

Contents

About this course	4
Using the course components	5

Practicals

The numbers in the titles match the corresponding textbook chapters. Some chapters have several practicals.

About the practicals	6
2A Separating salt and sand	8
2B Distilling cola	9
2C Separating the colours in ink	10
5 Changing the quantity of a reactant	11
6 The composition of magnesium oxide	12
8A Electrolysis of sodium chloride solution	13
8B Electroplating copper with nickel	14
9A Exothermic and endothermic reactions	15
9B Comparing two fuels	16
9C Investigating two reversible reactions	17
10A Reaction rate and surface area	18
10B Reaction rate and concentration	19
10C Reaction rate and temperature	20
10D Reaction rate and quantity of catalyst	21
11A Comparing the reactions of two acids	22
11B Neutralising vinegar with slaked lime	23
11C Making Epsom salts	24
11D Comparing antacid tablets	25
13 Arranging metals in order of reactivity	26
14 Extracting copper from copper(II) oxide	27
15 Investigating rusting	28
16 Making a fertiliser	29
17 Cracking hydrocarbons	30
19A Testing for anions	31
19B Testing for cations	32
Answers for questions in the practicals	33

Worksheets

The numbers in the titles match the corresponding textbook chapters. There is a worksheet for each chapter.

1 States of matter	34
2 Separating substances	36
3 Atoms and elements	38
4 Atoms combining	40
5 Reacting masses and chemical equations	42
6 Using moles	44
7 Redox reactions	46
8 Electricity and chemical change	48
9 Energy changes, and reversible reactions	50
10 The speed of a reaction	52
11 Acids and bases	54
12 The Periodic Table	56
13 The behaviour of metals	58
14 Making use of metals	60
15 Air and water	62
16 Some non-metals and their compounds	64
17 Organic chemistry	66
18 Polymers	68
19 In the lab	70
Answers for worksheet questions	72

Answers for questions in the student book

Answers are provided here, for quick reference, for all questions in the textbook.

Answers for questions within chapters	77
Answers for exam questions	94