

# AKAL ACADEMY



The Real Education

## SYLLABUS BOOKLET

**Subject : Mathematics**

**Grade : I - VIII**

**2019 - 2020**

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**CLASS: I**

**SUBJECT: MATHEMATICS**

**Name of the book: New Enjoying Mathematics 1**

**Name of the publisher: Oxford**

**Unit I (Pre Mid-Term)**

Duration	Content	Resources			Subject Enrichment
		Extra marks	Web link	Oxford	
01/04/2019 To 17/05/2019	Chapter 1 : Numbers upto 50 Chapter 2 : Addition upto 20 Chapter 3 : Subtraction within 20	<ul style="list-style-type: none"><li>Teaching slides</li><li>Practice worksheets</li></ul>	<a href="https://www.youtube.com/watch?v=gdq9NZaJtuc">https://www.youtube.com/watch?v=gdq9NZaJtuc</a>  <a href="https://www.youtube.com/watch?v=N0_TWQTrJ-k">https://www.youtube.com/watch?v=N0_TWQTrJ-k</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Maths lab activity-Place value(pg-28) -Addition and subtraction (pg-51 and 71)

**Pre Mid- Term Exam (18/05/2019 – 27/05/2019)**

**Unit II (Mid-Term)**

01/07/2019 To 03/09/2019	Chapter 5 : Numbers upto 100 Chapter 6 : Adding greater number Chapter 7 : Subtracting greater number	<ul style="list-style-type: none"><li>Teaching slides</li><li>NCERT Solutions</li><li>Get Set Go</li><li>Multiply using Arrays</li></ul>	<a href="https://www.youtube.com/watch?v=gdq9NZaJtuc">https://www.youtube.com/watch?v=gdq9NZaJtuc</a>  <a href="https://www.youtube.com/watch?v=N0_TWQTrJ-k">https://www.youtube.com/watch?v=N0_TWQTrJ-k</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Maths lab activity-Comparing numbers(pg-101) -Addition 2-digit (pg 118)
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**Mid- Term Exam (04/09/2019 – 14/09/2019)**

**Unit III (Post Mid-Term)**

21/09/2019 to 10/12/2019	Chapter 12 : Multiplication readiness Chapter 10 : Money Chapter 4 : Shapes and Patterns	<ul style="list-style-type: none"><li>Teaching slides</li><li>NCERT Solutions</li><li>Practice worksheets</li><li>Games</li></ul>	<a href="https://www.youtube.com/watch?v=fZFwHpiAVE0">https://www.youtube.com/watch?v=fZFwHpiAVE0</a>  <a href="https://www.youtube.com/watch?v=CK3MnyXL7p0">https://www.youtube.com/watch?v=CK3MnyXL7p0</a> <a href="https://www.youtube.com/watch?v=aSvkgmifNqk">https://www.youtube.com/watch?v=aSvkgmifNqk</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Shapes streamer (pg-84)
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**Post Mid- Term Exam(11/12/2019-20/12/2019)**

**Unit IV**

21/12/2019 to 20/02/2020	Chapter 8 : Measurement Chapter 9 : Time Chapter 11 : Data Handling	<ul style="list-style-type: none"><li>Teaching slides</li></ul>	<a href="https://www.youtube.com/watch?v=3YGQZXvG9fi">https://www.youtube.com/watch?v=3YGQZXvG9fi</a> <a href="https://www.youtube.com/watch?v=5xRoBx7iVGI">https://www.youtube.com/watch?v=5xRoBx7iVGI</a>  <a href="https://www.youtube.com/watch?v=SISfI9IVHpo">https://www.youtube.com/watch?v=SISfI9IVHpo</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Time(pg-139)
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21/2/2020 01/03/2020	Conduction of oral (Practical) examinations and revision for Final Exams				
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**Final Exam (04/03/2020 -15/03/2020)**

**CLASS: II**

**SUBJECT: MATHEMATICS**

**Name of the book: New Enjoying Mathematics 3**

**Name of the publisher: Oxford**

**Unit I (Pre Mid-Term)**

Duration	Content	Resources			Subject Enrichment
		Extra marks	Web link	Oxford	
01/04/2019 To 17/05/2019	Chapter 1 : Number upto 200 Chapter 2: Addition Chapter 3 : Subtraction	<ul style="list-style-type: none"> <li>Teaching slides</li> <li>Practice worksheets</li> </ul>	<a href="https://www.khanacademy.org/...grade...place-value/.../place-value">https://www.khanacademy.org/...grade...place-value/.../place-value</a>  <a href="https://www.khanacademy.org/...place-value/v/place-value-1">https://www.khanacademy.org/...place-value/v/place-value-1</a>  <a href="https://www.youtube.com/watch?v=DxKzyw8G-Bw">https://www.youtube.com/watch?v=DxKzyw8G-Bw</a>	_____	-Maths lab activity -place value(pg-250) -Understanding regrouping (pg-40 and 59)

**Pre Mid- Term Exam (18/05/2019 – 27/05/2019)**

**Unit II (Mid-Term)**

01/07/2019 To 03/09/2019	Chapter 4 : Number upto 1000 Chapter 5 : Addition of bigger number Chapter 6 : Subtraction of bigger number Chapter 9 : Shapes and pattern	<ul style="list-style-type: none"> <li>Teaching slides</li> <li>NCERT Solutions</li> <li>Get Set Go</li> <li>Multiply using Arrays</li> </ul>	<a href="https://www.khanacademy.org/...grade...place-value/.../place-value">https://www.khanacademy.org/...grade...place-value/.../place-value</a>  <a href="https://www.khanacademy.org/...place-value/v/place-value-1">https://www.khanacademy.org/...place-value/v/place-value-1</a>  <a href="https://www.youtube.com/watch?v=DxKzyw8G-Bw">https://www.youtube.com/watch?v=DxKzyw8G-Bw</a> <a href="https://www.youtube.com/watch?v=xgQJcN-hMpc">https://www.youtube.com/watch?v=xgQJcN-hMpc</a>	_____	-Place value(pg-76) -Maths lab activity using lines (pg-143)
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**Mid- Term Exam (04/09/2019 – 14/09/2019)**

**Unit III (Post Mid-Term)**

21/09/2019 to 10/12/2019	Chapter 7 : Multiplication Chapter 8 : Exploring multiplication Further Chapter 10 : Measurement Chapter 12 : Money	<ul style="list-style-type: none"> <li>Teaching slides</li> <li>NCERT Solutions</li> <li>Practice worksheets</li> <li>Games</li> </ul>	<a href="https://www.youtube.com/watch?v=AOkdRIS2GAc">https://www.youtube.com/watch?v=AOkdRIS2GAc</a>  <a href="https://www.khanacademy.org/...grade...measurement...measuring">https://www.khanacademy.org/...grade...measurement...measuring</a>  <a href="https://www.youtube.com/watch?v=YTI9DpSM4wl">https://www.youtube.com/watch?v=YTI9DpSM4wl</a>	_____	-Multiply(pg-111) -Order property(pg-127)
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**Post Mid- Term Exam(11/12/2019-20/12/2018)**

**Unit IV**

21/12/2019 to 20/02/2020	Chapter 11 : Time Chapter 14 : Division Readiness Chapter 13 : Data Handling	<ul style="list-style-type: none"> <li>Teaching slides</li> </ul>	<a href="https://www.youtube.com/watch?v=hBKYxl45oil">https://www.youtube.com/watch?v=hBKYxl45oil</a> <a href="https://www.youtube.com/watch?v=hKHgqqk4NbE">https://www.youtube.com/watch?v=hKHgqqk4NbE</a>	_____	-Time and calendar(pg-169)
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21/2/2020 01/03/2020	Conduction of oral (Practical) examinations and revision for Final Exams				
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**Final Exam (04/03/2020 -15/03/2020)**

**CLASS: III**

**SUBJECT: MATHEMATICS**

**Name of the book: New Enjoying Mathematics 3**

**Name of the publisher: Oxford**

**Unit I (Pre Mid-Term)**

Duration	Content	Resources			Subject Enrichment
		Extra marks	Web link	Oxford	
01/04/2019 To 17/05/2019	Chapter 1 : Place Value Chapter 2 : Addition	<ul style="list-style-type: none"> <li>Teaching slides</li> <li>NCERT Solutions</li> <li>Practice worksheets</li> <li>Games</li> <li>Puzzles</li> <li>Math mania and get set go can be used as assessments</li> </ul>	<ul style="list-style-type: none"> <li><a href="https://www.youtube.com/watch?v=P_xyCdnYo1E">https://www.youtube.com/watch?v=P_xyCdnYo1E</a></li> <li><a href="https://www.youtube.com/watch?v=Z1fUOc8XQio">https://www.youtube.com/watch?v=Z1fUOc8XQio</a></li> <li><a href="https://www.youtube.com/watch?v=x0DE_VDEEAw">https://www.youtube.com/watch?v=x0DE_VDEEAw</a></li> <li><a href="https://www.youtube.com/watch?v=eItAnbQpcwA">https://www.youtube.com/watch?v=eItAnbQpcwA</a></li> </ul>	-Place value of 4 digits using strips(pg-28) -Game using number cards (pg-44)	

**Pre Mid- Term Exam (18/05/2019 – 27/05/2019)**

**Unit II (Mid-Term)**

01/07/2019 To 03/09/2019	Chapter 3 : Subtraction Chapter 4 : Multiplication Chapter 5 : Division Concepts Chapter 8 : Shape, Space and Patterns	<ul style="list-style-type: none"> <li>Teaching slides</li> <li>NCERT Solutions</li> <li>Get Set Go</li> <li>Multiply using Arrays</li> </ul>	<a href="https://www.youtube.com/watch?v=FPHhYDje3lY">https://www.youtube.com/watch?v=FPHhYDje3lY</a> <a href="https://www.youtube.com/watch?v=9T3AAn-Cw3g">https://www.youtube.com/watch?v=9T3AAn-Cw3g</a> <a href="https://www.khanacademy.org/math/.../multiply.../basic-multiplication">https://www.khanacademy.org/math/.../multiply.../basic-multiplication</a> <a href="https://www.khanacademy.org/math/.../multiply.../examples-relationship">https://www.khanacademy.org/math/.../multiply.../examples-relationship</a> <a href="https://www.khanacademy.org/.../shapes/.../recognizing-shapes">https://www.khanacademy.org/.../shapes/.../recognizing-shapes</a> ..	-Multiplication using Arrays(pg-90) -Multiplication patterns(pg-90) -Equal sharing and grouping(pg-107)	
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**Mid- Term Exam (04/09/2018 – 14/09/2018)**

**Unit III (Post Mid-Term)**

21/09/2019 to	Chapter 6 : More Division	<ul style="list-style-type: none"> <li>Teaching</li> </ul>	<a href="https://www.khanacademy.org/math/.../home/...d">https://www.khanacademy.org/math/.../home/...d</a>	-Concept of remainder while	
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10/12/2019	Chapter 7 : Fraction Chapter 9 : Measurement	<ul style="list-style-type: none"> <li>g slides</li> <li>• NCERT Solutions</li> <li>• Practice worksheets</li> <li>• Games</li> </ul>	ivede/.../division-2 <a href="https://www.youtube.com/watch?v=Ix72WMHYWas">https://www.youtube.com/watch?v=Ix72WMHYWas</a> <a href="https://www.youtube.com/watch?v=ukzMc1Lr-8s">https://www.youtube.com/watch?v=ukzMc1Lr-8s</a>	dividing(pg-127) -Finding fractions(pg-144) -Measurement of weight and capacity (pg-171)	
<b>Post Mid- Term Exam(11/12/2019-20/12/2019)</b>					
<b>Unit IV</b>					
21/12/2019 to 20/02/2020	Chapter 10 : Time Chapter 11 : Money Chapter 12 : Handling data	<ul style="list-style-type: none"> <li>• Teaching slides</li> </ul>	<a href="https://www.youtube.com/watch?v=6VF89rQEWM">https://www.youtube.com/watch?v=6VF89rQEWM</a> <a href="https://www.youtube.com/watch?v=VMPAjI2BeYs">https://www.youtube.com/watch?v=VMPAjI2BeYs</a> <a href="http://www.primaryresources.co.uk/maths/powerpoint/Handling_Data.ppt">www.primaryresources.co.uk/maths/powerpoint/Handling_Data.ppt</a>	-Make your own timeline (pg-183) -Dot to Dot (Pg-185) -Market set up	
21/2/2020 to 01/03/2020	Conduction of oral (Practical) examinations and revision for Final Exams				
<b>Final Exam (04/03/2020 -15/03/2020)</b>					

**CLASS: IV**

**SUBJECT: MATHEMATICS**

**Name of the book: New Enjoying Mathematics 4**

**Name of the publisher: Oxford**

**Unit I (Pre Mid-Term)**

Duration	Content	Resources			Subject Enrichment
		Extra marks	Web link	Oxford	
01/04/2019 To 17/05/2019	<b>Chapter 1 :</b> Place Value <b>Chapter 2 :</b> Addition and Subtraction <b>Chapter 3 :</b> Multiplication	<ul style="list-style-type: none"> <li>• Teaching slides</li> <li>• Practice worksheets</li> </ul>	<a href="https://www.youtube.com/watch?v=zVhQY173Yyo">https://www.youtube.com/watch?v=zVhQY173Yyo</a>  <a href="https://www.youtube.com/watch?v=w8iDSAwDp6A">https://www.youtube.com/watch?v=w8iDSAwDp6A</a>  <a href="https://www.khanacademy.org/math/...multiply.../4-digit-times-1-d...">https://www.khanacademy.org/math/...multiply.../4-digit-times-1-d...</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Maths lab activity(pg-64)
<b>Pre Mid- Term Exam (18/05/2019 – 27/05/2019)</b>					
<b>Unit II (Mid-Term)</b>					
01/07/2019 To 03/09/2019	<b>Chapter 4 :</b> Division <b>Chapter 5 :</b>	<ul style="list-style-type: none"> <li>• Teaching slides</li> <li>• NCERT</li> </ul>	<a href="https://www.youtube.com/watch?v=KFzCWWTEDDI">https://www.youtube.com/watch?v=KFzCWWTEDDI</a>	Teacher manual +CD includes: -Animation and	-Maths lab activity(101)

	Factors <b>Chapter 6 :</b> Multiples	Solutions <ul style="list-style-type: none"> <li>• Get Set Go</li> <li>• Multiply using Arrays</li> </ul>	<a href="https://www.youtube.com/watch?v=62ee7w6qBVY">https://www.youtube.com/watch?v=62ee7w6qBVY</a>	video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	
<b>Mid- Term Exam (04/09/2019 – 14/09/2019)</b>					
<b>Unit III (Post Mid-Term)</b>					
21/09/2019 to 10/12/2018	<b>Chapter 7 :</b> Fractions <b>Chapter 8 :</b> Decimals <b>Chapter 9 :</b> Shapes, Space & Patterns <b>Chapter 10 :</b> Measurement	<ul style="list-style-type: none"> <li>• Teaching slides</li> <li>• NCERT Solutions</li> <li>• Practice worksheets</li> <li>• Games</li> </ul>	<a href="https://www.youtube.com/watch?v=RkvcGMLtAVU">https://www.youtube.com/watch?v=RkvcGMLtAVU</a> <a href="https://www.youtube.com/watch?v=2FH6YiLWluE">https://www.youtube.com/watch?v=2FH6YiLWluE</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Maths lab activity(pg-143 ) -Maths lab activity(pg-153 )
<b>Post Mid- Term Exam(11/12/2019-20/12/2019)</b>					
<b>Unit IV</b>					
21/12/2019 to 20/02/2020	<b>Chapter 11 :</b> Perimeter and Area <b>Chapter 12 :</b> Time <b>Chapter 13 :</b> Handling Data <b>20/2</b>	<ul style="list-style-type: none"> <li>• Teaching slides</li> </ul>	<a href="https://www.youtube.com/watch?v=LoaBd-sPzkU">https://www.youtube.com/watch?v=LoaBd-sPzkU</a> <a href="https://www.youtube.com/watch?v=egOO-e91YH8">https://www.youtube.com/watch?v=egOO-e91YH8</a> <a href="https://www.youtube.com/watch?v=-asCGUeunO4">https://www.youtube.com/watch?v=-asCGUeunO4</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Introductory and reinforcement activities -Assessments	-Maths lab activity (pg-179) -Maths lab activity (pg-195)
21/2/2020 to 01/03/2020	Conduction of oral (Practical) examinations and revision for Final Exams				
<b>Final Exam (04/03/2020 -15/03/2020)</b>					

**CLASS: V**

**SUBJECT: MATHEMATICS**

**Name of the book: New Enjoying Mathematics 5**

**Name of the publisher: Oxford**

### Unit I (Pre Mid-Term)

Duration	Content	Resources			Subject Enrichment
		Extra marks	Web link	Oxford	
01/04/2019 To 17/05/2019	<b>Chapter 1 :</b> Place Value <b>Chapter 2 :</b> Addition, Subtraction and its application <b>Chapter 3 :</b> Multiplication	<ul style="list-style-type: none"> <li>• Teaching slides</li> <li>• Practice worksheets</li> </ul>	<a href="https://www.youtube.com/watch?v=nrLZ1Wd2v3Y">https://www.youtube.com/watch?v=nrLZ1Wd2v3Y</a> <a href="https://www.khanacademy.org/math/cc-fifth-grade-math">https://www.khanacademy.org/math/cc-fifth-grade-math</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Assessments	-Number patterns (pg-25) -Average –Maths lab activity(pg-55)

	, Division and its application				
<b>Pre Mid- Term Exam (18/05/2019 – 27/05/2019)</b>					
<b>Unit II (Mid-Term)</b>					
01/07/2019 To 03/09/2019	<b>Chapter 4 :</b> Factors <b>Chapter 5 :</b> Multiples <b>Chapter 6 :</b> Fractions <b>Chapter 9 :</b> Shapes, Pattern and Nets <b>Chapter 10 :</b> Geometry Basis	<ul style="list-style-type: none"> <li>• Teaching slides</li> <li>• NCERT Solutions</li> <li>• Get Set Go</li> <li>• Multiply using Arrays</li> </ul>	<a href="https://www.khanacademy.org/...factors-multiples/...factors.../finding..">https://www.khanacademy.org/...factors-multiples/...factors.../finding..</a> <a href="https://www.youtube.com/watch?v=ZGmyYCOFvsE">https://www.youtube.com/watch?v=ZGmyYCOFvsE</a> <a href="https://www.youtube.com/watch?v=bjGh1tR9e8w">https://www.youtube.com/watch?v=bjGh1tR9e8w</a> <a href="https://www.youtube.com/watch?v=2V0S4OctuSc">https://www.youtube.com/watch?v=2V0S4OctuSc</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Assessments	-Maths lab activity(pg- 69) -Maths lab activity(pg-76 ) -Maths lab activity(pg- 101) -Maths lab activity(pg-157 ) -Fun activity (pg-141)
<b>Mid- Term Exam (04/09/2019 – 14/09/2019)</b>					
<b>Unit III (Post Mid-Term)</b>					
21/09/2019 to 10/12/2018	<b>Chapter 7 :</b> Decimals <b>Chapter 8 :</b> More About Decimals <b>Chapter 11 :</b> Measurement <b>Chapter 12 :</b> Perimeter, Area & Volume	<ul style="list-style-type: none"> <li>• Teaching slides</li> <li>• NCERT Solutions</li> <li>• Practice worksheets</li> <li>• Games</li> </ul>	<a href="https://www.youtube.com/watch?v=dDufGC2YwvU">https://www.youtube.com/watch?v=dDufGC2YwvU</a> <a href="https://www.khanacademy.org/...decimals/...decimals.../introduction">https://www.khanacademy.org/...decimals/...decimals.../introduction</a> <a href="https://www.khanacademy.org/...decimals/decimal.../decimal-place..">https://www.khanacademy.org/...decimals/decimal.../decimal-place..</a> <a href="https://www.youtube.com/watch?v=Wkx0KEa4BUc">https://www.youtube.com/watch?v=Wkx0KEa4BUc</a> <a href="https://www.youtube.com/watch?v=-SIF1GPMPIk">https://www.youtube.com/watch?v=-SIF1GPMPIk</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Assessments	-Maths lab activity(pg-194)
<b>Post Mid- Term Exam(11/12/2019-20/12/2019)</b>					
<b>Unit IV</b>					
21/12/2019 to 20/02/2020	<b>Chapter 13 :</b> Time & Temperature <b>Chapter 14 :</b> Mapping Skills <b>Chapter 15 :</b> Handling Data	<ul style="list-style-type: none"> <li>• Teaching slides</li> </ul>	<a href="https://www.youtube.com/watch?v=KkM9Mc5x9fM">https://www.youtube.com/watch?v=KkM9Mc5x9fM</a>  <a href="https://www.youtube.com/watch?v=4VMUz2GTc4g">https://www.youtube.com/watch?v=4VMUz2GTc4g</a> <a href="https://www.youtube.com/watch?v=0q5v4rJEAh4">https://www.youtube.com/watch?v=0q5v4rJEAh4</a>	Teacher manual +CD includes: -Animation and video -Printable documents -Lesson plan -Assessments	-Maths lab activity(pg-231)
21/2/2020 01/03/2020	<b>Conduction of oral (Practical) examinations and revision for Final Exams</b>				
<b>Final Exam (04/03/2020 -15/03/2020)</b>					

Name of the books: NCERT

Name of the publisher:

**Unit I (Pre Mid-Term)**

Duration	Content		Subject Enrichment Activity
<b>01/04/2019 To 17/05/2019</b>	Chapter 1 : Knowing our numbers  Chapter 2 : Whole Numbers  Chapter 3 : Playing with numbers	Introduction, Comparing numbers, Revisiting place value, larger numbers, use of commas, estimation, use of brackets, roman numerals.  Predecessor and successor, whole numbers, the number line, properties of whole numbers, patterns in whole numbers Introduction, factors and multiples, prime and composite numbers, tests for divisibility of numbers, common factors and common multiples, Some more divisibility rules Prime factorization, HCF, LCM, problems based on HCF and LCM	

**Pre Mid- Term Exam (18/05/2019 – 27/05/2019)****Unit II (Mid-Term)**

<b>1/07/2019 To 3/09/2019</b>	Chapter 9 : Basic geometrical ideas  Chapter 10 : Understanding elementary shapes.  Chapter 6 : Negative numbers and Integers  Chapter 14 : Data Handling	Points, a line, intersecting lines, parallel line, Ray, Curves, Polygons, Angles, Triangles, Quadrilaterals, Circle  Introduction, the circle, line segment, perpendiculars, perpendicular bisectors, angles, types of angles, perpendicular lines, classification of triangles, Quadrilaterals, polygons , 3D shapes  Introduction, integers, number line, ordering of integers, addition of integers,  Pictograph (Data Handling) Introduction, Recurring data, Organization of data,  Bar graph	To represent the integers on number line.  To find the area of irregular shape by activity method.
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<b>Mid- Term Exam (4/09/2019 – 14/09/2019)</b>			
<b>Unit III (Post Mid-Term)</b>			
<b>21/09/2019 to 10/12/2019</b>	Chapter 4 : Mensuration	Introduction, Perimeter of 2D shapes, Area of 2D shapes	Paper folding activity on fractions.
	Chapter 5 : Algebra	Introduction, Matchstick patterns, The idea of a variable, Examples of variables, use of variables in common rules, expressions with variables, introduction of Equations	
	Chapter 7 : Fractions	Introduction, Fraction, Proper fractions, improper fractions, mixed fractions, equivalent fractions, simplifying fractions, like fractions, comparing like fractions and unlike fractions, Addition and subtraction of fractions	
	Chapter 8 : Decimals	Introduction, decimals, comparing decimals, Addition and subtraction of decimals	
<b>Post Mid- Term Exam(11/12/2019-20/12/2019)</b>			
<b>Unit IV (Final Exam)</b>			
<b>21/12/2019 to 20/02/2020</b>	Chapter 11 : Symmetry	Introduction, Making symmetric figures Figures with two or more lines of symmetry, reflection and symmetry	Construct any five angles of your choice.  Nature walk to observe, symmetry in our environment
	Chapter 12 : Ratio and proportion	Introduction, Ratio, Proportion, Unitary method	
	Chapter 13 : Practical Geometry	Circles, perpendicular bisector of a line, angles, angle bisector.	
<b>21/2/2020 to 1/03/2020</b>	<b>Conduction of oral (Practical) examinations and revision for Final Exams</b>		
<b>Final Exam (4/3/2020 -15/3/2020)</b>			

CLASS: VII

SUBJECT: MATHEMATICS

Name of the books: NCERT

Name of the publisher:

### Unit I (Pre Mid-Term)

Duration	Content	Subject Enrichment Activity
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<b>01/04/2019 To 17/05/2019</b>	Chapter 1 : Integers	Introduction Integers representation on number line, Operations on integers(+, -, ×, ÷) , Properties of integers for all basic operations	Number line game based on integers using cards
	Chapter 2 : Fractions	Fractions, Intro, Types +, -, ×, ÷ of fractions	
	Chapter 3 : Decimal	Expanded form of decimals numbers. Comparison of decimals +, -, ×, ÷ of decimals.	
	Chapter 4 : Simple Equations	Vocabulary terms, Variables Rules for equations, Interchange the expression, Conversion of given statement into equation form, Trial & error method, Equations (Balancing, Transposing), From solution to equation.	

**Pre Mid- Term Exam (18/05/2019 – 27/05/2019)**

**Unit II (Mid-Term)**

<b>01/07/2019 To 03/09/2020</b>	Chapter 16 : Data Handling	Bar graph, double bar graph, Data, Information, Collection of Data, Organization of data, Mean, range, mode, median	Representation of rational numbers on number line.
	Chapter 17 : Visualizing solid shapes	Faces, edges, vertices, nets for building 3D shapes, Isometric sketches, visualizing solid shapes.	
	Chapter 11 : Lines and angles	Line, Line Segment, Angle Complementary, Supplementary Adjacent, Linear Pair Vertical opposite Angles Intersecting lines, Angles made by transversal and parallel lines	
	Chapter 12 : The triangle & its properties	Classification of triangles Altitude of triangle Median of triangle Exterior angle property Pythagoras property Angle sum property of triangle.	
	Chapter 5 : Rational numbers	Equivalent rational numbers, rational numbers on number line, comparison of rational number	

**Mid- Term Exam (4/09/2019 – 14/09/2019)**

**Unit III (Post Mid-Term)**

<b>21/09/2020 to 10/12/2020</b>	Chapter 6 : Operation on Rational Numbers	Operations on rational number – addition, subtraction, multiplication, division	
	Chapter 7 : Comparing quantities	Convert the ratio into equivalent ratio, Convert %age	

		to fraction & decimals & vice-versa Increase or decrease as percent Conditions of buying & selling Profit or loss as a %age.	
	Chapter 8 : Exponents	Base & Exponents, Laws of exponents, Decimal number system standard form, Important Formula, Exponential form, Very Large Numbers	
	Chapter 9 : Algebraic expression	Algebraic expressions (variable, constants) Terms of an expression Monomials, binomials, polynomials , Addition & Subtraction , Classification of expressions	

**Post Mid- Term Exam(11/12//2019-20/12/2019)**

**Unit IV (Final Exam)**

<b>21/12/2019 to 20/02/2019</b>	Chapter 10 : Perimeter and area	Perimeter & Area of square, rectangle, Circumference of Circle & Area, Area of parallelogram and triangle.	<ul style="list-style-type: none"> <li>• To find the area of different shapes by counting the number of squares on squared sheet</li> <li>• Nature walk to observe symmetry in nature.</li> <li>• To draw a cube with an edge of 5 cm on isometric dot paper &amp; draw its oblique sketch.</li> </ul>
	Chapter 13 : Congruence of triangle	Congruence of triangles, line segment, One to one correspondence , Criteria SSS, SAS, ASA, RHS	
	Chapter 14 : Practical Geometry	<b>Construction</b> of triangles (SSS, SAS, ASA, RHS) Triangle on basis of sides, angles, properties of triangles	
	Chapter 15 : Symmetry	Line symmetry, reflection and symmetry , Line of symmetry in polygon, Rotational symmetry types, centre, angle of rotation, Order of rotated, symmetry	

<b>21/02/2020 to 1/03/2020</b>	<b>Conduction of oral (Practical) examinations and revision for Final Exams</b>
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**Final Exam (04/03/2020 -15/03/2020)**

Submission of evaluated answer sheet	:	16/12/2020
Result Compilation and Declaration	:	18/12/2020
Record Entry, Reflection Day & Preparation for next session	:	19/12/2020 – 20/12/2020
Dispatching of Report Cards	:	21/12/2020 – 22/12/2020

Name of the books :

Name of the publisher:

**Unit I (Pre Mid-Term)**

<b>Duration</b>	<b>Content</b>	<b>Digital Content</b>	<b>Subject Enrichment Activity</b>
<b>01/04/2019 To 17/05/2019</b>	1. Rational Numbers  2. Operation on Rational Numbers  3. Powers  4. Square and Square roots  6. Playing with Numbers	Introduction, Equivalent rational number, standard form of rational number, comparison of rational numbers, Representation of rational numbers on the number line.  Properties of Rational numbers, Rational numbers between two rational numbers, Absolute value of a rational number. Summary  Introduction Powers with negative exponents Laws of exponents Uses of exponents to express small numbers in standard form Summary  Introduction Properties of square numbers Some more interesting patterns Finding the square of number Square roots Square roots of decimals Estimation of squares Summary  Introduction Numbers in general form Games with numbers Tests of divisibility , Summary	To represent of rational numbers on number line. To find the squares of different numbers

**Pre Mid- Term Exam (18/05/2019 – 27/05/2019)****Unit II (Mid-Term)**

<b>01/07/2019 To 03/09/2019</b>	21. Introduction to coordinate  22. Statistics  5. Cubes and Cube roots	Understand introduction to coordinate plane, draw and read linear graph, summary  Introduction, Bar Graph, grouped frequency table, Histogram,  Cubes , Cube roots, Summary	To locate given coordinates on the graph paper.
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	7. Algebraic Expressions	Expressions, Term, Factors and Coefficients, Monomials, Binomials, Polynomials Like and unlike terms, Addition and subtraction of algebraic expression Multiplication of algebraic expressions,	
	8. Division of Algebraic Expressions	Division of ; (a) monomial with a monomial (b) binomial or trinomial with a monomial (c) one polynomial with another	
	9. Direct and inverse variations	Introduction, Concept of variation, Differentiate between direct and inverse variation, application of direct and inverse variation in solving problems, Summary	
	16. Quadrilateral	Angles sum property Kind of quadrilateral (Understanding quadrilateral)	

**Mid- Term Exam (4/09/2019 - 14/09/2019)**

**Unit III (Post Mid-Term)**

<b>21/09/2019 to 10/12/2019</b>	9. Identities	Standard identities , use of these identities to find the product, Summary	To verify algebraic identity $(a+b)^2=a^2+2ab+b^2$
	10. Factorization of the algebraic expressions	Introduction, Factorization of algebraic expression using different methods; (i) taking out the common factors (ii) regrouping the terms (iii) using identities (iv) factorize a quadratic polynomial of the form $x^2 +ax+b$ summary	To draw front view, side view and top view of given 3 – dimension shapes.
	11. Linear Equations	Linear equation in one variable Solution of linear equation Some applications, Equations having	

	<p>12. Application of percentage</p> <p>13. Compound Interest</p> <p>17. Visualizing solid shapes</p> <p>18. Construction of quadrilaterals</p>	<p>variable on both sides Reducing equation to simpler form, Equation reducible to linear form, Summary</p> <p>Recalling ratio and percentage, Finding increase and decrease percent</p> <p>Compound interest Application of compound interest and formula Summary</p> <p>Introduction , Views of 3D Shapes, Faces, Edges and vertices , Euler's Formula, Summary</p> <p>Construct a quadrilateral when measurement of atleast 5 parts of a quadrilateral are given, construct special type of quadrilaterals (trapezium, parallelogram, rectangle, rhombus, square), Summary</p>	
<b>Post Mid- Term Exam(11/12/2019-20/12/2019)</b>			
<b>Unit IV (Final Exam)</b>			
<b>21/12/2019 to 20/02/2020</b>	<p>23. Pie Chart</p> <p>24. Probability</p> <p>15. Time and Work</p> <p>19. Area</p> <p>20. Volume and Surface area</p>	<p>Pie graph (Introduction to graph)</p> <p>Chance and probability (Data Handling)</p> <p>To apply the concept of direct and inverse variation to time and work problems.</p> <p>Area of circle, triangle, quadrilateral, parallelogram, rectangle, rhombus, and other polygons.</p> <p>Capacity, volume, Volume and surface area of cylinder, cube and cuboid.</p>	To verify the formula of the curved surface area of a right circular cylinder by activity method.
<b>21/2/2020 – 01/03/2020</b>	<b>Conduction of oral (Practical) examinations and revision for Final Exams</b>		
<b>Final Exam (04/03/2020 -15/03/2020)</b>			

## Internal Assessment (For Grade VI to VIII)

<b>Sl. No.</b>	<b>Description</b>	<b>M.M.: 20</b>
1	Paper Pencil Test	5 marks
2	Assessment using multiple strategies; eg: Observation ,Quiz, Debate, Oral Tests, Class discussion etc.	5 marks
3.	Portfolio (Journal or Notebook, Students Artifacts selected from coherent framework along with their reflections)	5 marks
4.	Subject Enrichment Activities (Lab Activities)	5 marks