

Contents

Chemical Reactions

| | | | |
|-----------|--|-----|--|
| 1 | INVESTIGATION | | |
| | Producing Circuit Boards | 3 | |
| 2 | LABORATORY | | |
| | Evidence of Chemical Change | 11 | |
| 3 | READING | | |
| | Physical Changes and Chemical Reactions | 17 | |
| 4 | MODELING | | |
| | Chemical Reactions at the Molecular Scale | 25 | |
| 5 | TALKING IT OVER | | |
| | Physical or Chemical Change? | 31 | |
| 6 | LABORATORY | | |
| | Comparing the Masses of Reactants and Products | 35 | |
| 7 | MODELING | | |
| | Explaining Conservation of Mass | 39 | |
| 8 | INVESTIGATION | | |
| | Chemical Batteries | 43 | |
| 9 | LABORATORY | | |
| | Thermal Energy and Reactions | 49 | |
| 10 | DESIGN | | |
| | Developing a Prototype | 53 | |
| 11 | DESIGN | | |
| | Refining the Design | 57 | |
| 12 | LABORATORY | | |
| | Recovering Copper | 61 | |
| 13 | LABORATORY | | |
| | Another Approach to Recovering Copper | 65 | |
| | Unit Summary | 71 | |
| | Appendices | 73 | |
| | Glossary | 107 | |
| | Index | 111 | |
| | Credits | 115 | |