

# Contents

Preface v

<b>1 INTRODUCTION</b>	<b>1</b>
for the individual; for the classroom teacher; workshops, inservice education, and courses; general features	
<b>2 A METRIC AMERICA</b>	<b>5</b>
what are the advantages of the metric system?; what are the disadvantages of the metric system?	
<b>3 MEASUREMENT</b>	<b>9</b>
what is measurement?; direct and indirect measures; measurement is approximate; nonstandard and standard units; the metric system	
<b>4 THE TEACHING OF MEASUREMENT</b>	<b>13</b>
go metric?; Piaget and measurement; metric curriculum ideas	
<b>5 THE DO'S AND DON'TS OF THE METRIC SYSTEM</b>	<b>21</b>
what are the measurement units?; mass—weight	
<b>6 ACTIVITIES</b>	<b>27</b>
how to use the activities	
<i>Section 1, Linear Measurement</i>	<b>33</b>

<i>Section II</i> , Area and Perimeter	94
<i>Section III</i> , Mass	143
<i>Section IV</i> , Volume and Capacity	195
<i>Section V</i> , Temperature	238
<i>Section VI</i> , Culminating Activities	261

<b>7 IDEAS</b>	<b>291</b>
five-minute fillers; class activities; bulletin boards	
<b>8 THE METRIC SYSTEM IN THE UNITED STATES</b>	<b>309</b>
history, metric historical dates	
<b>9 DESCRIPTION OF DERIVED UNITS</b>	<b>317</b>
speed; velocity; acceleration; force; work; power; energy; pressure; density; specific gravity; mole; degrees kelvin; heat; light	
<b>10 CAREERS AND METRIC</b>	<b>321</b>
<i>Appendix A</i> <b>WORKING WITH POWERS OF     10</b>	<b>324</b>
multiplication; division; numbers between 1 and 0; scientific notation; metric conversions	
<i>Appendix B</i> <b>A DIAGNOSTIC TEST OF THE     METRIC SYSTEM</b>	<b>330</b>
<i>Appendix C</i> <b>A METRIC MASTERY TEST</b>	<b>337</b>
<i>Appendix D</i> <b>METRIC BIBLIOGRAPHY</b>	<b>340</b>
<i>Appendix E</i> <b>METRIC SUPPLIERS</b>	<b>355</b>
<i>Appendix F</i> <b>CONVERSION TABLES</b>	<b>366</b>
approximate conversions; more pre- cise conversions	

Index 375