Science 10 Enriched

Name: .

Date: .

**CSI Investigation Project**

**Objective:** To demonstrate understanding and application of concepts learned on the field trip using creative methods.

**Example of Creative Methods:**  Short movie, made-up murder story, clay model, in-class presentation using class members as murders and suspects, skit, poster, story book, puppet show, interactive display, made-up scientific journal kept by an imaginary CSI Investigator, etc., you are not limited to these ideas.

**Proposal (one per group)**

I am working in a □ Group □ Individually

If in group please specify the different group members:

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Project Idea:

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**Note: Your idea must reflect how many group members you have.**

**Due Dates:**

The **proposal** portion is due **Wednesday 19th December lunch in W204**. We will look over your proposals quickly and approve them on the spot. If any issues come up in terms of group sizes we will address the issue then and there.

On the Presentation day, we will split the class into four big groups; in these big groups you will present your project. A leader will be present at each group and your presentations might be filmed for marking purposes. The presentation will be during **lunch on Monday 14th January in W204**

**Rubric for Assessment:**

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| --- | --- | --- | --- | --- |
|  | Beginning | Developing | Accomplished | Exemplary |
| Content-  Definitions | Uses terms. No clear definition | Uses only a few terms and defines them | Uses most terms and defines them | Uses all terms, defines clearly and accurately. |
| Words you must define: DNA structure, DNA extraction, PCR, Gel electrophoresis, Agglutination, Antigens, Antibodies, rH factor, Base pairs, Centrifuge, Short Tandem Repeats. | | | | |
| Content-Explanations | Disorganised, major points missing | Mostly organised, some points may be unclear or missing | Well organised. A few points may be unclear. Scientific words used. | Clear, correct, concise. Uses scientific words accordingly to describe all major points. |
| Points you must include: DNA extraction process (set-up, what happens and why), PCR process (set-up, what happens and why), Gel electrophoresis (set-up, what happens and why), Agglutination (what happens and why), Role of antigens, antibodies and rH factor in blood, different blood types (reactions of blood), Blood testing (how, pros and cons), Finger printing testing (how, pros and cons) | | | | |
| Application | Does not apply concepts to real world applications | Applies concepts to real world application however discussion lacks depth. | Applies concepts to real world applications and situations thoughtfully. Uses crime scene investigation as an example only. | Applies concepts in depth to real world applications and situations thoughtfully. Uses examples other than crime scene investigation. |
| Presentation | No visual aids. Audience never engaged. | Somewhat Interesting. Audience not engaged much. Visual aids do not connect to concepts. | Quite interesting. Audience engaged mostly. Visual aids help with understanding. | Very interesting. Audience engaged at all times. Creative. Visual aids help understanding greatly. |