







<h3>THE SOURCE OF SILVER</h3> <ul style="list-style-type: none"> • Silver is sourced from the ground. The silver ore is mined through open-pit and underground methods. The top producing silver mines in order of production are Mexico (18.7%), China (15.1%), and Peru (14.1%). These mines are able to produce commercial fine-grade silver, which means that the silver is 99.9% pure. • Silver is found in elemental form and also in various ores such as argentite and horn silver. • The main sources of silver are copper, copper-nickel, gold, lead, and lead-zinc ores. Nuggets of native silver can be found in minerals or sometimes in running rivers. 	<h1>SILVER</h1> <div style="text-align: center;">  </div> <p>The chemical element for silver is Ag. silver has a melting point of 961.78°C</p> <ul style="list-style-type: none"> • The boiling point of silver is 2,162°C • Silver is a better conductor than copper but due to its expensive prices copper is used instead. • Silver tarnishes quite readily in air or water which have hydrogen sulfide or ozone. 	<h3>THE APPLICATIONS & USES OF SILVER</h3> <ul style="list-style-type: none"> • Silver is a precious metal because it is rare and valuable, and it is a noble metal because it resists corrosion and oxidation. Silver is most commonly used for the following: • Jewelry, due to its great finish and malleability. This means it can be formed and shaped without fracture (cracking, breaking) • Tableware, as it resists corrosion and oxidation also it does not wear or tarnish after being regularly used or handled • Mirrors, as silver itself is a highly reflective metal, reflecting up to 95% of light. Layers of silver are coated over the mirror to create the reflection. • Awards, when placing second in a competition the medal is usually made from silver as silver is the 2nd most precious metal, gold being the first. 
<h3>PROPERTIES OF SILVER</h3> <ul style="list-style-type: none"> • Pure silver is nearly white in colour, lustrous, soft, very ductile, malleable and is an excellent conductor of heat and electricity. It is not a chemically active metal, but it is attacked by nitric acid and by hot concentrated sulfuric acid. • Being an excellent conductor is the ability of the material to leave electricity freely flow through. • It is also ductile meaning it can be permanently stretched out into a thin wire without fracture. • Silver is also lustrous this is another word for shiny. This is why it is the most common material that mirrors are made from. • It does not oxidize in air but reacts with the hydrogen sulfide present in the air, forming silver sulfide in other words causing it to tarnish. This is why silver objects need regular cleaning. Silver is stable in water. 	 <p>SCAN ME!!!!</p> 	<h3>MY PRODUCT</h3> <ul style="list-style-type: none"> • The product I chose was a camera film • The use of silver in photography is essential due to photochemistry. • The light sensitivity of the silver halides is key to the photographic process. Tiny crystals of all three of these compounds are used in making photographic film. When exposed to light, a chemical reaction darkens the film to produce an image. • Another product is electrical switches. Silver is used in switches as it has amazing thermal and electrical conductivity, allowing the current to flow through freely. 



CBA 1 Evaluation

Research & Analysis (The origin of the Material):

Do you think you found out all the relevant information about where the material came from? INITIALLY I DIDN'T HAVE ALL THE INFORMATION ABOUT WHERE SILVER IS SOURCED, I THEN RESEARCHED FURTHER AND ADDED IN EXTRA DETAIL.

How did you get on researching the material's origin? I FOUND RESEARCHING QUITE EASY DUE TO THE AMOUNT OF INFORMATION AVAILABLE TO ME THROUGH GOOGLE.

Highlight a few areas where you can improve your investigation? AT THE START I COULD'VE ADDED MORE INFORMATION ABOUT WHERE SILVER WAS SOURCED. I HAVE MADE THE CHANGES IN MY CURRENT POSTER.

Properties & Applications of the Material:

Were you successful at finding out about the properties? Yes I WAS SUCCESSFUL, ONCE I FILTERED OUT THE RELEVANT INFORMATION FOR THE POSTER.

Explain how you found out about the properties? I SEARCHED ON GOOGLE USING THE KEY WORDS "PROPERTIES OF SILVER" I THEN EXTRACTED DIFFERENT INFORMATION FROM VARIOUS SITES.

Highlight where you can improve on these sections of the task? I COULD INCLUDE EXTRA PICTURES TO ENHANCE THE OVERALL LOOK.

Were you happy with the way the properties section turned out? Yes I am very happy with the way it turned out as I FEEL IT IS STRAIGHT FORWARD AND INFORMATIVE.

How would you rate your investigation of the applications? I WOULD GIVE MY INVESTIGATION A HIGH RATING AS MY RESEARCH HAS PROVIDED ME WITH NECESSARY INFORMATION TO CREATE A VERY INFORMATIVE POSTER.

**Properties & Applications of the Material:**

How did you get on researching the material's uses? IT TOOK A WHILE TO FIND THE MOST RELEVANT INFORMATION BUT I ADVENTUALLY PICKED OUT WHAT I THOUGHT TO BE MOST INTERESTING.

Highlight where you can improve on these sections of the task? I COULD IMPROVE BY ADDING IN SUITABLE IMAGES AND INFORMATION TO IT. ABOUT FUTURE DEVELOPMENT.

Chosen Product

Do you think the product you chose was appropriate? YES, I DO FEEL LIKE MY PRODUCT WAS APPROPRIATE AS SILVER IS A KEY PART OF THE DEVELOPMENT OF PHOTOS.

Did you provide detailed information on why the product needs the material to work? YES I DID PROVIDE DETAILED INFORMATION ON WHY SILVER IS USED IN PHOTOGRAPHY.

What new skills did you learn in this task? IN THIS TASK I DEVELOPED MY RESEARCH SKILLS, I IMPROVED MY I.T SKILLS AND I LEARNED HOW TO CREATE A QR CODE.

What aspects of the task went well? THE FINAL DESIGN WENT VERY WELL AND I AM VERY HAPPY WITH HOW IT TURNED OUT.

What aspects of the task could have went better? SOME OF MY EARLIER DRAFTS COULD'VE BEEN BETTER.

Did you find the task good for your learning? YES, AS I FOUND IT VERY INTERESTING FROM START TO FINISH.

Did you find the task enjoyable? YES, I LOVE THE IDEA OF CREATING A POSTER FOR MY C.B.A.

Teacher Annotations

An excellent range of sources were used as part of the research and effectively used a QR code to link a video to further research material.

The work does demonstrate a comprehensive awareness of the engineering principles of silver within engineering.

Shows clear evidence throughout evaluation of critical analysis of the work which was amended to improve throughout the Classroom-Based Assessment.

Excellent presentation of information with the use of sections on the poster which were clear and easy to follow.

Overall Judgement

Exceptional

