

### C1 Topic 3 metals and their uses revision

<b>Quarrying transition elements and transition elements in the periodic table</b>	
1. What do we call a rock which contains a high concentration of a metal?	Ore
2. Name 2 unreactive metals which are found in pure form in the Earth	Gold, silver, platinum
3. How do we extract metals less reactive than carbon?	Heat with carbon
4. State 2 useful properties of aluminium and titanium	Low density, resist corrosion
5. What is a low grade ore?	Doesn't contain much metal
<b>Reduction and electrolysis</b>	
6. Why would an aluminium ion go to the negative electrode?	Because it has a positive charge
7. How do we extract metals which are more reactive than carbon?	Electrolysis
8. State a problem of electrolysis	Uses LOTS OF electricity
9. When oxygen is removed from a metal, we say it has been .....	Reduced
10. Which electrode do copper ions go to? Why?	Negative, they have a positive charge
<b>Copper extraction (and other metals)</b>	
11. What do we call it when we use bacteria to extract copper?	Bioleaching
12. Where is iron extracted?	Blast furnace
13. Name 2 methods to extract copper from solutions of copper salts	Displacement with iron, electrolysis
14. How can we purify copper?	Electrolysis
15. What do we call it when we use plants to extract copper?	Phytomining
16. Why is it expensive to extract aluminium and titanium?	LOTS of stages/ LOTS of electricity need
17. Give a use of copper	Electrical wiring, plumbing
18. Give two properties of copper	Good conductor of electricity and heat, does not react with water, can be bent
<b>Alloys</b>	
19. What is an alloy?	Mixture of metals
20. Which metal is in steel?	Iron
21. State 2 advantages of stainless steel	Doesn't corrode, strong
22. Which type of steel is easily shaped?	Low carbon
23. Which type of steel is very hard	High carbon
24. What is the problem with pure metals?	Too soft
<b>Recycling metals</b>	
25. What do we call elements in the centre of the Periodic Table?	Transition elements

26. Why should we recycle metals?	Save resources and use less energy
27. Give a disadvantage of recycling	The different metals/parts need to be sorted