Question 1

1(d)	yttrium < nickel < samarium < strontium (2) if 2 marks not scored: 1 mark if one consecutive pair reversed OR strontium < samarium < nickel < yttrium	**2**

Question 2

2(d)	niobium < nickel < iron < magnesium (2) 1 mark if one pair reversed	**2**

Question 3

3(d)	lead<nickel<iron<magnesium (2) if 2 marks not scored: 1 mark for 1 pair adjacent reversed OR magnesium<iron<nickel<lead	**2**

Question 4

4(d)	mercury < tin < iron < magnesium (2) 1 mark if one pair reversed	**2**

Question 5

5(c)(i)	cobalt < zinc < magnesium < barium if 2 marks not scored, 1 mark for all reversed / one consecutive pair reversed	**2**

Question 6

6(c)	copper , zinc , magnesium , potassium (2) if 2 marks not scored: 1 mark for one consecutive pair reversed	**2**

Question 7

7(e)	tin < nickel < magnesium < sodium (2) IF two marks not scored, 1 mark for one adjacent pair reversed.	**2**

Question 8

8(e)	**M1** aluminium oxide layer (1) **M2** (oxide layer) is unreactive (1)	**2**

Question 9

9(c)(i)	iron is more reactive than copper	**1**
9(c)(ii)	$Fe + CuSO_4 \rightarrow Cu + FeSO_4$	**1**
9(c)(iii)	electrolysis	**1**

Question 10

10(b)(i)	any metal above zinc in reactivity series	**1**
10(b)(ii)	any metal below iron in reactivity series	**1**