KEMENTERIAN PENDIDIKAN
BAHAGIAN PEMBANGUNAN KURIKULUM

# MODUL BIMBINGAN 



KEMENTERIAN PENDIDIKAN BAHAGIAN PEMBANGUNAN KURIKULUM

## MODUL BIMBINGAN

(MOBIM)
MATHEMATICS
YEAR 1

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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<br>KESETIAAN KEPADA RAJA DAN NEGARA<br>KELUHURAN PERLEMBAGAAN<br>KEDAULATAN UNDANG-UNDANG<br>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

## 3. Kurikulum Kebangsaan

(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.]

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Assalamualaikum dan Salam Sejahtera

Alhamdulillah dengan izin dan limpah kurniaNya, 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
vi) $x$ (d

## 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 100 | 100 Suggested time : 60 minutes |
| :---: | :---: | :---: |
| Content Standard | 1.1 Quantity intuitively <br> 1.7 Estimate |  |
| Learning Standard | 1.1.1 State the quantity by comp 1.7.1 Give reasonable estimatio | paring. <br> on for the quantity of objects. |
| Lesson Explanation | Organised content: <br> 1. Compare the quantity of two <br> 2. Give reasonable estimation for <br> The lesson starts by comparing using the words many or few, During the lesson, the teacher of the quantity of objects. Teac between the word less than, mo Teacher integrates fun learning the use of few, more or less, less | groups of objects. for the quantity of objects. <br> g the quantity of two groups of objects equal or not equal and more or less. focuses on the reasonable estimation acher emphasises on the relationship ore than, equal with the quantity. <br> g elements during the lesson involving ss than, more than and equal. |
| Suggested Activitie |  | Notes: |
| 1. Pupils are guided more, less than, <br> 2. Pupils compare concrete materia <br> 3. Pupils compare various form (Ex <br> i. less or more, <br> ii. equal or not e <br> 4. Pupils repeat the quantity of objec i. less or more, ii. equal or not e <br> 5. Pupils complete <br> 6. Discuss pupils' | understand the words less, re than, equal and not equal. quantity of two groups of <br> quantity of two groups in le.: pictorial): <br> I. <br> cond activity by estimating the ither: <br> I. <br> worksheets and activity book. wers. | - 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. <br> - Compare less or more between two groups of objects (same categories) to understand the concept of less and more. <br> - Integrated and enriched LS: 1.1.1 and 1.7.1 <br> - Concrete materials: beads, marbles, ice-cream sticks, sweets/candy etc. <br> - Pictures of objects (same and different categories). <br> - Games, songs or puzzles. <br> - Sample worksheet: Worksheet 1 |
| Refer Textbook (Part 1): page 2 to 4. |  |  |
| Refer Activity Book (Part 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: $\qquad$
A. State verbally which is more and less (A or B).
a)
b)

|  |  |
| :---: | :---: |
| A | B |
|  |  |
| A | B |
|  |  |
| A | B |
|  | $\operatorname{pppp}$ |
| A | B |
|  |  |
| A | B |

9) 

B. Match and colour.

Example:


| equal |
| :---: |


| Topic | 1.0 Whole Numbers Up To | 00 Suggested time : 60 minutes |
| :---: | :---: | :---: |
| Cont | 1.2 Number value |  |
| Lear | 1.2.1 Name the numbers up to 100 . <br> 1.2.2 Determine the number values up to 100 . |  |
| Less | Organised content: <br> 1. Name and determine the value of numbers up to 10. <br> 2. Show the quantity of the given number. <br> 3. Match group of objects with its number. <br> 4. Compare the value of two numbers. <br> 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. <br> Ensure that pupils have mastered counting, naming the number of objects, and comparing the value of two numbers. |  |
| Suggested Activities: ${ }^{\text {a }}$ Notes: |  |  |
| Intro  <br> 1. P <br>  ob <br> Activ  <br> 1. P <br> 2. P <br>  te <br> 3. P <br> 4. P <br> 5. t <br> Activit  <br> 1. D <br> 2. P <br> 2. P <br> 3. P <br> 4. a <br> 4. P <br> 5. m <br> 5. P <br> 6. R | fingers or any surrounding the number mentioned by the <br> suitable materials). mber of straws shown by the <br> the whiteboard. nd word cards according to s. until number 10. <br> plastic bags and marker pens nt the marbles. <br> from 1 to 10 on plastic bags. es into the plastic bag mber on the plastic bag. bags based on the number acher. <br> quantity for two groups of <br> by comparing other numbers. | Notes: <br> - 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. <br> - Abacus 4:1 can be used to count. <br> - Teacher can choose appropriate suggested activities. <br> - 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 100 Suggested time : 120 minutes |
| :---: | :---: |
| Content Standard | 1.3 Write numbers |
| Learning Standard | 1.3.1 Write numbers in numerals and words. |
| Lesson Explanation | Organised content: <br> 1. Write numbers in numerals and words up to 10 . <br> Lesson starts with pupils' prior knowledge on numbers. During the lesson, the teacher focuses on writing numbers in numerals and words up to 10 . Teacher integrates fun learning elements. <br> Ensure that pupils have mastered the skill of writing numbers in numerals and words. |


| Suggested activities: |
| :--- |
| Introduction: |
| 1. Pupils stand up and count based on: |
| i. birth month; |
| ii. favourite colour (Example: red); and |
| iii. pupils with spectacles. |

## Activity 1:

1. Show the correct technique and writing numbers
2. Pupils write 0 in numerals in the air using the correct technique.
3. Repeat activity until number 10.

## Activity 2 (in pairs):

1. Pupils $A$ writes a number on the back of pupil $B$.
2. Pupil B says and writes the number on a piece of paper.
3. Pupils take turns to repeat the activity.

## Activity 3 :

1. Prepare number cards and word cards.
2. Pupils match the number card with the word card on the board.
3. Teachers and pupils read and spell the numbers together.
4. Repeat the activity with other numbers.

## Notes

- Concrete materials: counters (bottle caps, ice scream stick), number cards and word cards.
- Abacus 4:1 can be used to count.
- Explain that numeral is a symbol for a number or quantity of objects.
- Teacher can choose appropriate suggested activities.
- Activity can be varied based on pupils' abilities.


## 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.

| Topic | 1.0 Whole Numbers Up To 100 | Suggested time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 1.2 Number value <br> 1.5 Number sequence <br> 1.9 Number patterns |  |
| Learning Standard | 1.2.1 Name the numbers up to <br> 1.2.2 Determine the number val <br> 1.5.1 Count numbers. <br> 1.5.2 Complete any number seq <br> 1.9.1 Identify pattern for a given <br> 1.9.2 Complete various simple | 0. <br> es up to 100 . <br> ence. <br> number series. <br> mber patterns. |
| Lesson Explanation | Organised content: <br> 1. Count numbers up to 10. <br> 2. Complete any number seque <br> 3. Arrange a group of objects in <br> Lesson starts with counting num the teacher needs to focus on 10). Teacher integrates fun lea recognise numbers 1 to 10 sequence. | ce up to 10. ascending and descending order. <br> ers from 1 to 10 . During the session, ounting numbers in sequence ( 1 to ning elements. Ensure that pupils efore they complete the number |
| Suggested Activities |  | Notes |
| 1. Pupils sing $1,2,3$ s <br> 2. Pupils are shown a the teacher to say <br> 3. Pupils place counter the number found <br> 4. Pupils count the nu cards. <br> 5. Pupils match objec domino cards. <br> 6. Pupils arrange the descending order. | ng with their teacher. umber line card. Pupils follow number in order. <br> (as appropriate) according to the cup. ber of the objects on the picture with their number on the umber cards in ascending and | - Use the activity of counting objects and writing numbers. <br> Domino Card <br> - Counters, object cards, domino cards, number cards <br> - Sample worksheet: Worksheet 2 to 4 |
| Refer Textbook (Part 1): page 5 to 6. |  |  |
| Refer Activity Book (Part 1): page 6 to 8. |  |  |

Name: $\qquad$ Class: $\qquad$
Count and match.
I.

2.

3.

4.

5.

6.

7.

8.


Worksheet 3
Name: $\qquad$ Class: $\qquad$
Count and write the numbers in ascending order.

Example

I)

2)

3)

4)

5)


Name: $\qquad$ Class: $\qquad$
Count and write the numbers in descending order.

Example

I)

2)

3)

4)

5)


1) 13

| Topic | 1.0 Whole Numbers Up to 100 | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Cont | 1.2 Number value |  |
| Learn | 1.2.1 Name the numbers up to <br> 1.2.2 Determine the number va | 100. <br> lues up to 100 |
| Lesson Explanation : Organised content: <br> 1. Name the numbers up to 20 . <br> 2. Show the quantity of a given number. <br> 3. Match group of objects with its numbers. <br> 4. Compare the value of two numbers. <br> Lesson starts with pupils' prior knowledge, numbers up to 10 . During the lesson, teacher emphasises on counting, naming and writing numbers in numerals and words up to 20. Teacher integrates fun learning elements. <br> Ensure pupils have mastered counting and quantifying objects, showing the quantity of the given number, comparing the value of two numbers and writing numbers in numerals and words. |  |  |
| Suggested Activities <br> Introduction: <br> 1. Recall numbers 1 until 10. <br> 2. Prepare straws and paper cups. <br> 3. Pupils are called randomly. <br> 4. Pupils put straws according to the number written on the paper cup. <br> Activity 1 : <br> 1. Prepare some pictures or objects. <br> 2. Paste the pictures or objects on the board. <br> 3. Pupils count the pictures or objects. <br> 4. Pupils state the quantity of the objects. <br> 5. Paste/write numbers according to the quantity of objects. <br> 6. Pupils compare two groups of objects/pictures. <br> Activity 2: <br> 1. Prepare paper cups. <br> 2. Show how to count by making groups of 10 . Example: 11 Count the paper cups up to 10 and arrange the cups vertically in groups of 10 . <br> Explain 10 and 1 is 11. <br> 3. Repeat the activities, numbers up to 20 . |  | Notes: |
|  |  | - Concrete materials: paper cups, straws, building blocks, balls, marbles, ice cream sticks, candies etc. <br> - Abacus 4:1 can be used to count. <br> - Teachers can choose appropriate suggested activities. <br> - Activities can be varied according to the pupils' abilities. |

## 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:


## 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.

| Topic | 1.0 Whole Numbers Up to 100 | 0 Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 1.2 Number value <br> 1.5 Number sequence <br> 1.9 Number patterns |  |
| Learning Standard | 1.2.1 Name the numbers up to <br> 1.2.2 Determine the number value <br> 1.5.1 Count numbers. <br> 1.5.2 Complete any number sequ <br> 1.9.1 Identify pattern for a give <br> 1.9.2 Complete various simple | 100. <br> values up to 100 . <br> quences. <br> number series. <br> number patterns. |
| Lesson explanation | Organised content: <br> 1. Count numbers up to 20. <br> 2. Complete any number sequ <br> 3. Identify number patterns up <br> Lesson starts with counting number line card. During teac should focus on counting num must also teach number patter pupils know the number from sequence. Teacher integrates | ences up to 20 . <br> to 20 . <br> numbers from 11 to 12 based on the aching and learning sessions, teacher bers in sequence from 1 to 20. Teacher ns while counting the numbers. Ensure 1 to 20 before completing the number fun learning elements. |
| Suggested Activities |  | Notes |
| 1. Pupils hold number class. <br> 2. Class state the numb This activity will be r Example: Teacher points to pu Class will say the nu <br> 3. Pupils stand in sequ <br> 4. Pupils stand in desc <br> 5. Pupils complete the ascending or descen <br> 6. Pupils arrange numb the patterns request ones, twos, fours an | cards 11 to 20 in front of the <br> ber pointed by the teacher. epeated with another pupil. <br> pils with card number 12. mber 12 out loud. <br> ence from 11 to 20. <br> ending order. <br> missing numbers in ding order (Worksheet 6). ered bottle caps according to ed by the teacher (count in d fives). | - Concrete materials: number line cards, number cards, numbered bottle caps. <br> - Sample worksheet: Worksheet 5 to 7 |
| Refer Textbook (Part 1): page 17 to 19. |  |  |
| Refer Activity Book (Part 1): page 25 to 27. |  |  |

## Worksheet 5

Name: $\qquad$

Class: $\qquad$

## Count and write the answer.

## Example:


I.

2.

3.

4. 28 \& 8 \& 8 \& 8 \& 8 \& 8 \& 8 8 8 8

5.

6.


Name: $\qquad$
A. Complete the number sequences.

## Example:


I)

2)

3)

4)

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

2)


Worksheet 7
Name: $\qquad$ Class: $\qquad$
Count and match the number.
I.

2.

3.

4.

5.

6.



## 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.


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.

## Worksheet 8

Name: $\qquad$ Class: $\qquad$
Write the place value and the digit value of the underlined digits.

|  | 13 | Place value | Ones |
| :---: | :---: | :---: | :---: |
|  |  | Digit value | 3 |
| I) | $\underline{15}$ | Place value |  |
|  |  | Digit value |  |
| 2) | IZ | Place value |  |
|  |  | Digit value |  |
| 3) | 19 | Place value |  |
|  |  | Digit value |  |
| 4) | $\underline{1}$ | Place value |  |
|  |  | Digit value |  |
| 5) | 20 | Place value |  |
|  |  | Digit value |  |


| Topic | 1.0 Whole Numbers Up to 100 | O Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 1.3 Write numbers |  |
| Learning Standard | 1.3.1 Write numbers in numer | s and words. |
| Lesson Explanation | Organised content: <br> 1. Write numbers in words and <br> Lesson starts with pupils' prior 10. During teaching and learning the skill of writing numbers in nu fun learning elements. <br> Ensure pupils have mastered w | numerals within 20. <br> knowledge on numbers in the range of g sessions, teacher needs to emphasis umerals and words. Teacher integrates <br> riting numbers in numerals and words. |
| Suggested Activities |  | Notes |
| Introduction: <br> 1. Write the numbers 11 to 20 in the air. <br> Activity 1 : <br> 1. Introduce the number words eleven to twenty and spell them. <br> 2. Show how to write the numbers 11 to 20 using the correct technique. <br> Activity 2 (in pairs): <br> 1. Prepare a piece of blank paper. <br> 2. A pupil says and another pupil writes in numerals and words. <br> 3. Pupils take turn in repeating the activity. <br> Activity 3: <br> 1. Prepare flash cards. <br> 2. Show the flash cards to the pupils. <br> 3. Pupils write numbers and words based on the quantity of objects on the flash card. <br> Activity 4 (in groups): <br> 1. Prepare the number word cards eleven to twenty, number cards 11 to 20 and manila cards. <br> 2. Pupils work in groups. <br> 3. Pupils choose a number and place the word card based on the chosen number. <br> 4. Paste on the manila cards. <br> 5. Check each group's answers. |  | - Concrete materials: flash cards, blank paper, number word card, number card and manila card. <br> - Abacus 4:1 can be used to count. <br> - Explain that numbers are symbols for numbers or numbers of objects. <br> - Teachers can choose appropriate suggested activities. <br> - Example of Activity 3: <br> 13 <br> thirteen |
| Refer Textbook (Part 1): page 20. |  |  |
| Refer Activity Book (Part 1): page 28 to 37. |  |  |



Name: $\qquad$ Class: $\qquad$
Write 'add' or 'equal to'.

| I. | Example: <br> 4 and 2 is 6 . <br> 4 $\square$ add ${ }^{2}$ $\square$ equal to 6 |
| :---: | :---: |
| 2. | 4 and 4 is 8 . <br> 4 $\square$ 4 $\square$ 8 |
| 3. | 5 and I make 6. <br> 5 $\square$ 1 $\square$ 6 |
| 4. | I more than 6 is 7 . <br> 6 $\square$ I $\square$ 7 |
| 5. | The sum of 7 and 3 is 10 . <br> 7 $\square$ 3 $\square$ 10 |

Worksheet 10
Name: $\qquad$

## Class:

$\qquad$
Write the symbols ' + ' and ' $=$ '.


| Topic | 2.0 Basic Operations | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 2.1 Concepts of addition and subtraction |  |
| Learning <br> Standard | 2.1.1 Use and vary the relevant vocabulary in context of addition and subtraction. <br> 2.1.2 Introduce the symbol of addition and 'equal to'. <br> 2.1.3 Use the symbol of addition, subtraction and 'equal to', to write number sentence based on the given situation. |  |
| Lesson Explanation : Organised content: <br> 1. Varying vocabulary that involves subtraction operations. <br> 2. Introduce the symbol of subtraction and "equal to'. <br> 3. Use the symbol of subtraction and 'equal to'. <br> Lesson starts with a simulation and Q\&A on activities involving the progression of subtraction and activities using concrete materials. During teaching and learning session, teacher emphasises on mastering the vocabulary of subtraction operations. Teacher integrates fun learning elements. <br> Ensure pupils have understood and mastered the concept of subtraction. |  |  |
| Suggested Activities |  | Notes |
| 1. Teacher talks about daily routine situations and relates with the vocabulary of subtraction such as take out, move to, separate, reduce, compare, subtract, balance, left, etc. <br> Example: <br> There are 9 oranges in the basket. 3 oranges were taken out from the basket. There are 6 oranges left now. <br> 2. Pupils recognise the vocabulary related to the subtraction operation through the given situation. <br> 3. Pupils create a story using vocabulary related to the subtraction operations. <br> 4. Pupils are introduced to subtraction and 'equal to' symbols to write number sentences. |  | - Use a story by taking out some objects from the same group to understand the concept of subtraction. <br> - Integrated and enriched LS: 2.4.1 <br> - Concrete materials: counters, oranges. <br> - Sample worksheet: Worksheet 11 |
| Refer Textbook (Part 1): page 74 and 75. |  |  |
| Refer Activity Book (Part 1): page 88 to 93. |  |  |

## Worksheet II

Name: $\qquad$ Class: $\qquad$
Solve it.

2.

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


$$
1 \text { (2) } 34 \text { 4 5 } 6 \times 7889
$$

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

$$
2+3=5
$$

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.

$$
8+4=12
$$

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: $\qquad$ Class: $\qquad$

Colour and find the answers.

## Example:

$3+4=7$


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

I) $5+3=\square$

2) $1+6=\square$

| $(1)$ | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3) $2+4=\square$

| 1 | $(2)$ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4) $5+\square=10$

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

5) $2+\square=5$

| 1 | $(2)$ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

6) $6+\square=10$

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

7) $\square+4=6$
nnnn

8) $\square+3=9$
nnn

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

Name: $\qquad$ Class: $\qquad$

Draw the arrows and find the answers.

| Example: $4+2=6$ |  |
| :---: | :---: |
| I) $6+3=\square$ |  |
| 2) $4+3=\square$ |  |
| 3) $5+4=\square$ |  |
| 4) $2+6=\square$ |  |

Name: $\qquad$

Class: $\qquad$

Draw the arrows and find the answers.

| Example: $4+\boxed{2}=6$ |  |
| :---: | :---: |
| I) $6+\square=9$ |  |
| 2) $4+\square=7$ |  |
| 3) $2+\square=8$ |  |
| 4) $6+\square=10$ |  |

Name: $\qquad$
$\qquad$

Draw the arrows and find the answers.

| Example: $1+4=5$ |  |
| :---: | :---: |
| 1) $\square+5=7$ |  |
| 2) $\square+7=9$ |  |
| 3) $\square+2=8$ |  |
| 4) $\square+3=10$ |  |

Worksheet 16
Name: $\qquad$ Class: $\qquad$

Write the number sentence based on the number line.

Example:

I)


$$
4+\square=9
$$

2) 



$$
\square+5=8
$$

3) 



$$
\square+\square=8
$$

4) 



$$
\square+\square=\square
$$

5) Draw the arrow and solve it.


$$
2+7=\square
$$

Name: $\qquad$ Class: $\qquad$
Write the number sentence based on the number line.

## Example:



$$
6+5=11
$$

I)


$$
9+\square=16
$$

2) 



$$
5+\square=13
$$

3) 



$$
9+\square=17
$$

4) 



$$
\square+9=14
$$

5) 



$$
\square+8=12
$$

6) 



$$
\square+5=16
$$

| Topic | 2.0 Basic Operations | Suggested Time : 180 minutes |
| :---: | :---: | :---: |
| Conte | 2.3 Subtract within 100 |  |
| Lear | 2.3.1 Subtract in the range | sic facts |
| $\begin{aligned} \text { Lesson Explanation }: & \text { Organised content: } \\ & \text { 1.Subtract within } 10 . \\ & \text { 2.Subtract within } 18 .\end{aligned}$ <br> Lesson starts with subtracting within 10, then followed by subtracting 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 |  | Notes |
| 1. Teacher starts with the addition activity and followed by the subtraction activity by relating pupils' prior knowledge. <br> 2. Pupils look at and count the number of objects up to 10 on the picture cards shown by the teacher. <br> 3. Pupils state the number of objects up to 10 on the picture cards shown by teachers. <br> 4. Pupils state the number of objects taken out by the teacher up to 10 on the picture cards. <br> 5. Pupils state the subtraction shown by the teacher using the number line. <br> 6. Pupils who are unable to master the subtraction up to 10 will repeat the steps 2 until 5 . <br> 7. Introduce the subtraction within 18 (the basic facts of subtraction) without regrouping. <br> 8. Pupils are encouraged to state spontaneously the basic facts of subtraction. <br> 9. Pupils who have mastered the subtraction skills will be introduced to writing the subtraction number sentences. <br> 10. Pupils find the balance of the concrete materials or objects on the picture cards. <br> 11. Pupils who are unable to subtract will repeat step 10. |  | - Use the activity of separating or taking out objects for the counting process and find the difference. <br> - Teacher relates the addition with the subtraction operation. <br> Example: <br> Notes: <br> - Concrete materials: Dienes blocks, beads, marbles, ice cream sticks, candies, erasers, rulers, pebbles, etc. <br> - A number line and abacus can be used for subtraction. <br> Calculating with an abacus is encouraged. |


|  | - Sample worksheet: <br> Worksheet 18 to 22 <br> - The teacher needs to scan the QR code before guiding the pupils to complete the activity on Worksheet 21. <br> - QR code for Worksheet 21: |
| :---: | :---: |
| Refer Textbook (Part 1): page 74 to 81. |  |
| Refer Activity Book (Part 1): page 88 to 96. |  |

Worksheet 18

Name: $\qquad$

Class: $\qquad$ -


Worksheet 19
Name: $\qquad$ Class: $\qquad$

3. Sold


44

Worksheet 20
Name: $\qquad$ Class: $\qquad$
Solve it.


Name: $\qquad$

## Find the difference.



Name: $\qquad$ Class: $\qquad$

## Complete the number sentences.

I.

2.


There are $\square$ cups not broken.

| Topic | $:$ 1.0 Whole Numbers Up to $100 \quad$ Suggested time $: 120$ minutes |
| :--- | :--- | :--- |
| Content Standard | $: 1.6$ Place value |
| Learning Standard | $: 1.6 .1$ State the place value and digit value of any number. |
| Lesson Explanation $:$Organised content: <br> 1. State the place value and digit value of any number within 50. <br> 2. State the place value and digit value of any number within 100. |  |
|  | Lesson starts with pupils' prior knowledge on numbers. During teaching <br> and learning session, teacher emphasises the skills of counting, naming <br> and writing numbers in numerals. Teacher integrates fun learning <br> elements. Ensure pupils have mastered counting and writing numbers <br> in numerals. |

## Suggested Activities

Introduction:

1. 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.
Example:
35
Place value
tens


## Notes

- 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).
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.

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.


## 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: $\qquad$
Match.
Example:


0000000000
0000000000 0000


Name: $\qquad$
Colour the correct answer.

## Example:



Name: $\qquad$

Class: $\qquad$

Write the numbers in words.


Worksheet 26
Name: $\qquad$ Class: $\qquad$
Write in numerals or in words.


| Topic | 1.0 Whole Numbers Up To 100 | 0 Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 1.2 Number value <br> 1.5 Number sequence <br> 1.9 Number patterns |  |
| Learning Standard | 1.2.1 Name the numbers up to 1 <br> 1.2.2 Determine the number valu <br> 1.5.1 Count numbers. <br> 1.5.2 Compare any number sequ <br> 1.9.1 Identify pattern for a given <br> 1.9.2 Complete various simple nu | 100. <br> alues up to 100 . <br> quence. number series. number patterns. |
| Lesson Explanation | Organised content: <br> 1. Count numbers up to 50 . <br> 2. Complete any number seque <br> 3. Identify number patterns with <br> 4. Arrange various objects in as <br> Lesson starts with counting in teacher will emphasis counting n teaches number patterns of tw Teacher integrates fun learning numbers up to 50 before they com | unce. <br> hin 50. <br> ascending and descending order. <br> tens until 50 . During the lesson, the numbers in sequence 1 to 50 . Teacher wos, fours, fives, and tens up to 50. ing elements. Ensure pupils recognise complete the number sequence. |
| Suggested Activities |  | Notes |
| 1. Pupils sit in groups. <br> 2. Teacher places the ' $H$ with some numbers up <br> 3. Pupils play the 'Hops <br> 4. Pupils jump on the m <br> 5. Pupils throw the bean and write down the nu <br> 6. Pupils arrange the nu and descending order <br> 7. Teacher prepares nu Activity Sheet 1). <br> 8. Pupils identify the num given (twos, fours, fiv | Hopscotch' game mat written p to 50 on the floor. cotch' game. at and say the numbers. bag three times on the mat umbers on a piece of paper. mbers written in ascending <br> mber pattern cards (refer <br> mber patterns on the cards es or tens). | - 'Hopscotch' game <br> - Teacher can use any suitable materials. <br> - Example of number pattern card in Activity Sheet 1 <br> - Example worksheet: Worksheet 27-30 |
| 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.


## Worksheet 27

Name: $\qquad$ Class: $\qquad$

Fill in the blanks.

## Example:

$$
21, \underline{22}, 23, \underline{24}, 25, \underline{26}, 27, \underline{28}, 29,30
$$

I. II, $\qquad$ , 13 $\qquad$ , 15, $\qquad$ , I7, $\qquad$ , 19, $\qquad$
2. 20, $\qquad$ 22, $\qquad$ 24, $\qquad$ 26, $\qquad$ , 28, $\qquad$
3. 42, $\qquad$ , 44, $\qquad$ 46, $\qquad$ , 48, $\qquad$ , 50, $\qquad$
4. 3, $\qquad$ , 5, $\qquad$ , 7, $\qquad$ , 9, $\qquad$ II, $\qquad$
5. 35, $\qquad$ , 37, $\qquad$ 39, $\qquad$ , 4I $\qquad$ 43, $\qquad$
6. 40, $\qquad$ , 42, $\qquad$ 44, $\qquad$ , 46, $\qquad$ , 48 $\qquad$
7. 10 , $\qquad$ , 12, $\qquad$ , 14, $\qquad$ , 16, $\qquad$ , 18, $\qquad$
8. 30, $\qquad$ , 32, $\qquad$ , $\qquad$ , 35, $\qquad$ , 37, $\qquad$ , $\qquad$
9. 16 , $\qquad$ , 18, $\qquad$ , 20, $\qquad$ , 22, $\qquad$ 24, $\qquad$
10. 24, $\qquad$ 26 $\qquad$ , 29, $\qquad$ , 3I, $\qquad$ ,

Name: $\qquad$ Class: $\qquad$

## 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.


## Worksheet 29

Name: $\qquad$ Class: $\qquad$

Arrange the numbers in ascending or descending order.
I)

i. Ascending order

ii. Descending order

2)

i. Ascending order

ii. Descending order


Name: $\qquad$

Count and colour the correct numbers.

| Example |  | 13 |  |
| :---: | :---: | :---: | :---: |
|  |  | 31 |  |
| I) |  |  | 34 |


| 2) | - | 21 |
| :---: | :---: | :---: |
|  |  | 12 |


| 3) |  | 36 |
| :---: | :---: | :---: |
|  |  | 45 |



| 6) |  | 25 |
| :---: | :---: | :---: |
|  |  | 29 |


| Topic | 2.0 Basic Operations | Suggested Time : 180 minutes |
| :---: | :---: | :---: |
| Cont | 2.2 Add within 100. |  |
| Learn | 2.2.2 Add two numbers with | e sum within 100. |
| Lesson Explanation : Organised content: <br> 1. Addition without regrouping within 50. <br> 2. Addition by regrouping within 50 . <br> 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. <br> Ensure pupils have mastered addition without regrouping within 50 before teaching addition by regrouping within 50 . |  |  |
| Suggested Activities |  | Notes |
| 1. Teacher starts the lesson with basic facts in addition. <br> 2. Pupils count the concrete materials (counters, Dienes blocks, abacus, counting frame or any suitable counters). <br> counting frame <br> counters <br> abacus <br> Dienes blocks <br> 3. In groups, pupils count the total of two groups of objects and show their answers (addition without regrouping with the sum up to 50 ). |  | - Use the combination of numbers for addition without regrouping (within 50). <br> (Example: 21 ${ }^{\text {st }}$ Century Learning Showdown) <br> - Integrated and enriched Learning Standard: <br> 1.2.1, 1.4.1 and 2.1.3 <br> - Concrete materials: Dienes blocks, ice-cream sticks, counting frame, etc. <br> - Abacus $4: 1$ can be used for addition. <br> - Sample worksheet: Worksheet 31 to 33 |



## 36

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

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

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


Worksheet 31
Name: $\qquad$ Class: $\qquad$

Add.
Example: $23+6=29$

I) $15+4=$

2) $27+2 \mid=$
tens
3) $23+22=$

4) $22+16=$

5) $18+30=$


Name: $\qquad$
$\qquad$
Add.

## Example:


2)

$\qquad$
4)

5)


Worksheet 33
Name: $\qquad$ Class: $\qquad$
Add.
Example:

$$
15+6=\mathbf{2 l}
$$

| tens | ones |
| :---: | :---: |
|  | 00000 |
| 8088 | 000000 |
| 2 | 1 |

I)
$27+8=$

2) $26+17=$

| tens | ones |
| :---: | :---: |
|  | $\theta \theta \theta \theta \theta \theta$ |
|  |  |
|  |  |

3) $24+18=$

| tens | ones |
| :---: | :---: |
|  | $\square-4-8$ |
|  | $\begin{aligned} & -4-8-H=8 \\ & -H-M-H \end{aligned}$ |
|  |  |

4) $13+29=$

| tens | ones |
| :---: | :---: |
|  | 000 |

5) $26+18=$



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.

| Topic | 1. Whole Numbers Up To 100 | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content <br> Standard | 1.2 Number value <br> 1.5 Number sequence <br> 1.9 Number patterns |  |
| Learning Standard | 1.2.1 Name the numbers up to <br> 1.2.2 Determine the number va <br> 1.5.1 Count numbers. <br> 1.5.2 Complete any number se <br> 1.9.1 Identify pattern for a give <br> 1.9.2 Complete various simple | 100. <br> alues up to 100 . <br> quence. number series. number patterns. |
| Lesson Explanation | Organised content: <br> 1. Count numbers up to 100 . <br> 2. Complete various number <br> 3. Identify patterns for a given <br> Lesson starts with pupils coun the lesson, teacher emphasise 100. Teacher also teaches the and tens up to 100. Teacher in Ensure the pupils have reco completing the number sequen | patterns. <br> number series up to 100 . <br> ing numbers in tens up to 100. During s counting numbers in sequence up to number patterns of twos, fours, fives tegrates fun learning elements. <br> ognised numbers up to 100 before ce. |
| Suggested Activities |  | Notes |
| 1. Distribute 100 squar numbers in sequenc <br> 2. Pupils fill in the blank square grid cards by Pupils check the ans <br> 3. Pupils are given cho number cards in gro counting the chopstic cards given. <br> 4. Pupils are shown a n the number patterns while counting with th | grid cards. Pupils write <br> up to 100 . <br> s and complete the 100 writing the missing numbers. wers. <br> sticks, rubber bands and ps. Pupils do the activity by ks based on the number <br> umber card and asked to read of twos, fours, fives and tens eir fingers. | - Concrete materials: 100 square grid cards, chopsticks, number cards. <br> - Teacher guides pupils to count in tens. <br> - Sample worksheet: Worksheet 34 |
| Refer Textbook (Part 1): page 23, 32 to 42. |  |  |
| Refer Activity Book (Part 1): page 38, 39, 49, 50 to 58. |  |  |

$\qquad$ Class: $\qquad$
Count numbers up to 100 .
Example:

I)

2)

3)

4)

5)

6)



Name: $\qquad$ Class: $\qquad$
Colour the correct answer.
Example:


17 is near to 10 or 20
I)


34 is near to 30 or 40
2)


43 is near to 40 or 50
3)

$\mathbf{5 I}$ is near to 50 or 50
4)


Name: $\qquad$ Class: $\qquad$
Round off the circled number to the nearest tens. Colour the answer.
Example:

I)

2)

3)

4)


| Topic | 2.0 Basic Operations | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Cont | 2.2 Add within 100 |  |
| Learn | 2.2.2 Add two numbers with the | e sum within 100 |
| Less | Organised content: <br> 1. Addition without regrouping <br> 2. Addition by regrouping with <br> Lesson starts with addition w 1-digit numbers and 2-digit regrouping within 100 (2-digit During the lesson, teacher counting, writing numbers b Teacher integrates fun learnin addition without regrouping regrouping within 100. | within 100. <br> 100. <br> hout regrouping within 100 (2-digit with umbers). Then followed by addition by with 1-digit number and 2-digit numbers). mphasises mathematical skills such as sed on their place value and addition. elements. Ensure pupils have mastered within 100 before teaching addition by |
| Suggested Activities |  | Notes |
| 1. Pupils counting using concrete materials (counters, Dienes blocks, abacus, counting frame or any suitable counters). <br> counting frame <br> counting sticks <br> abacus <br> Dienes block <br> 2. In groups, pupils count the total of two groups of objects. Pupils write the answer on a card and show it to the class (additional without regrouping with the sum within 100). |  | - Use combination of numbers for addition without regrouping (within 50). <br> - Example: $21^{\text {st }}$ Century LearningShowdown. <br> - Integrated and enriched LS: 1.2.1, 1.4.1, 2.1.3 <br> - Concrete materials: Dienes blocks, counting sticks, counting frame,etc. <br> - Abacus 4:1 can be used for addition. <br> - Sample worksheet: Worksheet 37 <br> - Ensure pupils have mastered addition with regrouping. |




Refer Textbook (Part 1): page 65 to 67.
Refer Activity Book (Part 1): page 79 to 87 .

Name: $\qquad$ Class: $\qquad$

## Solve it.

## Example:




| Topic | 2. Basic Operations | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Conte | 2.3 Subtract within 100 |  |
| Learning Standard : 2.3.2 Subtract two numbers within 100. |  |  |
| Lesso | Organised content: <br> 1. Subtract without regroupi <br> 2. Subtract by regrouping w <br> Lesson starts by subtracting subtracting 2-digit number numbers 2-digit numbers). Th (2-digit numbers with 1 -digit numbers) within 100. During mathematical skills such as place values and subtractio write numbers according to th fun learning elements. <br> Ensure the pupils have ma within 100 before teaching subs | within 100. <br> 100. <br> without regrouping within 100 (starting by with 1-digit numbers and 2-digit with n, followed by subtracting by regrouping umbers and 2-digit numbers with 2-digit the lesson, teacher emphasises on the ounting, writing numbers based on their Teacher ensures that the pupils able to correct place values. Teacher integrates <br> ered the subtraction without regrouping traction with regrouping within 100. |
| Suggested Activities |  | Notes |
| 1. Pup ma Die suit <br> 2. In of sh 50 | mbers shown using concrete sticks, counting sticks, s, counting frame and other s). <br> abacus <br> Dienes block <br> ve subtraction of two groups rete materials. Write and cards. (Subtraction is within g). | - Use the subtraction of two groups of objects to introduce the process of subtraction without regrouping within 50. <br> - Example: $21^{\text {st }}$ Century Learning Showdown. <br> - Integrated and enriched LS: 1.2.1, 2.1.3. <br> - Concrete materials: Dienes block, counting sticks, abacus, counting frame, etc. <br> - Abacus $4: 1$ can be used for subtractions. <br> - Sample worksheet: Worksheet 38 <br> - Teacher ensures that pupils have mastered the skill of subtraction with regrouping. <br> - 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.

| $85-48=37$ |  |  |
| :---: | :---: | :---: |
| tens | ones |  |
| 7 |  | +10 |
|  | 8 | 5 |
| $-\quad 4$ | 8 |  |
|  | 3 | 7 |


| 6. Teacher introduces other combination of |  |
| :--- | :--- | :--- |
| numbers for the same subtraction. |  |
| Example: |  |
| $95-72$ |  |
| Refer Textbook (Part 1): page 95 to107. |  |
| Refer Activity Book (Part 1): page 98 to 106. |  |

Name: $\qquad$ Class: $\qquad$
Solve it.
Example:



| Topic : 2.0 Basic Operations | Suggested time : 120 minutes |
| :---: | :---: |
| Content Standard : 2.4 Problem solving |  |
| Learning Standard : 2.4.1 Create stories involv | addition and subtraction within 100. |
| Lesson explanation : Organised content: <br> 1. Create stories involving ad <br> 2. Create stories involving adid <br> 3. Create stories involving ad <br> 4. Create stories involving a <br> The lesson starts with the sim situations for addition. During concept and the process of elements. <br> Ensure pupils able to create s | dition within 10. dition within 18. <br> dition within 50. dition within 100. <br> lation of create story based on daily life the lesson, teacher focuses on the ddition. Teacher integrates fun learning <br> ories based on simple daily situation. |
| Suggested activities: | Notes |
| 1. Pupils tell a story based on the number sentence shown. <br> Example: $4+3=7$ <br> Ali has 4 marbles | - Integrated and enriched LS: 2.1.1, 2.1.3, 2.2.1 and 2.2.2. <br> - Encourage pupils who have not mastered in writing, create stories verbally. <br> - Use picture. <br> - Apply CPA (concrete-pictorialabstract) approach. <br> - 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. |  |



| Step 4: Check the answer. <br> Counting backwards using number line. <br> 3. Pupils solve problems using Polya Model. |  |
| :---: | :---: |
| 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 : 2.4.1 Create stories involv | addition and subtraction within 100. |
| Lesson explanation : Organised content: <br> 1. Create stories involving <br> 2. Create stories involving <br> 3. Create stories involving <br> 4. Create stories involving <br> The lesson starts with the situations involving subtrac teacher focuses on the Teacher integrates fun lear Ensure pupils able to creat | traction within 10. <br> traction within 18. <br> traction within 50. <br> traction within 100. <br> ulations of create stories based on daily within 10 and more. During the lesson, cept and the process of subtraction. elements. <br> ories based on simple daily situation. |
| Suggested activities: | Notes |
| 1. Start the activity by creating stories on addition based on prior knowledge. Followed by creating stories for subtraction. <br> 2. Pupils create a story verbally based on the number sentence given. <br> Example: <br> 7-3 = 4 <br> There are 7 slices of cake. <br> 3 slices have been eaten. <br> There are $\square$ 4 slices of cake left. <br> 3. Pupils create stories verbally then write them down. <br> 4. Pupils are provided with number sentences with bigger numbers. | - Integrated and enriched LS: 2.1.1, 2.1.3, 2.2.1 and 2.2.2. <br> - Create stories verbally if pupils have not yet mastered writing skills. <br> - Use a diagram. <br> - Applied CPA (concrete-pictorialabstract) approach. <br> - Focus on the use of correct vocabulary related to the subtraction. <br> Example: separate, balance, take out, take away, difference. |
| 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 |  |  |
| Learn | 2.4.2 Solve problems invo situations. | addition and subtraction in daily life |
| Lesson Explanation : Organised content: <br> 1. Solve problems involving subtraction in daily life situations. <br> The lesson starts with simulation of solving problems involving subtraction in daily life situations. During the lesson, teacher emphasises the concept, process and terms of subtraction. Teacher integrates fun learning elements. <br> Pupils focus the problem solving process and relate with their daily life situations. |  |  |
| Suggested activities |  | Notes |
| 1. Teacher shows a number sentence and a situation. Pupils relate the number sentence with the situation. <br> 2. Pupils solve the problem given. Example: <br> Ali had 25 curry puffs. 10 curry puffs were sold. How many curry puffs were left? <br> Step 1: Understand and interpret the problem. There are: 25 curry puffs. <br> Sold: 10 curry puffs were sold. How many curry puff were left? <br> Step 2: Plan a solving strategy. <br> Operation: Subtraction <br> Number sentence: 25-10 = $\square$ <br> Step 3: Carry out the strategy. |  | - Integrated and enriched LS: 2.1.1, 2.1.3, 2.2.1 and 2.2.2. <br> - Use a picture. <br> - Apply CPA (concrete-pictorialabstract) approach. <br> - Focus the term of subtraction. Example: left, balance, take out, take away, difference. <br> - Polya Model steps: <br> i. Understand and interpret the problem; <br> ii. Plan a solving strategy; <br> iii. Carry out the strategy; and <br> 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.


Name: $\qquad$ Class: $\qquad$

## Write the number sentence.

## Example:


I)

2)

3)

4)

$\square$

| Topic | 2.0 Basic Operations | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 2.6 Repeated subtraction |  |
| Learning Standard | 2.6.1 Write a number sente tens, and fours. | of repeated subtraction in twos, fives |
| Lesson Explanation | Lesson starts by showing sim <br> i. twos <br> ii. fives <br> iii. tens <br> iv. fours <br> During lesson, teacher nee integrates fun learning elem Ensure that pupils have mas | ation on subtraction in: <br> to focus on number lines. Teacher s. <br> ed subtraction up to 100 . |
| Suggested Activiti |  | Notes |
| 1. Pupils carry out subtraction using <br> 2. Distribute number question cards (r <br> 3. In groups, pupils answers. <br> 4. Conduct discuss | ulation activity on repeated unters. <br> e cards (up to 20) with <br> Worksheet 40). <br> ve the problems and write the | - Teacher may use any suitable materials. <br> - Sample worksheet: Worksheet 40 |
| Refer Textbook (Part 1): page 111 to 113. |  |  |
| Refer Activity Book (Part 1): page 121 to 123. |  |  |

Name: $\qquad$ Class: $\qquad$

## Write the answers.



$$
15-5-5=5
$$

I)


$$
16-4-4=\square
$$

2) 



$$
10-2-2=\square
$$

3) 



$$
10-5-5=\square
$$

4) 



$$
20-10-10=\square
$$



## 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 .

Worksheet 4I
Name: $\qquad$ Class: $\qquad$

Cut and paste.


Worksheet 42

Name: $\qquad$ Class: $\qquad$

Cut and paste.


One over four


Worksheet 43

Name: $\qquad$ Class: $\qquad$

Cut and paste.

## Three quarters

Three over four



| Topic | 4.0 Money | Suggested Time : 60 minutes |
| :---: | :---: | :---: |
| Conte | 4.1 Notes and coins |  |
| Learn | 4.1.2 Represent the value | oney. |
| Lesson Explanation : Organised content: <br> 1. Sen up to RM 1. <br> 2. Ringgit up to RM10. <br> The lesson starts by telling the value of money according to the coins and notes shown. During lesson, teacher emphasises the skills such as identifying the value of money in 'RM' and 'sen' and telling the total for combination of notes and coins (up to RM10). Teacher integrates fun learning elements. <br> Ensure pupils can identify coins and notes of Malaysian currency before teaching the value of money. |  |  |
| Suggested Activities |  | Notes |
| 1. Pupils tell the value according to the coins and notes shown. <br> 2. Pupils arrange the coins and notes according to their value (from small to big). <br> Example: <br> RM1 <br> RM5 <br> RM10 <br> 3. Introduce how to represent value of money using abacus 4:1. <br> 4. Pupils tell the total for combination of notes and coins (up to RM10) with guidance. |  | - Use real money. <br> - Carry out simulation activity (combination of money). <br> - Encourage pupils to show the combination value of money on the abacus. <br> - Concrete materials: real money, sample money. <br> - Abacus $4: 1$ can be used to show the value of money. |
| Refer Textbook (Part 2): page 14 and 15. |  |  |
| Refer Activity Book (Part 2): page 15 and 16. |  |  |



| Topic | $:$ | 4.0 Money |
| :--- | :--- | :--- |
| Content Standard | 4.2 Financial resources and savings |  |

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 Resources <br> (Income) |  | 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.

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 proble money. | ms involving addition and subtraction of |
| Lesson Explanation : Organised content: <br> 1. Represent the value of mo <br> 2. Solve daily problems invol Lesson starts by representin followed by subtraction up to on mathematical processes a the value of money and subt based learning in the lesson. <br> Ensure pupils have mastered and 100 before teaching solvi money. | ney up to RM10. <br> ing subtraction up to RM10. <br> the value of money up to RM10 and RM10. During lesson, teacher emphasises and skills such as counting money, writing acting money. Teacher applies problem- <br> subtraction operations within 10, 18, 50 ng daily problems involving subtraction of |
| Suggested Activities | Notes |
| 1. Pupils are given a daily life situation involving money by the teacher. <br> Example: <br> Ali has RM5 pocket money. <br> 2. Pupils represent the value of money using coins or notes provided. <br> Example: <br> Pupils represent the value of RM5 with five pieces of RM1 notes <br> 3. Pupils are able to represent the value of money using coins or notes accurately and correctly. <br> 4. Pupils are given pictures and daily situations involving money. <br> Example: (Refer Textbook Part 2, page 29) | - Using activity represent the value of money in the process of counting and finding the balance. <br> - Integrated and enriched LS: 4.1.2, 4.1.3, 4.2.1 and 4.2.2. <br> - Concrete materials: samples of coins and notes <br> - Number line and abacus $4: 1$ can be used for subtraction |

Example:
Ali buys fried chicken.
5. Pupils count the balance of pocket money and state the amount.


Ali bought fried chicken at RM2.
Ali's pocket money balance is RM3.
6. Pupils are guided to write number sentence for subtraction.
Example:

$$
R M 5-R M 2=R M 3
$$

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

$$
\begin{array}{r}
\text { RM5 } \\
\text { - RM2 } \\
\hline \text { RM3 } \\
\hline
\end{array}
$$

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.

| Topic | 5.0 Time | Suggested time : 120 minutes |
| :---: | :---: | :---: |
| Conte | 5.1 Days and months |  |
| Learni | 5.1.1 State time in a day. <br> 5.1.2 State the sequence | ents in a day. |
| Lesso | Organised content: <br> 1. Introduce the pictures <br> 2. Introduce the vocabula <br> 3. Introduce time cards. <br> Lesson starts by showing p evening and night. Then, foll and suitable time for each elements. | activity. <br> of time for each activity. <br> ures of activity in the morning, afternoon, wed by introducing the vocabulary of time activity. Teacher integrates fun learning |
| Sugg |  | Notes |
| 1. Pu lyric <br> 2. Pu sho <br> 3. Pup Exa <br> 4. In tim Ex <br> 5. <br> Exa <br> 6. In on | orning Song' with music and based on the picture (activity) spelling of the word (time). $\qquad$ $g$ <br> ch the picture of activity with <br> ctivity with other time cards. <br> 8:30 at night <br> range all the activities based time. | - Concrete materials: pictures of activities, word cards, time cards, envelopes. <br> - Sample worksheets: Worksheets 44 and 45. |
| Refer Textbook (Part 2): page 31 and 32. |  |  |
| Refer Activity Book (Part 2): page 31 to 33. |  |  |

Worksheet 44

Name: $\qquad$ Class: $\qquad$

Match the picture of activities with the suitable time.


Worksheet 45
Name: $\qquad$ Class: $\qquad$
Cut and paste the pictures in the correct order.



| Topic | 5.0 Time | Suggested Time | 60 minutes |
| :---: | :---: | :---: | :---: |
| Content <br> Standard | 5.1 Days and months |  |  |
| Learning Standard | 5.1.3 Name the days of a week. |  |  |
| Lesson Ex | Organised content: <br> 1.Say in sequence the name of days. <br> 2. Write the name of the days of a week in words. <br> 3.Identify the day before and after. <br> The lesson starts with state the sequence of days of a week and write the days correctly. The teacher emphasises that the name of the day is written starting with a capital letter. Then, teacher introduces the terms "a day before", "a day after", "yesterday", "tomorrow" and "the day after tomorrow". Teacher integrates fun elements. |  |  |
| Suggeste |  | Notes |  |
| 1. Seven pupils are given day cards and they line up based on the sequence of days in a week. <br> 2. In groups, pupils arrange day cards in sequence. <br> 3. Pupils answer questions asked by the teacher. <br> Example: <br> When do we have school assembly? <br> 4. Pupils answer the questions asked by the teacher. Example: <br> What day is today? <br> What day is tomorrow? <br> What day was yesterday? <br> Name the day after Saturday. |  | - The beginning of the day of the week starts with Sunday. <br> - Teacher can use variety of activities based on the pupils' capability. <br> - Concrete materials: paper plates, marker pens, day cards, envelope <br> - Sample worksheet: Worksheet 46 and 47 |  |
| Refer Textbook (Part 2): page 38. |  |  |  |
| Refer Activity Book (Part 2): page 38. |  |  |  |

Name: $\qquad$ Class: $\qquad$

## Complete the days in correct sequence.

## Example:


2)

3)


## Worksheet 47

Name: $\qquad$ Class: $\qquad$
Complete the crossword puzzle.


## Horizontal

I) Before Wednesday is $\qquad$ .
2) Today is Thursday. Yesterday was $\qquad$ .
3) Two days after Wednesday is

Vertical
4) The day after Saturday.
5) Today is Thursday. The day after tomorrow is $\qquad$ .
6) Before Friday is $\qquad$ .
$\qquad$ -.


| Topic | 5.0 Time | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard : 5.2 Clock face |  |  |
| Learning Standard : 5.2.1 Identify the clock hands on the clock face. |  |  |
| Lesson Explanation : The lesson starts with hands-on activity by identifying the clock hands on the clock face (build clock face using concrete materials). During lesson, teacher needs to focus on the number value according to the minute hand and hour hand. |  |  |
| Suggested Activities |  | Notes |
| 1. Distribute paper plates (labelled number 3, 6, 9, 12) and number cards $1,2,4,5,7,8,10$ and 11. Example: <br> 2. Pupils complete the number on the paper plates using the number cards given. <br> Example: <br> 3. Pupils state the numbers on the clock face verbally. <br> 4. Pupils are given two clock hands (minute hand and hour hand). <br> 5. Pupils identify the minute hand and hour hand verbally. <br> 6. Pupils assemble the minute hand and hour hand according to the time stated by the teacher. Example: |  | - Identify the clock hands by building a clock face. <br> - Concrete materials: paper plates, number cards and clock hands. <br> - Emphasize that the minute hand must touch the number. <br> - Sample worksheet: <br> - Activity Sheet 2 <br> - 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


Name:
Class: $\qquad$

Complete the clock face.



| Topic : 5.0 Time | Suggested Time : 60 minutes |
| :---: | :---: |
| Content Standard $:$ 5.2 Clock face <br>  3.1 Concept of one over two | nd one over four in proper fractions. |
| Learning Standard : 5.2.2 Identify and state "half", the clock face. <br> 3.1.1 Identify one over two, on four. | "quarter" and "three quarters" based on over four, two over four and three over |
| Lesson Explanation : Identify and state 'half' equal to two' and 'three quarters' equa face. <br> The lesson starts by identifyin equal 'one over two' and 'thr based on the clock face. During concepts of fractions about 'ha of an hour, a quarter of an hour | 'one over two', 'quarter' equal 'one over to 'three over four' based on the clock <br> g 'half' equal to 'one over two', 'quarter' ee quarters' equal to 'three over four' ing lesson, teacher needs to relate the lf', 'quarter' and 'three quarters' with half and three quarters of an hour. |
| Suggested Activities | Notes |
| 1. Pupils identify "half", "quarter" and "three quarters" based on the clock face from the previous lesson. <br> 2. Pupils shade "half", "quarter" and "three quarters" on the clock face with guidance. <br> Example: <br> 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." | - Identify "half", "quarter" and "three quarters" based on the clock face pupils built. <br> - Integrated and enriched LS: 5.2.3. <br> - Concrete materials: clock face, ruler and colour pencil. <br> - Sample worksheet: Worksheet 49 |

Refer Textbook (Part 2): page 33 to 34.
Refer Activity Book (Part 2): page 34 to 35 .

Name: $\qquad$ Class: $\qquad$

Shade or write the time on the clock face.

## Example:


I)


3)

4)

5)



CALENDAR CARDS







## Worksheet 50

Name: $\qquad$ Class: $\qquad$

## Answer the questions based on the table.

| January | February | March | April |
| :---: | :---: | :---: | :---: |
| May |  | July |  |
|  | October | November | December |

I. When is Malaysia Merdeka Day?
$\qquad$ .
2. When do we celebrate Teachers' Day?
$\qquad$ .
3. When is Malaysia Day?
$\qquad$ .
4. Which month is Christmas celebrated?
$\qquad$ .
5. Which month you were born?
$\qquad$ .

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.
3. Pupils arrange the objects based on the length/ height.
4. 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.
5. Pupils complete the table (refer notes).

| objects | hand span |
| :---: | :---: |
| length of the table | 8 |
| length of the book | 2 |

Refer Textbook (Part 2): page 46 to 50.
Refer Activity Book (Part 2): page 45 to 51.



| Topic | $:$ | 6.0 Measurement |
| :--- | :--- | :--- |
| Content Standard | 6.1 Relative units to measure length, mass and volume of |  |
| liquids. |  |  |

3. Pupils compare the volume of liquids in two same containers (same size and same shape). Pupils determine which container contains more or less volume of liquids.
4. Pupils fill water into two same sized containers according to the terms full, half or empty (group activity with teacher's guidance).
5. Each group moves from one station to another (station by station) to explore the volume of liquids. Pupils record the measurement in the notebook/ exercise book.

Refer Textbook (Part 2): page 54 to 56.
Refer Activity Book (Part 2): page 57 to 61.

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 |
| :---: | :---: | :---: |
| Cont | 7.1 Three-dimensional shap |  |
| Learn | 7.1.1 Name the shape of cub cylinder and sphere. | id, cube, cone, square-based pyramid, |
| Less | Organised content: <br> 1. Identify three-dimension <br> 2. Relate real objects with <br> Lesson starts with observin During lesson, teacher em Ensure pupils to name the th real objects with three-dim lesson. | shapes. <br> e-dimensional shapes in diagrams. <br> hree-dimensional objects on the table. hasises on three-dimensional shapes. e-dimensional shapes correctly. Relate sional shapes in diagrams for the next |
| Sugg |  | Note |
| 1. $P$ $\square$ <br> 2. an <br> 3. re <br> 4. P <br> 5. P a | eal objects on the table. , tumbler, dice and small shapes, conduct questions ons on concrete materials ee-dimensional shapes and <br> real objects according to the hapes. <br> e-dimensional shapes ure shown by teacher. | - Concrete materials: pencil case, tumbler, dice, small cone, ball and other suitable items. |
| Refer Textbook (Part 2): page 61 to 63. |  |  |
| Refer Activity Book (Part 2): page 67 |  |  |


| Topic | 7.0 Space | Suggested Time | 60 minutes |
| :---: | :---: | :---: | :---: |
| Cont | 7.1 Three-dimensional shapes |  |  |
| Learn | 7.1.2 Describe face, edge and vertex of three-dimensional shapes. |  |  |
| Lesson Explanation : Organised content: <br> 1. Describe face, edge and vertex of three-dimensional shapes. <br> 2. Determine the numbers of face, edge and vertex for each of the three-dimensional shapes. <br> During lesson, teacher emphasises on understanding face, edge and vertex for three-dimensional shapes. Ensure pupils able to determine the number of face, edge and vertex for the three-dimensional shapes. |  |  |  |
| Suggested Activities |  | Notes |  |
| 1. Determine face, edge and vertex of threedimensional shapes with teacher's guidance. <br> 2. Pupils are divided into six groups. Each group will be provided with one three-dimensional shape. <br> 3. Pupils determine the number of face, edge and vertex of the three-dimensional shapes and record its characteristics/properties. <br> 4. Pupils present their results in front of the class. <br> 5. Pupils complete their assessments in activity book and discuss with their friends. |  | - Concrete materials: dimensional blocks <br> - Integrated and enric | ree- <br> LS: 7.1.1. |
| Refer Textbook (Part 2): page 64 and 65. |  |  |  |
| 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 squ | , rectangle, triangle and circle. |
| Lesson Explanation : Organised content: <br> 1. Identify two-dimensional shapes. <br> 2. Name the shape square, rectangle, triangle and circle. <br> Lesson starts with pupils observing two-dimensional objects shown. During the lesson, teacher emphasises the understanding of twodimensional shapes. Pupils able to understand the shape of square, rectangle, triangle and circle. |  |  |
| Suggested Activities |  | Notes |
| 1. Pupils name the shape of the objects shown. <br> Example: face of a table and face of a clock. <br> 2. Pupils observe the picture shown. <br> Example: circle <br> i. Name the shape above. <br> ii. Name an object with the same shape above. <br> 3. Repeat step 2 with square, rectangle and triangle. <br> 4. Pupils draw and name two-dimensional shapes. <br> 5. Pupils complete worksheet 51. |  | - Concrete objects: Two-dimensional cards and three-dimensional objects. <br> - Triangle: any triangle shapes <br> - Sample worksheet: <br> Worksheet 51 |
| Refer Textbook (Part 2): page 68. |  |  |
| Refer Activity Book (Part 2): page 72 and 73. |  |  |

Worksheet 51
Name: $\qquad$ Class: $\qquad$
A. Name the two-dimensional shapes below.
triangle circle square rectangle

| square |  |
| :---: | :---: |
|  |  |
|  |  |

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

| triangle | rectangle |
| :---: | :---: |
|  |  |
|  |  |
|  |  |


| circle | square |
| :--- | :--- |
|  |  |
|  |  |
|  |  |


| Topic | 7.0 Space | Suggested Time | 120 minutes |
| :---: | :---: | :---: | :---: |
| Conte | 7.2 Two-dimensional shapes |  |  |
| Learn | 7.2.2 Describe straight line, side, corner and curved line of twodimensional shapes. |  |  |
| Lesso | Organised content: <br> 1. Describe straight side, corner and curved side of two-dimensional shapes. <br> 2. Determine the number of corner, straight side and curved side for two-dimensional shapes. <br> Lesson starts with pupils understanding the meaning of straight side, corner and curved side. Teacher emphasises the characteristics of two-dimensional shapes. |  |  |
| Suggested Activities |  | Notes |  |
| 1. Pupils observe a two-dimensional shaped card. Pupils will be given explanation on the meaning of straight side, corner and curved side of twodimensional shapes. <br> Example: <br> 2. Pupils are divided into a few groups. Each group is provided with a two-dimensional sketch. <br> 3. Pupils identify and record the characteristics/ properties of two-dimensional shapes. <br> 4. Pupils present and discuss their results. <br> 5. Pupils complete Worksheets 52 to 54. |  | - Concrete material dimensional cards <br> - Sample workshee Worksheets 52 to | two- <br> 4. |
| Refer Textbook (Part 2): page 69. |  |  |  |
| Refer Activity Book (Part 2): page 73 and 74. |  |  |  |

Worksheet 52
Name: $\qquad$ Class: $\qquad$

Label the shape with the correct words.
1)

2)

3)

4)


Name: $\qquad$ Class: $\qquad$
Write the number of characteristics/properties of two-dimensional shapes.

| shape | corner | straight side | curved side |
| :---: | :---: | :---: | :---: |
| I. <br> square |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. <br> circle |  |  |  |

## Worksheet 54

Name: $\qquad$ Class: $\qquad$
A. What am I?

1. I have 4 corners and 4 same straight 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 straight sides.

5. I am a hoop.

B. State two-dimensional shapes without curved side.
$\square$


| Topic | 7.0 Space | Suggested time : 120 minutes |
| :---: | :---: | :---: |
| Conte | 7.3 Problem Solving |  |
| Learn | 7.3.1 Solve problems involv | aily situations. |
| Lesson Explanation : Organised content: <br> 1. Recognize three-dimensional shapes and two-dimensional shapes. <br> 2. Identify three-dimensional shapes and two-dimensional shapes according to the patterns. <br> The lesson starts with prior knowledge about three-dimensional shapes and two-dimensional shapes. Ensure pupils are able to naming the three-dimensional shapes and two-dimensional shapes correctly. Ensure pupils solve problems according to the two-dimensional shapes and three-dimensional shapes patterns. |  |  |
| Suggested activities <br> Activity for three-dimensional shapes: <br> 1. Pupils observe three-dimensional shapes shown and followed by Q\&A session. <br> 2. Pupils are called randomly to arrange threedimensional shapes to build a model. <br> 3. Explain about the pattern. <br> 4. Pupils are divided into groups. Distribute pictures of three-dimensional shapes to each group. <br> 5. Pupils cut the pictures of the thee-dimensional shapes dan paste it on the paper to form a pattern (Activity Sheet 4). <br> 6. Pupils present and discuss their group work. |  | Notes |
| Activ <br> 1. P <br> 2. $P$ <br> di <br> 3. Ex <br> 4. Pu <br> 5. $P$ <br> sh <br> 6. Pup <br> Activ <br> Activ <br> 1. Pu <br> 2. $P$ <br> 3. $P$ diff dim <br> Activ <br> 1. P <br> 2. Di <br> 3. C | ensional shapes: <br> e-dimensional shapes shown A session. <br> ndomly to arrange threeto build a model. <br> attern. <br> into groups. Distribute pictures al shapes to each group. <br> res of the thee-dimensional on the paper to form a pattern <br> discuss their group work. <br> sional shapes: <br> w arranged two-dimensional <br> arranged two-dimensional the board and followed by <br> ctivity in step 2 and arrange using arranged two- <br> into groups. <br> anged two-dimensional ach group (Activity Sheet 5). o-dimensional shapes and | - Integrated and enriched LS 7.1.3, 7.2.3 <br> - Teacher could use real objects to identify and name threedimensional and two-dimensional shapes. <br> - Begin the group activity with two different patterns. <br> - Concrete materials: papers, stickers, glues and other appropriate concrete materials. <br> - Sample activities Activity Sheet 4 and 5. |

4. 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.

Name: $\qquad$
Cut and create patterns.


Activity Sheet 5
Name: $\qquad$ Class: $\qquad$
Cut and create patterns.


| Topic | $: 7.0$ Space | Suggested time : 120 minutes |
| :--- | :--- | :--- |
| Content <br> Standard | $: 7.3$ Problem solving |  |
| Learning <br> Standard | 7.3.1 Solve problems involving daily situations. |  |
| Lesson Explanation $:$Organised content: <br> 1. Recognise three-dimensional shapes. <br> 2. Create new models from a combination of three-dimensional <br> shapes. |  |  |
| Lesson starts with pupils observing picture of the three-dimensional <br> model shown. At the beginning of the lesson, teacher emphasises on <br> the pupils' understanding about three-dimensional shapes. Ensure <br> pupils naming the three-dimensional shapes correctly. Then, pupils <br> create models based on three-dimensional shapes. |  |  |
| Suggested Activities | Notes |  |



Name: $\qquad$ Class: $\qquad$
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 |
| :---: | :---: |
| $\square$ |  |
|  |  |
|  |  |
|  |  |



| Topic | 8.0 Data Management | Suggested Time : 120 minutes |
| :---: | :---: | :---: |
| Content Standard | 8.2 Pictograph |  |
| Learning Standard | 8.2.1 Read and obtain infor | ion from a pictograph. |
| Lesson Explanation | Organised content: <br> 1. Recognise pictograph. <br> 2. Read and obtain informa <br> Lesson starts by explaining or symbols). Teacher em represents one. Pupils need to read and get information | from a pictograph. <br> meaning of pictographs (pictured figures asises that each picture or symbol unting skills so that pupils would be able $m$ pictographs correctly. |
| Suggested Activities |  | Notes |
| 1. Pupils look at an exa textbook page 78 . <br> 2. Teacher guides pup from the pictograph. <br> 3. Q\&A session betwe regarding informatio <br> 4. Pupils paste coloure the board. <br> 5. Pupils are guided by information from the | mple of pictograph in the <br> s to read and get information <br> n teacher and pupils of the pictograph. <br> cards on the pictograph on <br> the teacher to obtain the pictograph. | - Emphasis pupils that each picture or symbol represent 'one'. <br> - Concrete materials: coloured cards, stickers and manila cards. |
| Refer Textbook (Part 2): page 78-80 |  |  |
| Refer Activity Book (Part 2): page 84-85 |  |  |


6. 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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