90944R



## Level 1 Science, 2014

# 90944 Demonstrate understanding of aspects of acids and bases

9.30 am Monday 10 November 2014 Credits: Four

### RESOURCE BOOKLET

Refer to this booklet to answer the questions for 90944.

Check that this booklet has pages 2–3 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

### **Table of Ions**

+1	+2	+3	-3	-2	-1
NH <sub>4</sub> <sup>+</sup>	Ca <sup>2+</sup>	Al <sup>3+</sup>		O <sup>2-</sup>	OH <sup>-</sup>
Na <sup>+</sup>	Mg <sup>2+</sup>	Fe <sup>3+</sup>		S <sup>2-</sup>	Cl <sup>-</sup>
K <sup>+</sup>	Cu <sup>2+</sup>			CO <sub>3</sub> <sup>2-</sup>	NO <sub>3</sub>
Ag <sup>+</sup>	Pb <sup>2+</sup>			SO <sub>4</sub> <sup>2-</sup>	HCO <sub>3</sub>
$\mathrm{H}^{+}$	Fe <sup>2+</sup>				F
	Ba <sup>2+</sup>				
	Zn <sup>2+</sup>				

# PERIODIC TABLE OF THE ELEMENTS

18 2 He	10 Ne	18 <b>Ar</b>	36 <b>Kr</b>	54 Xe	86 <b>Rn</b>	
17	9 F	17 CI	35 Br	53 I	85 A <b>t</b>	
16	© ⊗	91 S	34 Se	52 Te	84 <b>Po</b>	
15	Z	15 <b>P</b>	33 As	51 <b>Sb</b>	83 <b>Bi</b>	
41	) 9	14 <b>S</b>	32 Ge	50 <b>Sn</b>	82 <b>Pb</b>	
13	<b>B</b>	13 Al	31 <b>Ga</b>	49 In	81 T1	
		12	30 <b>Zn</b>	48 Cd	80 <b>Hg</b>	
		11	29 Cu	47 <b>Ag</b>	79 <b>Au</b>	Rg
		10	28 <b>N</b>	46 <b>Pd</b>	78 <b>Pt</b>	110 <b>Ds</b>
		O	27 C <b>0</b>	45 <b>Rh</b>	77 Ir	109 Mt
	1	∞	26 Fe	44 <b>Ru</b>	92 Os	Hs
H H		_	25 Mn	43 Tc	75 <b>Re</b>	107 <b>Bh</b>
Number		9	24 C <b>r</b>	42 <b>Mo</b>	74 W	106 S <b>g</b>
Atomic Number		Ŋ	23 V	41 <b>Nb</b>	73 <b>Ta</b>	105 <b>Db</b>
		4	22 <b>Ti</b>	40 <b>Zr</b>	72 Hf	104 <b>Rf</b>
		ო	21 Sc	39 Y	71 <b>Lu</b>	103 Lr
2	4 <b>Be</b>	12 <b>Mg</b>	20 Ca	38 <b>Sr</b>	56 <b>Ba</b>	88 <b>Ra</b>
7	J. Ti	11 <b>Na</b>	19 <b>K</b>	37 <b>Rb</b>	55 Cs	87 Fr

70	102
<b>Yb</b>	<b>No</b>
69	101
Tm	<b>Md</b>
68	100
Er	<b>Fm</b>
<b>OH</b>	99 Es
66	98
<b>Dy</b>	Cf
65	97
Tb	<b>Bk</b>
64	96
<b>Gd</b>	<b>Cm</b>
63	95
Eu	<b>Am</b>
62	94
<b>Sm</b>	<b>Pu</b>
61	93
<b>Pm</b>	<b>Np</b>
<b>PN</b>	92 U
59	91
<b>Pr</b>	<b>Pa</b>
58	90
Ce	<b>Th</b>
57	89
La	<b>Ac</b>