Materials and their properties · notes sheet

Name: _____ Date: _____ AQA 3.1.6

1. Strength and hardness

Property	Meaning	Example material and product
Strength		
Hardness		

Lab test: the scratch test.	
I predict:	**What happened and why:**

2. Toughness and brittleness

Property	Meaning	Example material and product
Toughness		
Brittleness		

Lab test: the hammer test.	
I predict:	**What happened and why:**

3. Elasticity, plasticity, malleability, ductility

Property	Meaning	Example material and product
Elasticity		
Plasticity		
Malleability		
Ductility		

Lab test: pull and let go.	
I predict:	**What happened and why:**

4. Conductivity

Property	Good conductor	Good insulator
Thermal		
Electrical		

Lab test: three rods in hot water.	
I predict:	**What happened and why:**

5. Density, absorbency and fusibility

Property	Meaning	Example material and product
Density		
Absorbency		
Fusibility		

Lab test: the water tank.	
I predict:	**What happened and why:**

6. Quick fire

Situation	Property
Resists scratching	
Absorbs impact	
Returns to shape	
Drawn into wire	
Lets heat pass	
Soaks up water	

Exam question (4 marks)

A saucepan has a copper base and a polypropylene handle. Explain why each material was chosen. *Tip: make a point, then link it with **so…***