


Year 10 GCSE Chemistry Tasks


**KEEP
CALM
AND
STUDY
CHEMISTRY**



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The Reactivity Series	
Metals Key words	
Aluminium and Titanium	
Transition metals	
Displacement reactions	

Use Kerboodle textbook and Google as well as what you have learnt in lessons to complete these mini tasks. They can be completed on **paper**.

Metals key words

Key word	Meaning
Ore	
Native State	
Reduction	
Atom	
Alloy	
Transition metal	

Aluminium and titanium

Which words can be used to describe titanium and aluminium?

weak
heavy
reactive
Low density

strong
High density
light
cheap
expensive
unreactive

Why is aluminium used for bicycles?



Why is titanium used for jet engines?



Why do aluminium and titanium not normally react?



Why are aluminium and titanium so expensive?



Transition metals

1 H 1.00794																	2 He 4.002602
3 Li 6.941	4 Be 9.012182											5 B 10.811	6 C 12.0107	7 N 14.00674	8 O 15.9994	9 F 18.9984032	10 Ne 20.1797
11 Na 22.989770	12 Mg 24.3050											13 Al 26.981538	14 Si 28.0855	15 P 30.973761	16 S 32.066	17 Cl 35.4527	18 Ar 39.948
19 K 39.0983	20 Ca 40.078	21 Sc 44.955910	22 Ti 47.867	23 V 50.9415	24 Cr 51.9961	25 Mn 54.938049	26 Fe 55.845	27 Co 58.933200	28 Ni 58.6534	29 Cu 63.545	30 Zn 65.39	31 Ga 69.723	32 Ge 72.61	33 As 74.92160	34 Se 78.96	35 Br 79.504	36 Kr 83.80
37 Rb 85.4678	38 Sr 87.62	39 Y 88.90585	40 Zr 91.224	41 Nb 92.90638	42 Mo 95.94	43 Tc (98)	44 Ru 101.07	45 Rh 102.90550	46 Pd 106.42	47 Ag 196.56655	48 Cd 112.411	49 In 114.818	50 Sn 118.710	51 Sb 121.760	52 Te 127.60	53 I 126.90447	54 Xe 131.29
55 Cs 132.90545	56 Ba 137.327	57 La 138.9055	58 Ce 140.12	59 Pr 140.90765	60 Nd 144.242	61 Pm (145)	62 Sm 150.36	63 Eu 151.964	64 Gd 157.25	65 Tb 158.92535	66 Dy 162.50	67 Ho 164.93032	68 Er 167.259	69 Tm 168.93032	70 Yb 173.054	71 Lu 174.967	72 Hf 178.49
87 Fr (223)	88 Ra (226)	89 Ac (227)	104 Rf (261)	105 Db (262)	106 Sg (263)	107 Bh (262)	108 Hs (265)	109 Mt (266)	110 (269)	111 (272)	112 (277)	114 (289)	(287)	116 (289)	(289)	118 (293)	

Name three transition metals

Label the transition metal part of the periodic table above.

Property	Meaning	Property	Meaning
High density		Malleable	
High melting point		Ductile	
High conductivity		Lustrous	

Displacement reactions

Most
reactive



Potassium

Sodium

Lithium

Calcium

Magnesium

Aluminium

Carbon

Zinc

Iron

Tin

Lead

Copper

Mercury

Silver

Gold

Least
reactive

A more reactive metal can displace a less reactive metal.

e.g. magnesium + copper sulphate \rightarrow magnesium sulphate + copper

Finish these word equations:

Iron + copper sulphate \rightarrow

Tin + copper chloride \rightarrow

Lithium + iron sulphate \rightarrow

Sodium + aluminium chloride \rightarrow

Sodium and magnesium are used to displace titanium from titanium chloride. What does this tell you about titanium?