils count the concrete materials (counters, (Example: 21st Century Learning-Dienes blocks, abacus, counting frame or any Showdown) suitable counters). Integrated and enriched Learning Standard: 1.2.1, 1.4.1 and 2.1.3 Concrete materials: Dienes blocks, ice-cream sticks, counting frame, Abacus 4:1 can be used for counting frame abacus addition. Sample worksheet: Worksheet 31 to 33

Dienes blocks



4. Pupils write the number sentence on the card given with guidance.

2I add I5 equals to 36

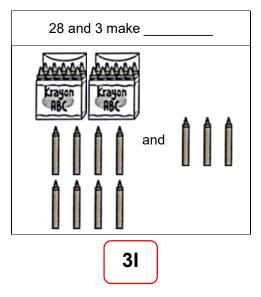


$$21 + 15 = 36$$

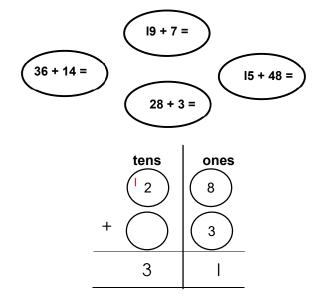
5. Pupils are guided to use the standard written method. Pupils write the answers on the cards given.

tens 2 +	ones
3	6

6. In groups, pupils add any two numbers using objects. Pupils write and show the answers on the card (addition within 50 by regrouping).



7. Pupils are provided with cards to write the number sentence followed by the standard written method. Pupils will move from one station to another station to complete the given number sentences.



Refer Textbook (Part 1): page 63 to 67.

Refer Activity Book (Part 1): page 78 to 87.

Name: _____ Class: _____

Add.

Example: 23 + 6 = 29

tens	ones
2	9

1) 15 + 4 =

tens	ones

2) 27 + 21 =

tens	ones

3) 23 + 22 =

tens	ones

tens	ones

5) I8 + 30 =

tens	ones

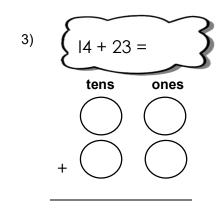
Name: _____

Class: _____

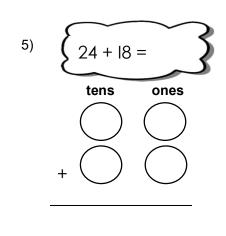
Add.

Example:

2)	34 + 5 =	=
	tens	ones
	+	



4)	[19+ 25 =	
	tens	ones
	+	





Name: Class:

Add.

Example:

tens	ones
800	0000
	00000
2	I

I) 27 + 8 =

tens	ones
Krayon RBC	

2) 26 + 17 =

tens	ones
	00000
	000000

3) 24 + 18 =

tens	ones

tens	ones	
	000	
	00000000	

5) 26 + 18 =

tens	ones

Topic	: 2.0 Basic Operations	Suggested Time : 120 minutes
Content Standard	: 2.3 Subtract within 100	
Learning Standard	: 2.3.2 Subtract two numbers w	rithin 100.
Lesson Explanation	Lesson starts with subtraction needs to emphasise the mast such as counting, writing nunintegrates fun learning elemen	subtraction within 50 without regrouping
Suggested Activities		Notes
cards given. 2. Pupils carry out actinumber cards. 3. Pupils do the subtracards. 4. Pupils show two number subtract the number subtract the number subtract until they subtraction within 56. Pupils who have many subtraction within 56.	astered the subtraction skills will he ways of writing number	 Pupils who can state the answer for the subtraction quickly and correctly will take the card from their partner. Pupils will continue the game until one of them has no more cards left. The winner of the game is the pupil with the most cards or the pupil with the highest score. Concrete materials: number cards within 50.

Refer Textbook (Part 1): page 88 to 92.

7. The activity will be continued with other pupils.

Refer Activity Book (Part 1): page 97.

sentence for the subtraction.

Topic	:	1.0 Whole Numbers Up To 1	Suggested Time: 120 minutes	
Content Standard	:	1.2 Number value		
Learning Standard	:	1.2.1 Name the numbers up to 100.		
		1.2.2 Determine the number values up to 100.		
		1.3.1 Write numbers in numera	als and words.	
Lesson Explanation	n :	Organised content:		
		 Name the numbers up to 10 Show the quantity of the giv Match groups of objects wit Compare the value of two n Write numbers in numerals Lesson starts with the pupils'	en number. h its number. umbers.	
		Teacher can also apply fun lea Ensure pupils have mastered numbers for a group of object	I the skills of counting and naming the cts to represent its quantity, showing the comparing the value of two numbers and	
Currented Activity			Notes	
Suggested Activit	ies		Notes	
Introduction: 1. A pupil is called air with their fing	l rand	domly to write a number in the (writing in the air).	Notes: • Concrete materials: straw, picture cards, 100 square grid card, number	
Introduction: 1. A pupil is called	l rand	(writing in the air).	Notes: • Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards.	
Introduction: 1. A pupil is called air with their fing 2. Other pupils gu	l rand	(writing in the air).	Notes: Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards. Abacus 4:1 can be used to count.	
Introduction: 1. A pupil is called air with their fine 2. Other pupils gu Activity 1:	l rand gers ess t	(writing in the air). the number written.	Notes: • Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards.	
Introduction: 1. A pupil is called air with their fine 2. Other pupils gu Activity 1:	l rand gers ess t	(writing in the air).	 Notes: Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards. Abacus 4:1 can be used to count. Teacher can choose any suitable activities. Activities can be varied according to 	
Introduction: 1. A pupil is called air with their fing 2. Other pupils gu Activity 1: 1. Prepare some s	l rand gers ess t	(writing in the air). the number written. s and count them together	 Notes: Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards. Abacus 4:1 can be used to count. Teacher can choose any suitable activities. 	
Introduction: 1. A pupil is called air with their fine 2. Other pupils gu Activity 1: 1. Prepare some swith pupils. 2. Guide pupils to 3. Prepare picture	f rangers ess t straw	(writing in the air). the number written. s and count them together	 Notes: Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards. Abacus 4:1 can be used to count. Teacher can choose any suitable activities. Activities can be varied according to 	
Introduction: 1. A pupil is called air with their fing 2. Other pupils gu Activity 1: 1. Prepare some swith pupils. 2. Guide pupils to 3. Prepare picture objects and pass	I rand gers ess t straw cour cour	(writing in the air). the number written. s and count them together at in tens. ds that show quantity of	 Notes: Concrete materials: straw, picture cards, 100 square grid card, number cards and word cards. Abacus 4:1 can be used to count. Teacher can choose any suitable activities. Activities can be varied according to 	

Activity 2:

- 1. Prepare a 100 square grid card.
- 2. Pupils say the number based on the coloured squares.

6. Repeat the activity with other picture cards.

- 3. Guide pupils to count in tens.
- 4. Distribute the 100 square grid cards each pupil.
- 5. Pupils colour the 100 square grid cards based on the number mentioned by the teacher.

6. Pupils write numbers based on the coloured squares in numerals and words.

Activity 3:

- 1. Prepare number cards 0 to 9.
- 2. Pupils take two number cards randomly and paste them on the board.
- 3. Other pupils write the numbers in words.
- 4. Repeat the activity for other numbers.
- 5. Prepare number word cards.
- 6. Pupils are called randomly to take the number word cards and paste them on the board.
- 7. Other pupils write the numbers in numerals.

Activity 4:

- 1. Prepare picture cards/number cards.
- 2. Pupils are called randomly and take two picture cards and show them to other pupils.
- 3. Pupils compare the quantity and the value of two groups of objects shown in the picture cards.

Refer Textbook (Part 1): page 21 to 24.

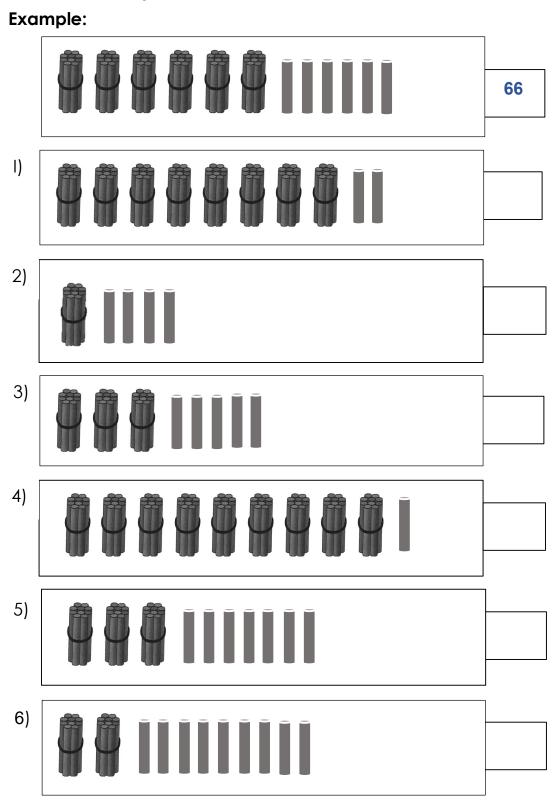
Refer Activity Book (Part 1): page 39 to 43.

				and the second s
Topic	: 1. Whole	e Numbers Up To 10	Suggested Time	: 120 minutes
Content Standard	1.5 Num	ber value ber sequence ber patterns		
Learning Standard	1.2.2 De 1.5.1 Co 1.5.2 Co 1.9.1 Ide	 1.2.1 Name the numbers up to 100. 1.2.2 Determine the number values up to 100. 1.5.1 Count numbers. 1.5.2 Complete any number sequence. 1.9.1 Identify pattern for a given number series. 1.9.2 Complete various simple number patterns. 		
Lesson Explanation	1. Cour 2. Comp 3. Ident Lesson s the lesso 100. Tea and tens Ensure	starts with pupils cour on, teacher emphasis acher also teaches th s up to 100. Teacher in	n number series up to 1 nting numbers in tens u es counting numbers in e number patterns of t ntegrates fun learning e cognised numbers up	up to 100. During a sequence up to twos, fours, fives elements.
Suggested Activities		<u> </u>	Notes	
 Distribute 100 square grid cards. Pupils write numbers in sequence up to 100. Pupils fill in the blanks and complete the 100 square grid cards by writing the missing numbers. Pupils check the answers. Pupils are given chopsticks, rubber bands and number cards in groups. Pupils do the activity by counting the chopsticks based on the number cards given. Pupils are shown a number card and asked to read the number patterns of twos, fours, fives and tens while counting with their fingers. 		 Concrete materials cards, chopsticks, respectively. Teacher guides putens. Sample worksheet: Worksheet 34 	number cards. pils to count in	
Refer Textbook (Part	1): page 23,	32 to 42.	,	

Refer Activity Book (Part 1): page 38, 39, 49, 50 to 58.

Name: _____ Class: _____

Count numbers up to 100.

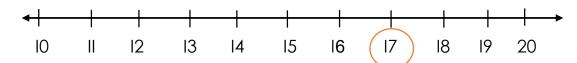


Topic	1.0 Whole Numbers Up to 100	Suggested Time : 120 minutes	
Content Standard	: 1.8 Round off numbers		
Learning Standard	: 1.8.1 Round off whole numbers	1.8.1 Round off whole numbers to the nearest tens.	
Losson evalenation	: Organised content:		
Lesson explanation	 Organised content: i. Round off numbers to the n 	nearest tens within 20.	
	ii. Round off numbers to the r	earest tens within 50.	
	iii. Round off numbers to the n	umbers to the nearest ten within 20.	
		off' concept. Continue the activity with	
	Ensure the pupils have mastere numbers up to 100 before teach	ed the number line and able to identify ning round off.	
Suggested Activity		Notes	
asked the following i. Is Siti standing ii. Is Hong stand iii. Zul standing n iv. Who is nearer Example: The rest of the pup Teacher explains the to the arrangement 2. The same pupils ar 20 (number line also asked: i. What is the ii. What are to iii.	ing near Azim or Lee? ing near Azim or Lee? ear Azim or Lee? to Lee, Ali or Kala? Lee ills answer the questions. he concept of "nearest" according it. re given the number cards 10 to so can be used). Pupils will be he middle number? the numbers near to 10? the numbers near to 20?	 Emphasise on the concept of "nearest". Concrete materials: number cards and number line cards. Sample worksheet: Worksheet 35 and 36 	
Refer Textbook (Part 1			
Refer Activity Book (Pa	art i). page ou to oz.		

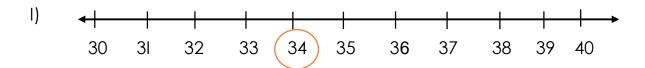
Name: _____ Class: _____

Colour the correct answer.

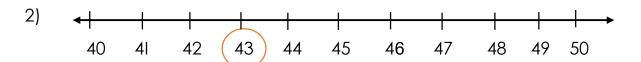
Example:



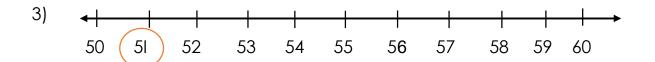
17 is near to 10 or 20



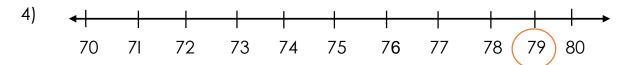
34 is near to 30 or 40



43 is near to 40 or 50



51 is near to 50 or 60

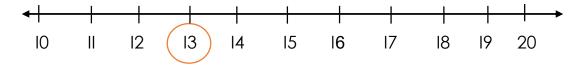


79 is near to 70 or 80

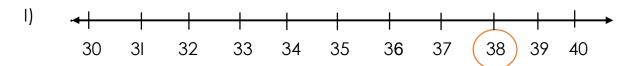
Name: _____ Class: _____

Round off the circled number to the nearest tens. Colour the answer.

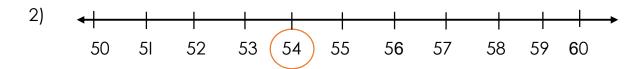
Example:



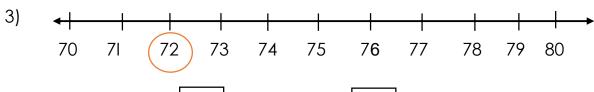
10 or 20



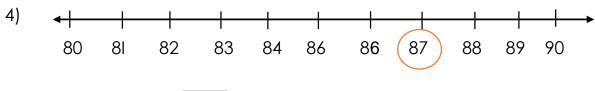
30 or 40



50 or 60

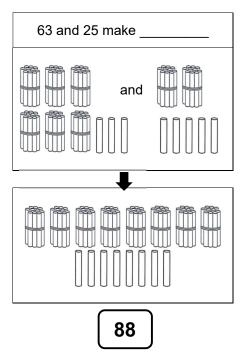


70 or 80

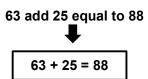


80 or 90

	The second secon	
Topic : 2.0 Basic Operation	Suggested Time : 120 minutes	
Content Standard : 2.2 Add within 100	2.2 Add within 100	
Learning Standard : 2.2.2 Add two num	bers with the sum within 100	
2. Addition by regrouping within 1 During the lesson, counting, writing notes that the counting is a second to the counting of	regrouping within 100. addition without regrouping within 100 (2-digit with a 2-digit numbers). Then followed by addition by 00 (2-digit with 1-digit number and 2-digit numbers). teacher emphasises mathematical skills such as numbers based on their place value and addition. fun learning elements. Ensure pupils have mastered egrouping within 100 before teaching addition by	
Suggested Activities	Notes	
1. Pupils counting using concrete materials Dienes blocks, abacus, counting frame or suitable counters). counting frame abacus counting sticks Dienes block 2. In groups, pupils count the total of two objects. Pupils write the answer on a card it to the class (additional without regroupir sum within 100).	addition without regrouping (within 50). Example: 21st Century Learning-Showdown. Integrated and enriched LS: 1.2.1, 1.4.1, 2.1.3 Concrete materials: Dienes blocks, counting sticks, counting frame,etc. Abacus 4:1 can be used for addition. Sample worksheet: Worksheet 37 Ensure pupils have mastered addition with regrouping.	



3. Pupils create the number sentence using number cards given with guidance. Pupils write the number sentence on the board.



4. Pupils are guided to use standard written method (write numbers according to the place values).

	tens	ones
	6	3
+	2	5
	8	8

5. Pupils use standard written method to solve number sentence (addition with regrouping).

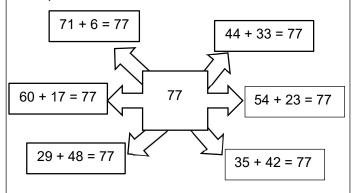
$$48 + 25 = 73$$

	tens	ones
1 4		8
+	2	5
	7	3



6. Teacher emphasises on other number sentences that give the same total amount.

Example:



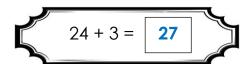
Refer Textbook (Part 1): page 65 to 67.

Refer Activity Book (Part 1): page 79 to 87.

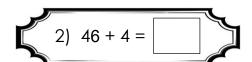
Name: _____ Class: _____

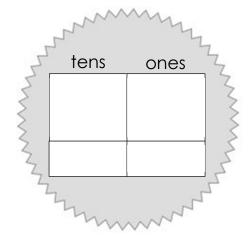
Solve it.

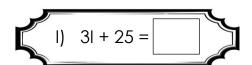
Example:

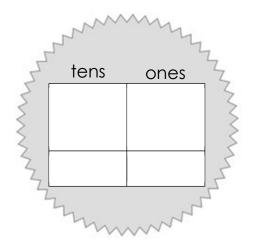


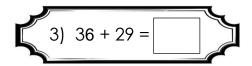
	Lun	My	
Y	tens	ones	7
7	2	4	3
{	+	3	3
3	2	7	Z
	744	h.,	7

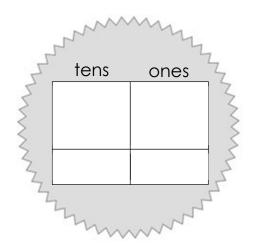






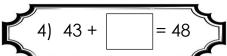




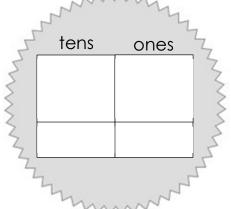


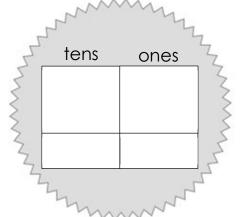
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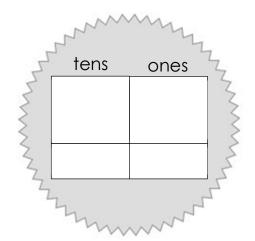


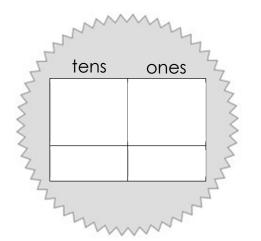












Topic	:	2. Basic Operations	Suggested Time	:	120 minutes
Content Standard	:	2.3 Subtract within 100			
Learning Standard	:	2.3.2 Subtract two numbers within	100.		

Lesson Explanation : Organised content:

1. Subtract without regrouping within 100.

2. Subtract by regrouping within 100.

Lesson starts by subtracting without regrouping within 100 (starting by subtracting 2-digit numbers with 1-digit numbers and 2-digit with numbers 2-digit numbers). Then, followed by subtracting by regrouping (2-digit numbers with 1-digit numbers and 2-digit numbers with 2-digit numbers) within 100. During the lesson, teacher emphasises on the mathematical skills such as counting, writing numbers based on their place values and subtraction. Teacher ensures that the pupils able to write numbers according to the correct place values. Teacher integrates fun learning elements.

Ensure the pupils have mastered the subtraction without regrouping within 100 before teaching subtraction with regrouping within 100.

Suggested Activities

 Pupils count the numbers shown using concrete materials (ice cream sticks, counting sticks, Dienes blocks, abacus, counting frame and other suitable counting tools).



counting frames

abacus





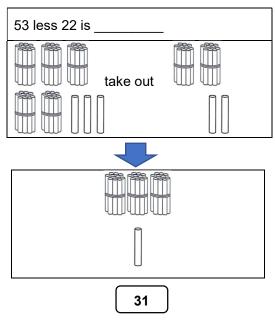
counting sticks

Dienes block

 In groups, pupils solve subtraction of two groups of objects using concrete materials. Write and show answer on the cards. (Subtraction is within 50 without regrouping).

Notes

- Use the subtraction of two groups of objects to introduce the process of subtraction without regrouping within 50.
- Example: 21st Century Learning Showdown.
- Integrated and enriched LS: 1.2.1, 2.1.3.
- Concrete materials: Dienes block, counting sticks, abacus, counting frame, etc.
- Abacus 4:1 can be used for subtractions.
- Sample worksheet: Worksheet 38
- Teacher ensures that pupils have mastered the skill of subtraction with regrouping.
- Teacher ensures pupils can subtract according to the correct place values in the standard written method.



3. Pupils who have mastered the subtraction skills are introduced on how to write number sentence for subtraction. Step 2 will be repeated with the pupils who are still unable to subtract correctly.

53 minus 22 is equal to 31

$$53 - 22 = 31$$

4. Pupils are introduced to standard written method by using place values. Write numbers according to the correct place values in the standard written method.

	tens	ones
	5	3
_	2	2
	3	1

5. Pupils solve subtraction by regrouping in standard written method by writing numbers according to the correct place values.

tens		ones
7		+10
	8	5
_	4	8
	3	7

6. Teacher introduces other combination of numbers for the same subtraction.

Example:

95 - 72

66 - 43

23

42 - 19

50 - 27

Refer Textbook (Part 1): page 95 to 107.

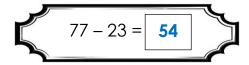
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Refer Activity Book (Part 1): page 98 to 106.

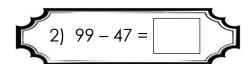
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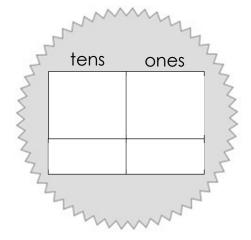
Solve it.

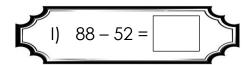
Example:

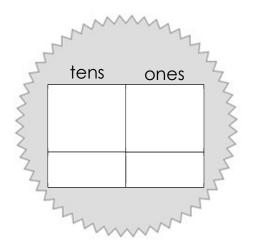


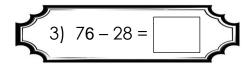
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Z	tens	ones	7
7	7	7	3
{	- 2	3	3
3	5	4	Z
7	444	h	7

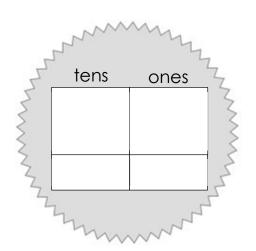






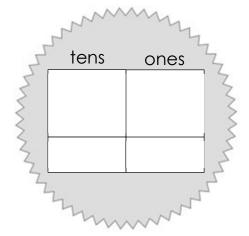


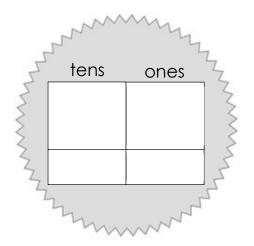


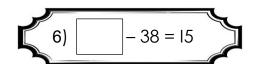


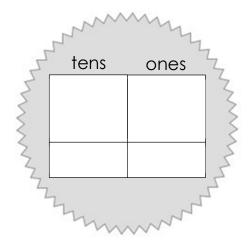


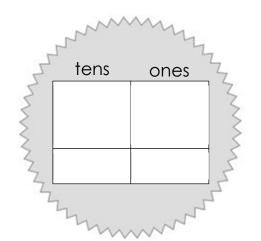












Topic	:	2.0 Basic Operations	Suggested time : 120 minutes
Content Standard	:	2.4 Problem solving	
Learning Standard	:	2.4.1 Create stories involving	g addition and subtraction within 100.
Lesson explanation : Organised content:			
		1. Create stories involving ad	dition within 10.
		2. Create stories involving ad	dition within 18.
		3. Create stories involving addition within 50.	
		4. Create stories involving ad	dition within 100.
		The lesson starts with the simulation of create story based on daily life situations for addition. During the lesson, teacher focuses on the concept and the process of addition. Teacher integrates fun learning elements. Ensure pupils able to create stories based on simple daily situation.	

Suggested activities:	Notes			
 Pupils tell a story based on the number sentence shown. Example: 4+3=7 Ali has 4 marbles Siva has 3 marbles There are 7 marbles. Pupils create stories with guidance. Pupils write the story. 	 Integrated and enriched LS: 2.1.1, 2.1.3, 2.2.1 and 2.2.2. Encourage pupils who have not mastered in writing, create stories verbally. Use picture. Apply CPA (concrete-pictorial-abstract) approach. Focus on the terms of addition. Example: add, total, altogether. 			
Refer Textbook (Part 1): page 93 and 106.				
Refer Activity Book (Part 1): page 109 to 116.				

Topic	:	2.0 Basic operations	Suggested time : 120 minutes
Content Standard	:	2.4 Problem Solving	
Learning Standard	:	2.4.2 Solve problems invo situations.	lving addition and subtraction in daily life
Lesson Explanation	:	Organised content: 1. Solve problems involving addition in daily life situations.	

The lesson starts with the simulation of solving problems involving addition in daily situation. During the lesson, teacher emphasises the concept and process of addition. Teacher integrates fun learning elements. Pupils focus the problem solving process.

Suggested activities

- 1. Teacher shows a number sentence and a situation. Pupils relate the number sentence with the situation.
- 2. Pupils solve the problem.

Example:

Rahim has 10 stamps. Amin has 5 stamps. How many stamps altogether?

Step 1: Understand and interpret the problem.

Rahim: 10 stamps Amin: 5 stamps

Find the total of stamps.

Step 2: Plan a solving strategy.

Operation: Addition

Number sentence: 10 + 5 =

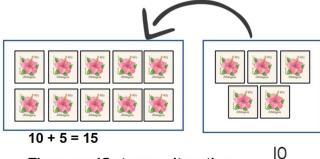
Step 3: Carry out the strategy.

Notes

- Integrated and enriched Learning Standard:
 - 2.1.1, 2.1.3, 2.2.1 and 2.2.2.
- Start with simple daily life situation.

Notes:

- Use a diagram.
- Apply CPA (concrete-pictorialabstract) approach.
- Focus on the terms of addition.
 Example: add, total, altogether.
- Polya Model steps:
 - I. Understand and interpret the problem;
 - II. Plan a solving strategy;
 - III. Carry out the strategy; and
 - IV. Check the answer.



There are 15 stamps altogether.

15

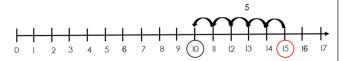
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Step 4: Check the answer.

Counting backwards using number line.



3. Pupils solve problems using Polya Model.

Refer Textbook (Part 1): page 93 and 106.

Refer Activity Book (Part 1): page 109 to 116.

Content Standard : 2.4 Problem Solving Learning Standard : 2.4.1 Create stories involving addition Lesson explanation : Organised content: 1. Create stories involving subtraction 2. Create stories involving subtraction 3. Create stories involving subtraction 4. Create stories involving subtraction The lesson starts with the simulations situations involving subtraction within 1 teacher focuses on the concept and Teacher integrates fun learning elements.	within 10. within 18. within 50. within 100. of create stories based on daily 0 and more. During the lesson, d the process of subtraction.			
Lesson explanation : Organised content: 1. Create stories involving subtraction 2. Create stories involving subtraction 3. Create stories involving subtraction 4. Create stories involving subtraction The lesson starts with the simulations situations involving subtraction within 1 teacher focuses on the concept and Teacher integrates fun learning elements.	within 10. within 18. within 50. within 100. of create stories based on daily 0 and more. During the lesson, d the process of subtraction.			
Create stories involving subtraction Create stories involving subtraction Create stories involving subtraction Create stories involving subtraction The lesson starts with the simulations situations involving subtraction within 1 teacher focuses on the concept and Teacher integrates fun learning elements.	within 18. within 50. within 100. of create stories based on daily 0 and more. During the lesson, d the process of subtraction.			
Ensure pupils able to create stories ba	sed on simple daily situation.			
Suggested activities: Notes				
based on prior knowledge. Followed by creating stories for subtraction. 2. Pupils create a story verbally based on the number sentence given. Example: 7 - 3 = 4 There are 7 slices of cake. 2.1.3 • Creathave • Use • Appl abstraction • Focut vocas subtraction.	grated and enriched LS: 2.1.1, 8, 2.2.1 and 2.2.2. Interstories verbally if pupils enot yet mastered writing skills. In a diagram. Ited CPA (concrete-pictorial-react) approach. Its on the use of correct abulary related to the reaction. Imple: separate, balance, take take away, difference.			
bigger numbers. Refer Textbook (Part 1): page 93 and 106.				
Refer Activity Book (Part 1): page 109 to 116.				

	2.0 Basic Operations	Suggested time : 120 minutes
Content Standard :	2.4 Problem Solving	
Learning Standard :	2.4.2 Solve problems involving situations.	g addition and subtraction in daily life
Lesson Explanation :	Solve problems involving so The lesson starts with sim	ubtraction in daily life situations. ulation of solving problems involving tuations. During the lesson, teacher
	emphasises the concept, pro- integrates fun learning elemer	cess and terms of subtraction. Teacher nts.
	Pupils focus the problem solvi life situations.	ng process and relate with their daily
Suggested activities		Notes
the situation. 2. Pupils solve the pro Example: Ali had 25 curry puf How many curry pu	ate the number sentence with ablem given. Ifs. 10 curry puffs were sold. Iffs were left? and interpret the problem. puffs. were sold. Iff were left? Iff were left? Ing strategy. If ion 25 - 10 =	 Integrated and enriched LS: 2.1.1, 2.1.3, 2.2.1 and 2.2.2. Use a picture. Apply CPA (concrete-pictorial-abstract) approach. Focus the term of subtraction. Example: left, balance, take out, take away, difference. Polya Model steps: Understand and interpret the problem; Plan a solving strategy; Carry out the strategy; and iv. Check the answer.

Step 4: Check the answer.

Use addition operation to check.

- 3. Pupils continue the activity with larger numbers.
- 4. Pupils solve problems using Polya Model with guidance.

Refer Textbook (Part 1): page 93 and 106.

Refer Activity Book (Part 1): page 109 to 116.

Topic	:	2.0 Basic Operations	Suggested Time : 120 minutes
Content Standard	:	2.5 Repeated addition.	
Learning Standard	:	2.5.1 Write number sentend and fours.	ce of repeated addition in twos, fives, tens
Lesson Explanation	:	Organised content:	
		Write number sentence of re	epeated addition in:
		i. twos	
		ii. fives	
		iii. tens	
		iv. fours	
		addition by using counters	lation and Q&A session about repeated and pictures. During teaching and learning ocus on how to write number sentences of

Suggested Activities

- 1. Pupils carry out simulation activity related to repeated addition.
- 2. Get three pupils and provide two counters to each of them.
- 3. Pupils write number sentence of repeated addition.

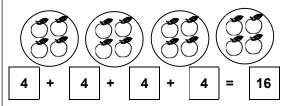








4. Pupils write number sentence from the picture provided, with teacher's guidance.



5. Repeat Activity 4 for repeated addition in fives, tens and fours.

Notes

repeated addition. Teacher integrates fun learning elements.

- Integrated and enriched LS: 2.2.1.
- Concrete materials: counters, pictures, and number lines.
- Relate repeated addition as multiplication.
- Sample worksheet: Worksheet 39

Refer Textbook (Part 1): page 108 to 110.

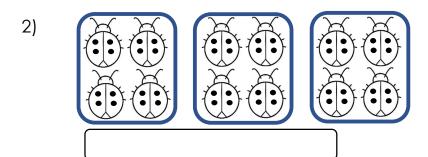
Refer Activity Book (Part 1): page 117 to 119.

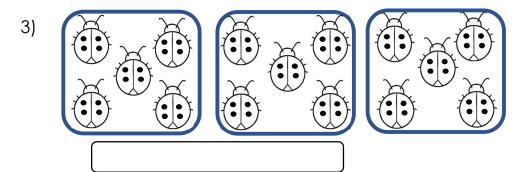
Name: _____ Class: _____

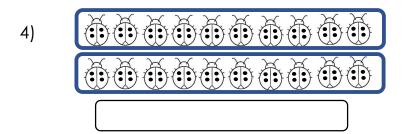
Write the number sentence.

Example:









Topic	:	2.0 Basic Operations	Suggested Time : 120 minutes
Content Standard	:	2.6 Repeated subtraction	
Learning Standard	:	2.6.1 Write a number senten tens, and fours.	ce of repeated subtraction in twos, fives
Lesson Explanation	:	Lesson starts by showing sim i. twos ii. fives iii. tens iv. fours During lesson, teacher need integrates fun learning eleme Ensure that pupils have maste	ds to focus on number lines. Teacher nts.

 Pupils carry out simulation activity on repeated subtraction using counters. Distribute number line cards (up to 20) with question cards (refer Worksheet 40). In groups, pupils solve the problems and write the answers. Conduct discussion. Teacher may use any suitable materials. Sample worksheet: Worksheet 40 	Suggested Activities	Notes
	 subtraction using counters. Distribute number line cards (up to 20) with question cards (refer Worksheet 40). In groups, pupils solve the problems and write the answers. 	materials. • Sample worksheet:

Refer Textbook (Part 1): page 111 to 113.

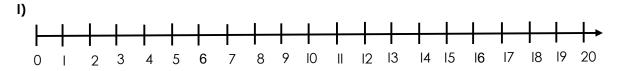
Refer Activity Book (Part 1): page 121 to 123.

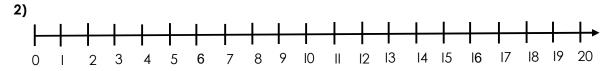
Name: _____ Class:____

Write the answers.

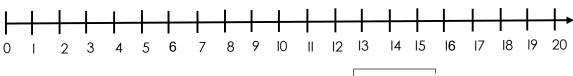
Example:



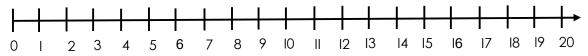




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4)



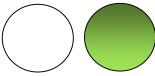
Topic	:	3.0 Fractions	Suggested Time : 120 minutes
Content Standard	:	3.1 Concept of one over two and one over four in proper fractions.	
Learning Standard	:	3.1.1 Identify one over two, one over four, two over four and three over four.	
Lesson Explanation	:	Identify 'one over two', 'half', 'one o	ver four' and 'three over four'.

The lesson starts with hands-on activity by identifying 'one over two', 'half', 'one over four' and 'three over four' (make a fraction card using concrete materials). During the lesson, teacher emphasises that one over two equal to half, one over four equal to a quarter and three over four equal to three quarters.

Suggested Activities

- 1. Give two different coloured papers to pupils.
- 2. Pupils draw two circles on the paper.

Example:



3. Pupils make fraction card step by step: Step 1:





Step 2:







Step 3:



Notes

- Use a fraction card to identify 'one over two', 'half', 'one over four', 'quarter', 'three over four' and 'three quarters'.
- Concrete materials: coloured paper, ruler and scissors.
- Sample worksheet: Worksheets 41 to 43.

Step 4:





4. Pupils spell and write 'one over two', 'half', 'one over four', 'quarter', 'three over four' and 'three quarters' in words.

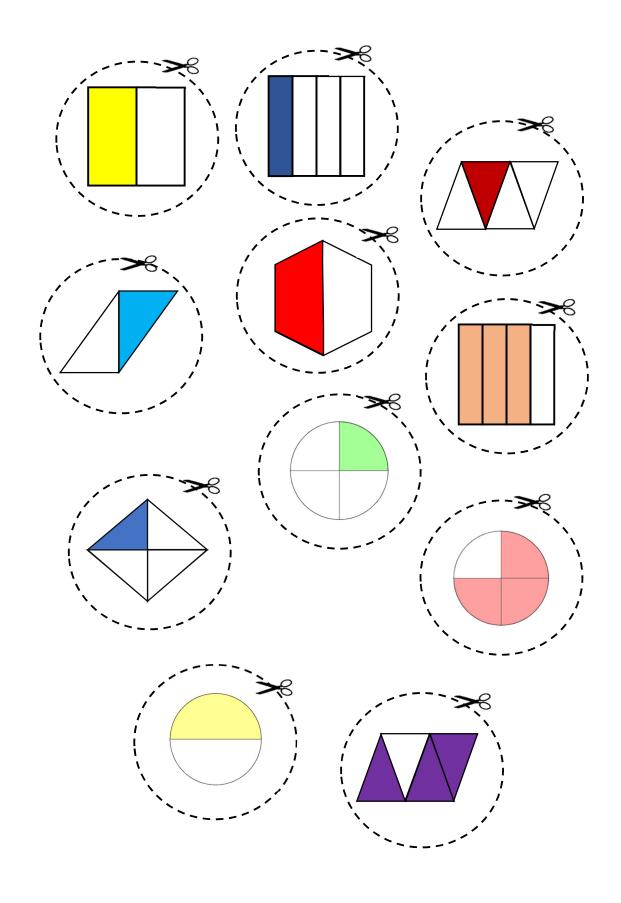
Refer Textbook (Part 2): page 2 to 4.

Refer Activity Book (Part 2): page 1 to 5.

Name:		Class:	
Cut and paste.			
	Half		
	One over to	WO	

Name:		Class:
Cut and paste.		
	Quarter	1
	Quarter	<u></u>
	One over four	
		\

Name:		Class:	
Cut and paste.			
	Three quarters		
	Three over four		



Topic	:	4.0 Money	Suggested Time : 60 minutes
Content Standard	:	4.1 Notes and coins	
Learning Standard	:	4.1.2 Represent the value of n	noney.
Lesson Explanation	:	 Sen up to RM 1. Ringgit up to RM10. The lesson starts by telling the and notes shown. During less as identifying the value of mor for combination of notes and fun learning elements. 	e value of money according to the coins on, teacher emphasises the skills such ney in 'RM' and 'sen' and telling the total coins (up to RM10). Teacher integrates oins and notes of Malaysian currency loney.
Suggested Activitie	s		Notes
1. Pupils tell the value according to the coins and notes shown. 2. Pupils arrange the coins and notes according to their value (from small to big). Example:		oins and notes according to	 Use real money. Carry out simulation activity (combination of money). Encourage pupils to show the combination value of money on the abacus. Concrete materials: real money, sample money. Abacus 4:1 can be used to show the value of money.
Pupils tell the values shown. Pupils arrange the their value (from	ue e c	oins and notes according to	 Carry out simulation action (combination of money). Encourage pupils to show combination value of money or abacus. Concrete materials: real mosample money. Abacus 4:1 can be used to show

RM10

3. Introduce how to represent value of money using abacus 4:1.

RM5

4. Pupils tell the total for combination of notes and coins (up to RM10) with guidance.

Refer Textbook (Part 2): page 14 and 15.

RM1

Refer Activity Book (Part 2): page 15 and 16.

			MOBIM MATHEMATICS YEAR 1
Topic	:	4.0 Money	Suggested Time : 60 minutes
Content Standard	:	4.1 Notes and coins	
Learning Standard	:	4.1.3 Convert money.	
Lesson Explanation	:	 Coins up to RM1. Notes up to RM10. Lesson starts by asking pupils same value as the money she emphasises the skill of conver RM10) using combination of elements. 	to show the sample coins which have the own at the board. During lesson, teacher rting coins (up to RM 1) and notes (up to money. Teacher integrates fun learning he value of money in 'RM' and 'sen' before.
Suggested Activitie	s		Notes
 Pupils sit in pairs. Distribute sample coins to pupils. Pupils show sample coins which have the same value as the money shown/ written on the board. Pupils paste the sample coins on the board. Example: 		coins which have the same shown/ written on the board.	 Convert money using various combination of money. The value of money must be the same during conversion of money. Concrete material: sample coins / notes, printed coins/ notes.



- 5. Repeat the activities with other conversion of money (up to RM10).

 6. Pupils convert money in coins and notes using
- combination of money.

Refer Textbook (Part 2): pages 16 to 19.

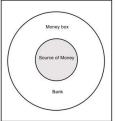
Refer Activity Book (Part 2): pages 17 to 19.

			MOBIM MATHEMATICS YEAR 1
Topic	:	4.0 Money	Suggested Time : 120 minutes
Content Standard	:	4.2 Financial resources and sa	avings
Learning Standard	:	4.2.1 Identify financial resourc	es and savings.
Lesson Explanation	:	resources. Lesson starts by asking questi pupils. Then, teacher relates t lesson, teacher needs to emskills such as counting money	ons about pocket money and expenses to ofinancial resources and savings. During phasise on mathematical processes and any, writing money, adding, and subtracting project-based learning to create a more
Suggested Activities	s		Notes
1. Teacher asks pupils about pocket money. i. How much is your pocket money? ii. What can you buy using the pocket money? iii. How much do you spend? 2. Teacher asks pupils: What other source of money do you have? (Example: Hari Raya money) 3. Teacher explains about savings.		ur pocket money? uy using the pocket money? ou spend? : What other source of money nple: Hari Raya money)	 Project-based learning (mini project) to evaluate the pupils' performance level. Integrated and enriched LS: 4.1.1, 4.1.2, 4.1.3 and 4.2.2
4. Teacher guides p	oup	ils to relate the topic with savings, and expenses (use	from various sources. Example: Peaket manay raya/angay

Example:



on the given Circular Map.



6. Pupils are given a few situation cards.

Example:

Father gave pocket money to Ali.

situations that are related to the pupils daily life).

5. Pupils state the financial resources and savings

Ali kept the money in the coin box.

7. Pupils are asked to match the situation cards in the table at the board.

Example: Pocket money, raya/angpau money, reward money/gifts and sales money.

Savings: Part of the financial resources that are set aside for savings or use in the future.

Example: Set aside certain amount of daily pocket money and keep it in a bank.

Expenses: Extra money from savings to be spent.

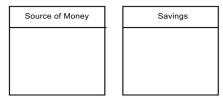
Example: Money more than savings spent on buying things.

Notes:

- I-think map/Mind Map: Circular Map and Mind Map and table to collect and record information.
- Using records to monitor savings and expenses.
- Video link



Example:



- 8. Discuss the answers.
- 9. Pupils are divided into a few groups and teacher gives suitable mini projects.

Project suggestion: Pupils prepare a mind map on the source of money and savings.

Example: (Refer Textbook: Part 2, page 20)



10. Pupils explain with examples: savings and expenses record. Example:

SAVINGS AND EXPENSES RECORD

Date	Financial Resou (Income)	irces	Savings	Expenses	
10.1.2023	Pocket Money	RM3	RM2	Nasi Lemak	RM1
	Baby Sitting	RM2		Syrup Drink	RM1
				Watermelon	RM1

- 11. Pupils explain about financial resources, daily savings and expenses.
- 12. Each pupil is given a suitable mini project. Project suggestion: pupils prepare daily record of savings and expenses.
- 13. Pupils present and discuss the completed project.



Didik TV KPM: Year 1 Money Resources

https://www.youtube.com/watch?v=e Sux1iVURv8

Refer Textbook (Part 2): page 20 to 22.

Refer Activity Book (Part 2): page 20 and 21.

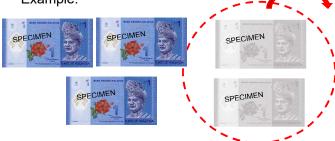
Topic	: 4.0 Money	Suggested Time : 120 minutes
Content Standard	: 4.3 Problem Solving	
Learning Standard	: 4.3.1 Solve daily life prob money.	lems involving addition and subtraction of
Lesson Explanation	Lesson starts by represent followed by subtraction up to on mathematical processes the value of money and subased learning in the lessor Ensure pupils have master	rolving subtraction up to RM10. ting the value of money up to RM10 and to RM10. During lesson, teacher emphasises and skills such as counting money, writing btracting money. Teacher applies problem-
Suggested Activitie	S	Notes
money by the teamer Example: Ali has lead to the control of the c	RM5 pocket money. the value of money using coins of specimen specimen and the specimen and	 Using activity represent the value of money in the process of counting and finding the balance. Integrated and enriched LS: 4.1.2, 4.1.3, 4.2.1 and 4.2.2. Concrete materials: samples of coins and notes Number line and abacus 4:1 can be used for subtraction
five pi	ent the value of RM5 with ecces of RM1 notes	
	represent the value of money es accurately and correctly.	
 Pupils are given prinvolving money. Example: (Refer 	ictures and daily situations Fextbook Part 2, page 29)	



Ali buys fried chicken.

5. Pupils count the balance of pocket money and state the amount.

Example:



Ali bought fried chicken at RM2.

Ali's pocket money balance is RM3.

6. Pupils are guided to write number sentence for subtraction.

Example:

$$RM5 - RM2 = RM3$$

7. Pupils are guided to write in standard written method.

Example: - RM5

RM3

- 8. Pupils are asked to solve subtraction using standard written method.
- 9. Pupils work in groups for the activity given. Example: Teacher prepares different daily life situation cards that involve subtraction.

Mimi has RM3. Mimi bought a cupcake.

Sani has RM2. Sani bought a burger.

- 11. Pupils solve problems in number sentence and standard written method.
- 12. Teacher discusses pupils' work.

Refer Textbook (Part 2): page 23 to 29.

Refer Activity Book (Part 2): page 22 to 30.

			MODINI MATTILMATIOS TEAR I		
Topic	:	5.0 Time	Suggested time : 120 minutes		
Content Satndard	:	5.1 Days and months			
Learning standard	:	5.1.1 State time in a day.			
		5.1.2 State the sequence of ev	vents in a day.		
Lesson Explanation	:	Organised content: 1. Introduce the pictures of activity. 2. Introduce the vocabulary of time for each activity. 3. Introduce time cards. Lesson starts by showing pictures of activity in the morning, afternoon evening and night. Then, followed by introducing the vocabulary of time and suitable time for each activity. Teacher integrates fun learning.			
		elements.			
Suggested Activitie	es		Notes		
 Pupils sing 'Good Morning Song' with music and lyrics. Pupils state the time based on the picture (activity) shown. Pupils complete the spelling of the word (time). Example: 		based on the picture (activity)	 Concrete materials: pictures of activities, word cards, time cards, envelopes. Sample worksheets: Worksheets 44 and 45. 		
mr	'n	g			
4. In pairs, pupils m time. Example:	atc	h the picture of activity with			
		night			
5. Pupils match the activity with other time cards.					
Example:					

8:30 at night

6. In groups, pupils arrange all the activities based on the sequence of time.

Refer Textbook (Part 2): page 31 and 32.

Refer Activity Book (Part 2): page 31 to 33.

Name:	Class:

Match the picture of activities with the suitable time.



night



evening



afternoon





morning



Name:		Class:
Cut and paste the picture	s in the correct	order.
	J	









8:00 night

6:00 evening

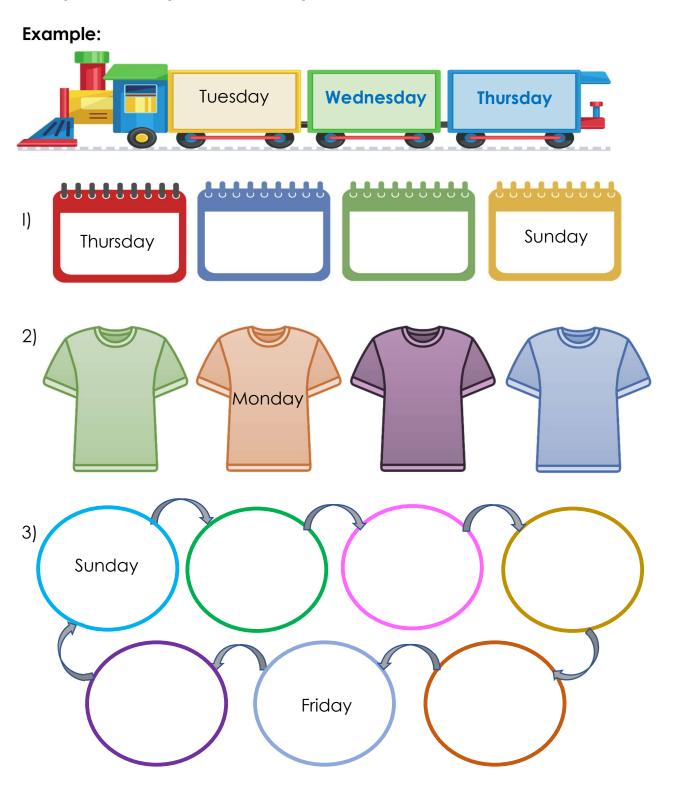
12:30 afternoon

7:00 morning

Refer Activity Book (Part 2): page 38.

Name: _____ Class: _____

Complete the days in correct sequence.



Name:						Class:					
Complete t				uzzle	•				6		
									T		
				4							
ı	T			S					R		
							E				
							5				,
	2	W					S				
МО	Ν	D	Α	Υ							
							U				
					3	F		l			
Horizontal					٧	ertic	al	-			
I) Before Wednesday is			4) The	day	after	Satur	day.			
2) Today is Thursday. Yesterday was			5				day. 1 w is _				
3) Two days after Wednesday is			6) Befo	ore Fr	iday	is		·		

Topic	:	5.0 Time	Suggested Time : 60 minutes
Content Standard	:	5.1 Days and months	
Learning Standard	:	5.1.4 Name the months of a year	ear.
Lesson Explanation	:	the name of the month correct emphasise that the name of the same	nth in words. and after. Intion the months in sequence and write tly. During the lesson, teacher needs to the months should start with the capital important events in the month. Teacher
Suggested Activitie	s		Notes
 Suggested Activities Pupils sing a song on months. Pupils are given month cards. Pupils stand in front based on the months in correct sequence. In groups, pupils arrange the months in correct sequence. Pupils write the month stated by the teacher in words. Pupils complete sentense. Example: The second month is After the month of July is 		th cards. Pupils stand in front in correct sequence. Inge the months in correct in stated by the teacher in ense.	 Concrete materials: month cards, envelopes. Teacher can use various activities based on the pupils' capabilities.
Refer Textbook (Part	2)	: page 39.	
Refer Activity Book (F	Pai	rt 2): page 39 and 40.	

Topic	:	5.0 Time	Suggested Time : 120 minutes
Content Standard	:	5.2 Clock face	
Learning Standard	:	5.2.1 Identify the clock hands or	n the clock face.
Lesson Explanation	:	on the clock face (build clock	n activity by identifying the clock hands face using concrete materials). During on the number value according to the

Suggested Activities

Distribute paper plates (labelled number 3, 6, 9, 12) and number cards 1,2,4,5,7, 8,10 and 11.

Example:



2. Pupils complete the number on the paper plates using the number cards given.

Example:



- 3. Pupils state the numbers on the clock face verbally.
- 4. Pupils are given two clock hands (minute hand and hour hand).
- 5. Pupils identify the minute hand and hour hand verbally.
- Pupils assemble the minute hand and hour hand according to the time stated by the teacher.Example:



3:00 p.m.

Notes

- Identify the clock hands by building a clock face.
- Concrete materials: paper plates, number cards and clock hands.
- Emphasize that the minute hand must touch the number.

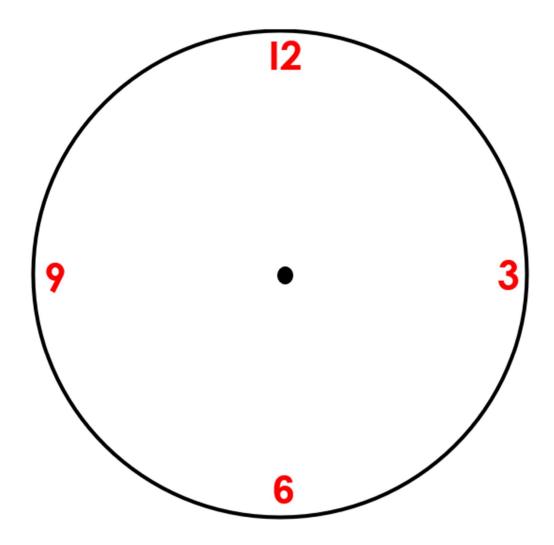


- Sample worksheet:
- · Activity Sheet 2
- Sample worksheet: Worksheet 48

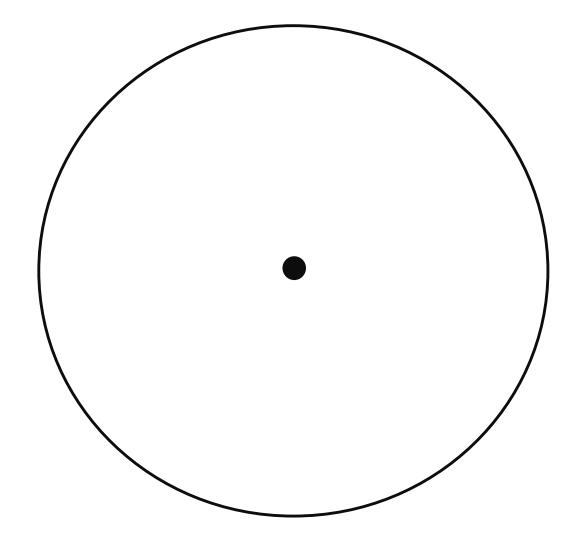
Refer Textbook (Part 2): page 2 to 4, page 33 and 34.

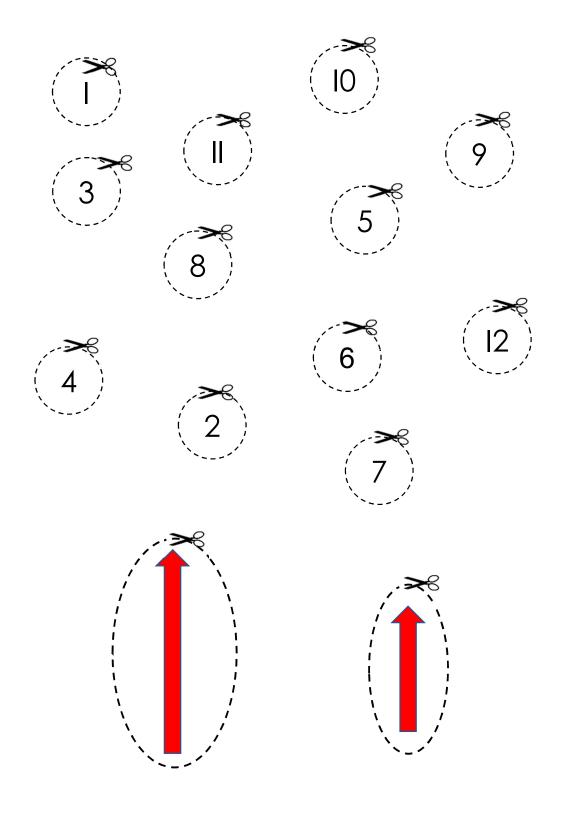
Refer Activity Book (Part 2): page 34.

Activity Sheet 2



Complete the clock face.





Topic	:	5.0 Time	Suggested Time : 60 minutes
Content Standard	:	5.2 Clock face 3.1 Concept of one over two and	
		3.1 Concept of one over two and	one over lour in proper fractions.
Learning Standard	:	5.2.2 Identify and state "half", "que the clock face.	uarter" and "three quarters" based on
		3.1.1 Identify one over two, one or four.	ver four, two over four and three over
Lesson Explanation	:	•	ne over two', 'quarter' equal 'one over o'three over four' based on the clock
		equal 'one over two' and 'three based on the clock face. During	nalf' equal to 'one over two', 'quarter' quarters' equal to 'three over four' lesson, teacher needs to relate the 'quarter' and 'three quarters' with half nd three quarters of an hour.

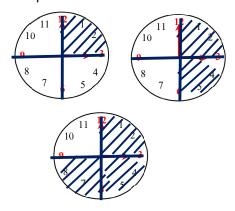
Suggested Activities

1. Pupils identify "half", "quarter" and "three quarters" based on the clock face from the previous lesson.



2. Pupils shade "half", "quarter" and "three quarters" on the clock face with guidance.

Example:



3. Pupils spell and write "half of an hour", "quarter of an hour", "three quarters of an hour", "one over four of an hour" and "three over four of an hour."

Notes

- Identify "half", "quarter" and "three quarters" based on the clock face pupils built.
- Integrated and enriched LS: 5.2.3.
- Concrete materials: clock face, ruler and colour pencil.
- Sample worksheet: Worksheet 49

Refer Textbook (Part 2): page 33 to 34.

Refer Activity Book (Part 2): page 34 to 35.

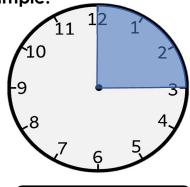


Name: _____

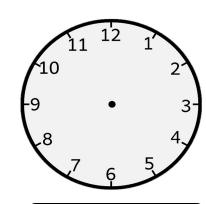
Class:_____

Shade or write the time on the clock face.

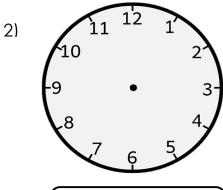
Example:



quarter of an hour



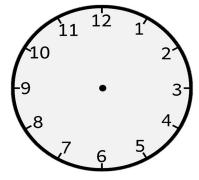
half of an hour



three quarters of an hour

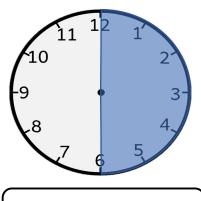
31

1)



one over four of an hour

4)



5)

110	12	1' 2
8 7	6	4.

Topic :	5.0 Time	Suggested Time : 120 minutes
Content Standard :	5.3. Problem solving	
Learning Standard :	5.3.1 Solve problems involving	g daily life situations.
Lesson Explanation :	clock face through hands-on a session, teacher emphasise th	m solving involving days and months and activity. During the teaching and learning the days, weeks, months and write the time her integrates fun learning elements.
Suggested Activities		Notes
sunday Sunday Tuesday Tuesday Thursday Saturday Thursday Th	ar cards and word cards to sheet 3). NUARY 8 15 22 29 9 16 23 30 10 17 24 31 11 18 25 12 19 26 13 20 27 14 2 28 2 January 2023 alendar cards with guidance. estions based on the calendar er Monday. the 9th of January falls on?	 Questioning technique various based on the pupils' capability. Concrete materials: calendar cards, word cards and stickers. Sample activity sheet: Activity Sheet 3 Sample worksheet: Worksheet 50 Complete the calendar card based on the current year. .
a) What is the time no	ow?	
h) M/h = 4 =		

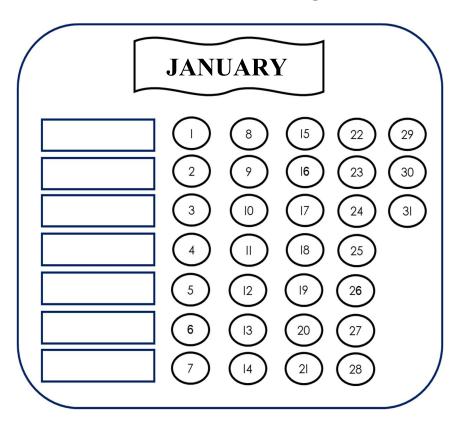
Refer Textbook (Part 2): page 41 to 43.

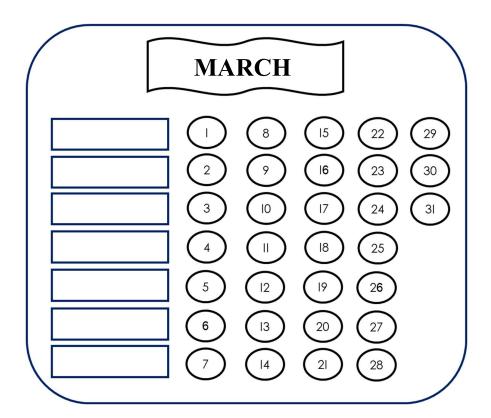
Refer Activity Book (Part 2): page 41 and 42.

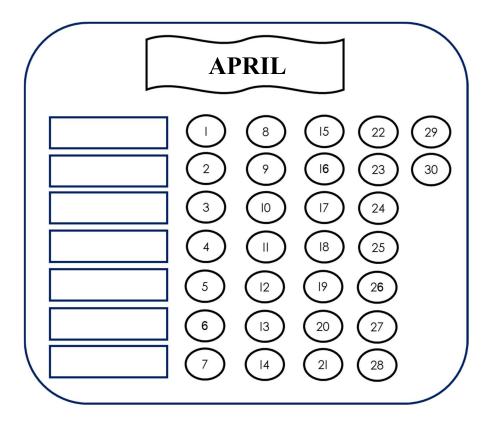
b) What number is the minute hand pointing to?

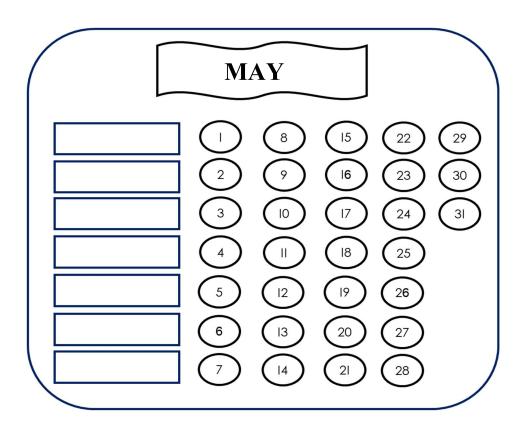
Activity Sheet 3

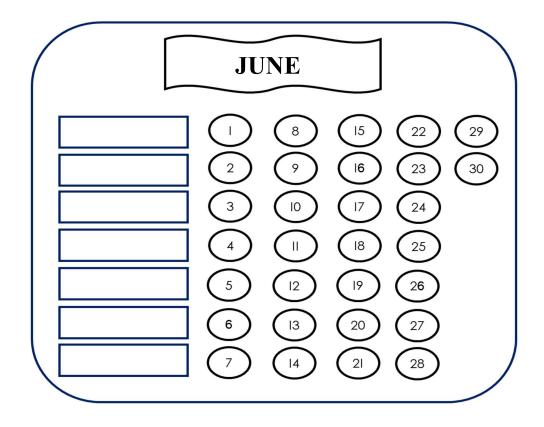
CALENDAR CARDS

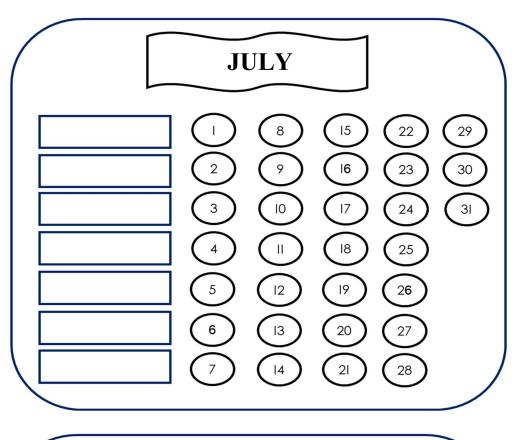


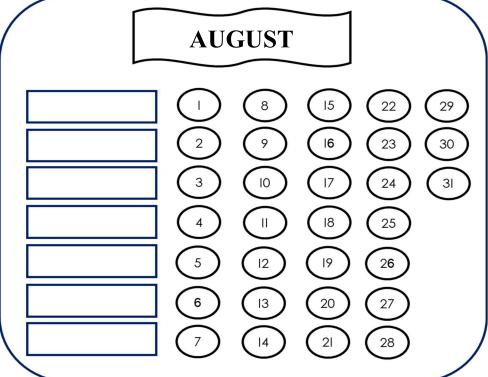


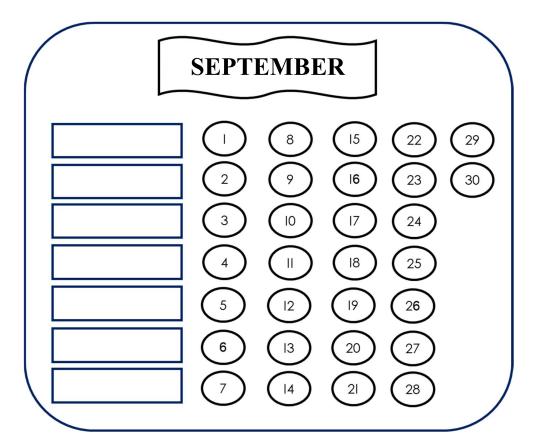




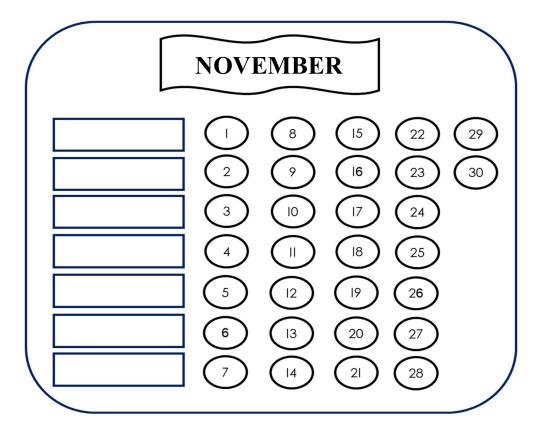








OCTOBER Ш



DECEMBER

Name:	Class:

Answer the questions based on the table.

January	February	March	April
May	June	July	August Merdeka!!!
September	October	November	December

l. '	When is Malaysia Merdeka Day?
2.	When do we celebrate Teachers' Day?
3.	When is Malaysia Day?

- 4. Which month is Christmas celebrated?
- 5. Which month you were born?

Topic	:	6.0 Measurement	Suggested Time : 120 minutes
Content Standard	:	6.1 Relative units to measure length, mass and volume of liquids.	
Learning Standard	:	6.1.1 Use and vary the vocabulary in the context of length, mass and volume of liquids.	
Lesson Explanation	:	Organised content: Use and vary the vocabulary of le	ength (hand span, cubit, step and arm

The lesson starts with pupils compare the length of two objects in the

The lesson starts with pupils compare the length of two objects in the classroom (any suitable) such as pencil, ruler, sides of a table (length and width), height of tree, door and window, exercise book and textbook.

Teachers need to emphasise the comparison between long/short, high/low, tall/short and far/near. Carry out the comparing the length of two objects using non-standard units (hand span, cubit, step and arm span).

(Pupils need to emphasise that the measurement start from one end of the object to another)

Example:



Teacher integrates fun learning elements.

Suggested Activities

- 1. Pupils give a statement based on the picture shown.
 - Example:



2. Introduce non-standard unit of length based on the picture.



Notes

- Name types of non-standard unit based on pictures.
- Carry out by comparing the length of two objects using non-standard units
- Integrated and enriched LS: 6.1.2 and 6.1.3.
- Measurement using non-standard unit may differ compared to others.
- Concrete materials: pens, pencils, erasers, rulers, notebooks, textbooks, chairs, tables, windows, doors, pictures of trees, paper clips, clothes peg, etc.

- 3. Pupils measure and compare two or more objects (according to the situations). Pupils state which object is short/long or high/short.
- 4. Pupils use object to compare one with another. Example:
 - 1. Compare pencil versus paper clips.
 - 2. Compare book versus eraser.
- 5. Pupils arrange the objects based on the length/ height.
- 6. Pupils measure the length/ height/distance using non-standard units (hand span, cubit, step and arm span).

Example:

- i. Measure the distance from pupil's seat to board, etc.
- ii. Measure the length of a window, a door, a table, etc.
- iii. Measure the height of a table, a chair, etc.
- 7. Pupils complete the table (refer notes).

objects	hand span
length of the table	8
length of the book	2

• Example for table:

Object	Hand span	Cubit
Pen		
Book		
Chair		

• Example measurement of length:



Shorter

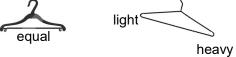


Longer

Refer Textbook (Part 2): page 46 to 50.

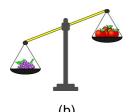
Refer Activity Book (Part 2): page 45 to 51.

Topic	:	6.0 Measurement	Suggested Time : 60 minutes
Content Standard	:	6.1 Relative units to measure length, mass and volume of liquids	
Learning Standard	:	6.1.1 Use and vary the vocabulary in the context of length, mass and volume of liquids.	
Lesson Explanation	:	 Organised content: Use and vary the vocabulary of mass (heavy, light, equal to, less th or more than). 	
			compare the mass of two objects in h as exercise book and textbook, bag and
		using non-standard unit. Build	on comparing the mass of two objects by d a weighing tool using clothes hanger or and compare mass of objects in the
		7	S



Teacher integrates fun learning elements.

Suggested Activities	Notes
1. Pupils discuss the picture shown. Example: Verbal discussion on heavy/ light/ equal 2. Introduce non-standard unit for weight (heavy, light, equal). (a)	 Name types of non-standard unit based on pictures (heavy, light, equal, less than). Carry out comparing the mass of two objects using non-standard units. Integrated and enriched LS: 6.1.2 and 6.1.3. Concrete materials: fruits, pencils, erasers, exercise books, textbooks, school bags, etc. Use hanger, plastic bags, clothes pegs, paper clips to weigh the mass.





(c)

- 3. Pupils compare and identify the mass of two different objects (heavy/ light) and state verbally their answers.
- 4. In group, pupils carry out comparison activity (mass of the objects).
- 5. Pupils arrange the objects based on mass.
- 6. Pupils compare mass of two objects using nonstandard unit.
- 6. Pupils complete the table with non-standard unit for weight.

objects	heavy	light
exercise book		
textbook		
eraser		
pencil		

• Example for table

Ob	ject	Measurement
		equal

• Example:

Use hanger, plastic bag and weighing scale.



equal



heavy or light

(Object in A is lighter than object in B)

Refer Textbook (Part 2): page 51 to 53.

Refer Activity Book (Part 2): page 52 to 56.

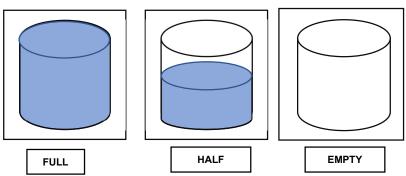
Topic	:	6.0 Measurement	Suggested Time : 120 minutes
Content Standard	:	6.1 Relative units to measure length, mass and volume of liquids.	
Learning Standard	:	6.1.1 Use and vary the vocabulary in the context of length, mass a volume of liquid.	
Lesson Explanation	:	· ·	

1. Measuring the volume of liquids in terms of full, half or empty.

Lesson starts by showing comparison on the volume of liquid between various sizes of bottles. Determine the volume of liquid using the term full, half or empty.

Teacher needs to emphasise the comparing the volume of liquid of two objects using non-standard unit. Identify the volume of liquid in a container is full, half or empty or compare it.

Example:

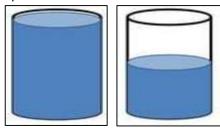


Teacher integrates fun learning elements.

Suggested Activities

1. Pupils look at the picture shown.

Example:



Pupils compare using the term "full" and "half".

2. Introduced non-standard unit (full, half and empty) based on the picture/ real objects.

Notes

- Name and use the term full, half or empty.
- Use two containers with different coloured of water to compare the volume of liquids (use non-standard measurement).
- Integrated and enriched LS: 6.1.2 and 6.1.3.
- Concrete materials: water containers, pencils, cups, plates, balloons, plastic bags, etc.
- Example: Use cups to compare.

two same b. Pupils re or less		
tainers (group		
nother e of in the		
Refer Activity Book (Part 2): page 57 to 61.		
ייי ייי		

			MOBIM MATHEMATICS YEAR 1	
Topic	:	6.0 Measurement	Suggested Time : 120 minutes	
Content Standard	:	6.2 Problem Solving		
Learning Standard	:	6.2.1 Solve problems involving	daily life situations.	
Lesson Explanation	:	Organised content: Solve the problem involving daily situations using objects and pictures with non-standard unit measurements and compare it. Lesson starts with pupils' prior knowledge about non-standard unit measurement through mini games in group or any suitable activities. During the lesson, teacher emphasises the skill on measuring by using appropriate objects or tools. Teacher integrates fun learning elements. Ensure pupils are ready with the appropriate objects or tools (non-standard unit) for the measurement activities.		
Suggested Activities			Notes	
Introduction: 1. Carry out the activities in group according to the suitability (each single group represent one type of measurement). Activity 1: (Length)		e group represent one type of	 Concrete materials: glasses, bottles of the same size and containing different volumes of liquids. Teacher emphasises on nonstandard unit. Teacher guides pupils to compare distance using non-standard unit 	
 Two pupils will be chosen randomly. Two pupils walk to the teacher's desk from the same starting point (compare the number of steps taken). 		he teacher's desk from the	(far/near).Activities can be carried out outdoor.	
 3. The two pupils will move to another place (according to the situation) to compare far or near. 4. Pupils use picture cards to show far and near (refer textbook Part 2 page 47). 		uation) to compare far or near. ards to show far and near		



5. Carry out activities to compare tall and short or long and short.

Activity 2 (Mass)

- 1. Guide pupils to compare two objects with different weights and introduce the word "heavy" and "light".
- 2. Pupils compare the weight of two objects (notebook with a textbook).

3. Compare weight through exploratory activities (teacher provide non-standard unit measuring tools and pupils learn through self-discovery).

Activity 3: (Volume of liquid)

1. Prepare same sized glasses/cups and two same sized bottles with different volume of water.



- 2. Pour water from the bottle into the glasses/cups until they are full.
- 3. Pupils count the glasses/cups which contain the water.
- 4. State the number of glasses to compare the volume of liquid using the term "full", "half" or "empty".

Refer Textbook (Part 2): page 57 to 59

Refer Activity Book (Part 2): page 62 to 66

Topic :	7.0 Space	Suggested Time : 60 minutes	
Content Standard : 7.1 Three-dimensional shapes		s	
Learning Standard : 7.1.1 Name the shape of cub cylinder and sphere.		oid, cube, cone, square-based pyramid,	
Lesson Explanation :	Organised content: 1. Identify three-dimensional shapes. 2. Relate real objects with three-dimensional shapes in diagrams. Lesson starts with observing three-dimensional objects on the table. During lesson, teacher emphasises on three-dimensional shapes. Ensure pupils to name the three-dimensional shapes correctly. Relate		
		nsional shapes in diagrams for the next	
Suggested Activities		Note	
Pupils observe the real objects on the table. Example: pencil case, tumbler, dice and small cone.		Concrete materials: pencil case, tumbler, dice, small cone, ball and other suitable items.	
 Discuss the name of shapes, conduct questions and answering sessions on concrete materials around. 			
3. Teacher shows a three-dimensional shapes and relates it with step 1.			
4. Pupils categorise the real objects according to the three-dimensional shapes.			
5. Pupils name the three-dimensional shapes according to the picture shown by teacher.			
Refer Textbook (Part 2	e): page 61 to 63.		

Refer Activity Book (Part 2): page 67

Topic : 7.0 Space		7.0 Space	Suggested Time : 60 minutes	
Content Standard : 7.1 Three-dimensional shapes		7.1 Three-dimensional shapes		
Learning Standard : 7.1.2 Describe face, edge and shapes.		7.1.2 Describe face, edge and shapes.	d vertex of three-dimensional	
Lesson Explanation	:	 Determine the numbers of three-dimensional shapes. During lesson, teacher empha vertex for three-dimensional s 	ertex of three-dimensional shapes. face, edge and vertex for each of the sises on understanding face, edge and hapes. Ensure pupils able to determine vertex for the three-dimensional shapes.	
Cummantad Astiviti	es		Notes	
Suggested Activitie			140169	
Determine face, dimensional shap Pupils are divided be provided with	edg pes d in one	e and vertex of three- with teacher's guidance. to six groups. Each group will to three-dimensional shape.	 Concrete materials: three-dimensional blocks Integrated and enriched LS: 7.1.1. 	
 Determine face, dimensional shape Pupils are divided be provided with Pupils determine 	edg pes d in one the	with teacher's guidance. to six groups. Each group will three-dimensional shape. number of face, edge and imensional shapes and record	Concrete materials: three- dimensional blocks	
 Determine face, dimensional shap Pupils are divided be provided with Pupils determine vertex of the threats characteristics 	edg pes d in one the e-d s/pro	with teacher's guidance. to six groups. Each group will three-dimensional shape. number of face, edge and imensional shapes and record	Concrete materials: three- dimensional blocks	
 Determine face, dimensional shape Pupils are divided be provided with Pupils determine vertex of the three its characteristics Pupils present th 	edg pes d in one the ee-d s/pro	with teacher's guidance. to six groups. Each group will three-dimensional shape. number of face, edge and imensional shapes and record operties. results in front of the class. r assessments in activity book	Concrete materials: three- dimensional blocks	

Refer Activity Book (Part 2): page 68 and 69.

Topic	: 7.0 Space	Suggested Time : 60 minutes	
Content Standard	7.2 Two-dimensional shapes		
Learning Standard : 7.2.1 Name the shapes square		are, rectangle, triangle and circle.	
Lesson starts with pupils obs During the lesson, teacher		pserving two-dimensional objects shown. emphasises the understanding of two-able to understand the shape of square,	
Suggested Activitie	s	Notes	
Suggested Activities 1. Pupils name the shape of the objects shown. Example: face of a table and face of a clock. 2. Pupils observe the picture shown. Example: circle i. Name the shape above. ii. Name an object with the same shape above. 3. Repeat step 2 with square, rectangle and triangle. 4. Pupils draw and name two-dimensional shapes. 5. Pupils complete worksheet 51.		 Concrete objects: Two-dimensional cards and three-dimensional objects. Triangle: any triangle shapes Sample worksheet: Worksheet 51 	

Refer Activity Book (Part 2): page 72 and 73.

Name:	Class:

A. Name the two-dimensional shapes below.

triangle	circle	:	square	rectangle
square				

B. Draw an object for each two-dimensional shape below.

triangle	rectangle

square

Topic	: 7.0 Space	Suggested Time : 120 minutes		
Content Standard	: 7.2 Two-dimensional	7.2 Two-dimensional shapes		
Learning Standard	-	7.2.2 Describe straight line, side, corner and curved line of two-dimensional shapes.		
Lesson Explanation	shapes. 2. Determine the nu two-dimensional starts with purcentage and curved significant starts.	Describe straight side, corner and curved side of two-dimensional		
Suggested Activitie	S S	Notes		
Pupils observe a two-dimensional shaped card. Pupils will be given explanation on the meaning of straight side, corner and curved side of two-dimensional shapes. Example:		ining of dimensional cards.		
Example:		Worksheets 52 to 54.		

-corner

- 3. Pupils identify and record the characteristics/ properties of two-dimensional shapes.
- 4. Pupils present and discuss their results.
- 5. Pupils complete Worksheets 52 to 54.

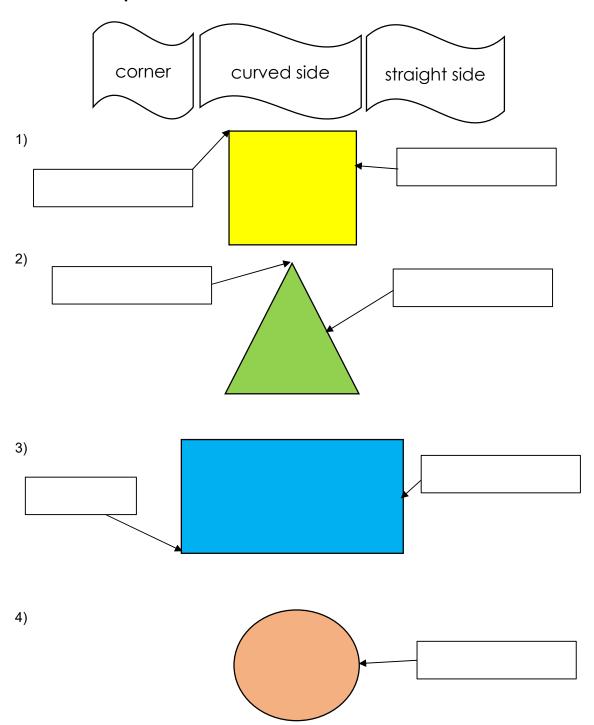
straight side

Refer Textbook (Part 2): page 69.

Refer Activity Book (Part 2): page 73 and 74.

Name: _____ Class: _____

Label the shape with the correct words.



Name:	Class:
Name	CIOSS
1101110.	CIGIS.

Write the number of characteristics/properties of two-dimensional shapes.

shape	corner	straight side	curved side
I. square			
2. rectangle			
3. triangle			
4. circle			

Nc	ame:	Class:
Α.	What am I?	
	1. I have 4 corners and 4 same straigh	t sides.
	2. I have curved side.	
	3. I have 3 straight sides and 3 corners	
	4. I am a door with 4 corners and 4 stro	aight sides.
	5. I am a hoop.	
В.	State two-dimensional shapes withou	ut curved side.
		J

		MOBINI MATHE	INIATIOS TEAR I
Topic :	7.0 Space	Suggested time :	120 minutes
Content Standard :	7.3 Problem Solving		
Learning Standard :	7.3.1 Solve problems involving	daily situations.	
Lesson Explanation :	Organised content: 1. Recognize three-dimensional 2. Identify three-dimensional according to the patterns. The lesson starts with prio shapes and two-dimensional s the three-dimensional shapes Ensure pupils solve problems a and three-dimensional shapes	shapes and two-dimensional according to the shapes.	three-dimensional are able to naming shapes correctly.
Suggested activities		Notes	
 Activity for three-dimensional shapes: Pupils observe three-dimensional shapes shown and followed by Q&A session. Pupils are called randomly to arrange three-dimensional shapes to build a model. Explain about the pattern. Pupils are divided into groups. Distribute pictures of three-dimensional shapes to each group. Pupils cut the pictures of the thee-dimensional shapes dan paste it on the paper to form a pattern (Activity Sheet 4). Pupils present and discuss their group work.		 Integrated and enr 7.2.3 Teacher could use identify and name dimensional and to shapes. Begin the group addifferent patterns. Concrete materials stickers, glues and appropriate concretes Activity Sheet 4 and 7.2.3 	e real objects to three- wo-dimensional ctivity with two s: papers, I other ete materials.

Activity for two-dimensional shapes:

Activity 1:

- 1. Pupils observe a few arranged two-dimensional shapes cards.
- 2. Pupils observe the arranged two-dimensional shapes arranged on the board and followed by Q&A session.



3. Pupils repeat the activity in step 2 and arrange different patterns by using arranged two-dimensional shapes.

Activity 2:

- 1. Pupils are divided into groups.
- 2. Distribute a few arranged two-dimensional shapes sketch to each group (Activity Sheet 5).
- 3. Cut the arranged two-dimensional shapes and create patterns.

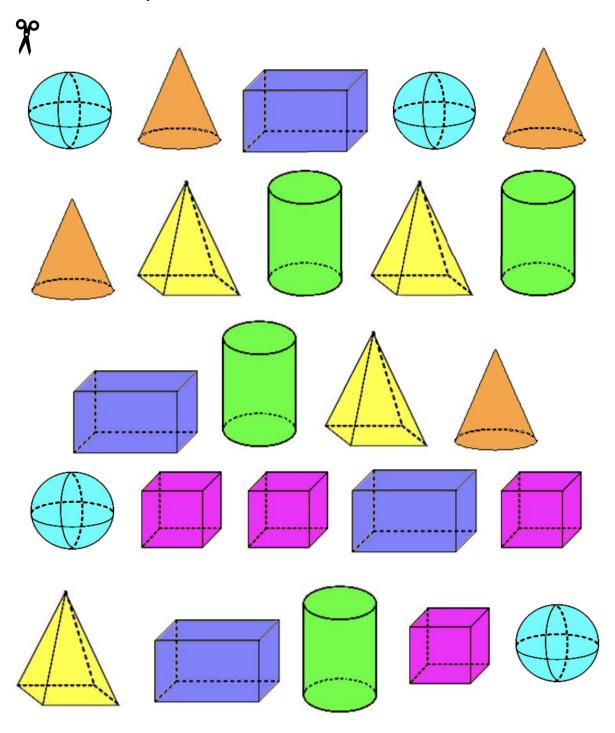
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 Pupils present their group work and followed by Q&A session. 	
Refer Textbook (Part 2): page 66, 70 and 72.	
Refer Activity Book (Part 2): page 70, 75 and 78.	

Activity Sheet 4

Name: _____ Class: _____

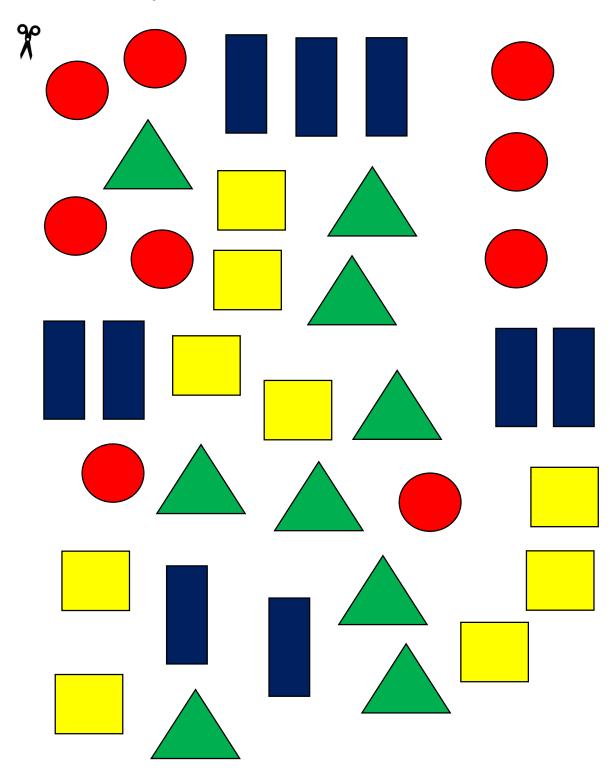
Cut and create patterns.



Activity Sheet 5

Name:	Class:
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Cut and create patterns.

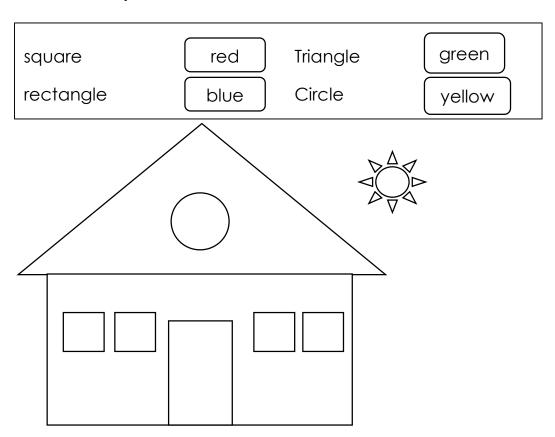


Topic	: 7.0 Space	Suggested time : 120 minutes	
Content Standard	: 7.3 Problem solving		
Learning Standard	: 7.3.1 Solve problems involving	g daily situations.	
Lesson Explanation	: Organised content:		
	 Recognise three-dimension 	nal shapes.	
	Create new models from shapes.	n a combination of three-dimensional	
	model shown. At the beginning the pupils' understanding ab	serving picture of the three-dimensional g of the lesson, teacher emphasises on out three-dimensional shapes. Ensure ensional shapes correctly. Then, pupils -dimensional shapes.	
Suggested Activities	s	Notes	
Pupils name the three-dimensional shapes based on the real objects shown by the teacher.		Concrete material: three- dimensional shapes objects.	
Pupils are divided into groups. Pupils create models from several three-dimensional shapes.		Integrated and enriched LS 7.1.4.	
3. Pupils present the	models.		
Refer Textbook (Part	Refer Textbook (Part 2): page 67.		
Refer Activity Book (Part 2): page 71.			

Topic	:	7.0 Space	Suggested time : 120 minutes
Content Standard	:	7.3 Problem solving	
Learning Standard	:	7.3.1 Solve problems involving	g daily situations.
Lesson Explanation	:	Lesson starts with pupils nami	two-dimensional shapes. ng two-dimensional shapes shown by the the shapes correctly. Then, pupils create
Suggested Activities	S		Notes
 Pupils name the shapes of the two-dimensional shape cards. Pupils complete Worksheet 55. Pupils create patterns using several two-dimensional shapes. Pupils present the patterns. 		rksheet 55. ns using several two-	 Concrete material: two-dimensional shape cards. Integrated and enriched LS 7.2.4. Example worksheet: Worksheet 55
Refer Textbook (Part	2)	: page 67.	

Name: Class:

A. Colour the shapes.



B. Look at the sketch above. Count the number of shapes used. Write the number of two-dimensional shapes in the table below.

shapes	number of shapes

Topic	:	8.0 Data Management	Suggested Time : 120 minutes
Content Standard	:	8.1 Collect, classify and arrange	data
Learning Standard	:	8.1.1 Data collection based on re	al life situations.
Lesson Explanation : Organised content: 1. Data collection within 10. 2. Data collection within 18. Lesson starts by explaining the meaning of data management. Tea ensures that pupils know how to make a tally of five, especially whereached five. In this session, teacher conducting an activity using for pupils to make tally and counting numbers. Ensure pupils make and counting correctly. Conduct activities on data collection to concrete materials surrounding such as teachers' cars, color of the water bottles, balls, etc.		make a tally of five, especially when it ther conducting an activity using table ng numbers. Ensure pupils make tally t activities on data collection using	
Suggested Activities	s		Notes
 Pupils are given a collection. Pupils count each record it in the tab. Pupils discuss the and teacher's guid Repeat activity on and counting with). In tandalin balanda In dandalin da	ata collection by making a tally 18. e coloured cards on the board	 Emphasis on how to make a tally Integrated and enriched LS 1.2.1. Concrete materials: balls, coloured cards, stickers, water bottles, bags, teachers' cars and other appropriate materials.
Refer Textbook (Part	2)	: page 75 – 77.	

Topic	:	8.0 Data Management	Suggested Time : 120 minutes
Content Standard	:	8.2 Pictograph	
Learning Standard	:	8.2.1 Read and obtain informa	tion from a pictograph.
Lesson starts by explaining the or symbols). Teacher emploresents one. Pupils need or		 Recognise pictograph. Read and obtain information Lesson starts by explaining the or symbols). Teacher employed 	e meaning of pictographs (pictured figures nasises that each picture or symbol punting skills so that pupils would be able
Suggested Activitie	es		Notes
Pupils look at an textbook page 78		ample of pictograph in the	Emphasis pupils that each picture or symbol represent 'one'.
2. Teacher guides pupils to read and get information from the pictograph.		ils to read and get information	Concrete materials: coloured cards, stickers and manila cards.
Q&A session between teacher and pupils regarding information of the pictograph.		· ·	
4. Pupils paste coloured cards on the pictograph on the board.			
Pupils are guided by the teacher to obtain the information from the pictograph.			
Refer Textbook (Par	t 2)	: page 78 - 80	•

Refer Activity Book (Part 2): page 84 - 85

Topic : **8.0 Data Management** Suggested Time : 120 minutes

Content Standard : 8.3 Problem solving

Learning Standard : 8.3.1 Solve problems involving daily situation.

Lesson Explanation : Organised content:

1. Count and make a tally.

2. Read and obtain information from the pictograph.

Lesson starts by reviewing the topics that have been learned related to data management. Pupils are guided to read data (tally and pictograph). Pupils need counting skills to solve problems. Teacher integrates fun learning elements.

Suggested Activities

1. Pupils observe the examples in the textbook on pages 81 and 82.



Page 81 Textbook (Part 2)

Page 82 Textbook (Part 2)

- 2. Pupils read the data in the table and pictograph with teacher's guidance.
- 3. Q&A session for tally and pictograph between teacher and pupils.
- 4. Problem solving activity involving tally:
 - i. Distribute a piece of paper to the pupils.
 - ii. Pupils write their favourite food (example: fried chicken, doughnut and ice cream).
 - iii. Pupils paste their paper on the white board.
 - iv. Pupils collect data with teacher's guidance.
- 5. Problem solving activity involving pictograph:
 - i. Pupils are given random picture stickers by the teacher.
 - ii. Pupils stick their favourite picture stickers on the pictograph given.

Notes

- Emphasise the technique for making tally and how to read pictographs.
- The quantity of each item in the pictograph should not exceed 10 numbers.
- Concrete materials: papers, pictured stickers and other suitable concrete materials.

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Pupils are guided by the teacher to get information on the pictograph.	
Refer Textbook (Part 2): page 81 – 84.	
Refer Activity Book (Part 2): page 86 – 90.	

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