Notice of Assessment Task
Year 11 *Chemistry*
Secondary Source Investigation

Date of initial notification:	Date of submission of task:
Thursday 2 March 2023 Week 5, Term 1	Thursday 16 March 2023 Week 7, Term 1

Teacher:	Task Number:
Mrs Maynard & Miss Mar	1

Time Allowed:	Weighting of task:
2 Weeks	30%

Course Component/Focus area/topic/module:
Module 1: Properties & Structure of Matter

Task Description

Research and Analyse Data

"Compare and explain the similarities and differences between intermolecular and intramolecular bonding and the effect it has on physical properties of elements and compounds."

Part A

- Research and produce a poster for all the different types of intermolecular bonding (dispersion, dipole-dipole and hydrogen bonding). Posters should include:
- Definitions, general physical properties and labelled diagrams of each.
- You will be allocated a set of elements and/or compounds. You are to construct a comparison table to show of your set of elements and/or compounds and should include the following:
  - Hand drawn, labelled diagrams of the set of elements/compounds.
  - Type of intermolecular bonding, atoms occurs between and strength
  - Physical properties
  - Explanation of each property related to the type of intermolecular bonding.
- A reference list will be provided using the Harvard Referencing system. This should be a separate page.

Part B

- Complete an Extended Response (unseen question) in class on the due date. This section will relate to intermolecular bonding, physical properties using data that is provided to you.
- Students will not be able to access Part A whilst completing Part B.
- Students will have approximately 30 minutes to complete the unseen question.

Outcomes/Competencies to be assessed in this task:	
CH11-5	analyses and evaluates primary and secondary data and information
CH11-8	explores the properties and trends in the physical, structural and chemical aspects of matter

Feedback: How will I receive feedback on this task?

☐ Written

☐ Verbal

Students will have one opportunity for teacher feedback PRIOR to submission. This will occur in Week 6.

MARKING GUIDELINES Secondary Source Investigation

Outcomes		Elementary	Basic	Sound	Thorough	Extensive	Mark
Knowledge and Understanding CH11-8 *Explores the properties and trends in the physical, structural and chemical aspects of matter*	*POSTER – INTERMOLCEULAR BONDING*	○ Attempts to/or provides a simple description of one or some of intermolecular bonding (hydrogen bonding, dipole-dipole and dispersion). ○ Attempts to produce some diagrams of each type of intermolecular bonding, ○ Lists some the general physical properties that some of the type of intermolecular bonding experiences.	○ Attempts to describe each type of intermolecular bonding (hydrogen bonding, dipole-dipole and dispersion) using basic scientific terms. ○ Produces diagrams of each type of intermolecular bonding, with minimal labels. ○ Identifies some of the physical properties for each intermolecular bonding. ○ Describes the how the identified properties related to the intermolecular bonding using basic scientific terms.	○ Describes each type of intermolecular bonding (hydrogen bonding, dipole-dipole and dispersion) using some correct scientific terminology. ○ Produces mostly labelled diagrams of each type of intermolecular bonding ○ Identifies most the physical properties for each intermolecular bonding. ○ Explains the how the identified properties related to the intermolecular bonding using some correct scientific terminology.	○ Describes each type of intermolecular bonding (hydrogen bonding, dipole-dipole and dispersion) using correct scientific terminology. ○ Produces clear labelled diagrams of each type of intermolecular bonding. ○ Outlines all the physical properties for each intermolecular bonding. ○ Outlines and explains the how the identified properties related to the intermolecular bonding using correct scientific terminology.	○ Describes in detail each type of intermolecular bonding (hydrogen bonding, dipole-dipole and dispersion) using precise scientific terminology. ○ Produces clear and concise labelled diagrams of each type of intermolecular bonding. ○ Outlines succinctly all the physical properties for each intermolecular bonding. ○ Outlines and explains clearly the how the identified properties related to the intermolecular bonding using precise scientific terminology.	
		1-3 marks	***4-6 marks***	***7-9 marks***	***10-12 marks***	***13-15 marks***	
Knowledge and Understanding CH11-8 *Explores the properties and trends in the physical, structural and chemical aspects of matter*	*PRESENTATION*	○ Produces a presentation with limited organization. ○ Some ideas are limited in nature. Scientific terminology not used.	○ Produces a presentation with some organization with some headings. ○ Ideas are presented in a manner which is basic. ○ Scientific terminology used but not in context.	○ Produces a presentation which is mostly logical with headings. ○ Ideas are presented in a manner which is sound. ○ Scientific terminology used sporadically in the presentation.	○ Produces a logical presentation with headings and/or subheadings. ○ Ideas are presented in full. ○ Scientific terminology used throughout the presentation.	○ Produces a logical and well thought out presentation with appropriate headings and/or subheadings. ○ Ideas are succinct and concise. ○ Scientific terminology used consistently throughout the presentation.	
		1-2 marks	***3-4 marks***	***5-6 marks***	***7-8 marks***	***9-10 marks***	
Analysing data and information CH11-5 *Analyses and evaluates primary and secondary data and information*	*EXTNDED RESPONSE*	○ Attempts to identify some data points to the type of intermolecular bonding or property/properties. ○ Provides some relevant information.	○ Some data provided is correctly matched to the compounds/elements provided. ○ Some intermolecular bonding is correctly identified to the corresponding elements/compounds. ○ Some data points are describes in in relation to the property exerted by each intermolecular bonding.	○ Data provided is correctly matched to the compounds/elements provided. ○ Each intermolecular bonding is correctly identified to the corresponding elements/compounds. ○ Some data points are explained in in relation to the property exerted by each intermolecular bonding.	○ Data provided is correctly matched to the compounds/elements provided. ○ Each intermolecular bonding is correctly identified to the corresponding elements/compounds. ○ Data points are explained in in relation to the property exerted by each intermolecular bonding. ○ Provides a justification of each data point.	○ Data provided is correctly matched to the compounds/elements provided. ○ Each intermolecular bonding is correctly identified to the corresponding elements/compounds. ○ Data points are explained in detail in relation to the property exerted by each intermolecular bonding. ○ Provides a clear justification of each data point.	
		1-2 marks	***3-4 marks***	***5-6 marks***	***7-8 marks***	***9-10 marks***	
Analysing data and information CH11-5 *Analyses and evaluates primary and secondary data and information*	*REFERENCE LIST*	○ Limited use of a reference list ○ Use of 0-2 references	○ Provides a reference list and attempts to use the appropriate reference style ○ Use of 2-3 references	○ Provides a reference list using the appropriate referencing style that may be limited and/or have minor errors ○ Use of 5-7 references	○ Provides an accurate reference list, using the appropriate referencing style with some minor errors ○ Use of 7-9 references	○ Provides an accurate reference list using the Harvard referencing style. ○ Use of 10+ references.	
		1 mark	***2 marks***	***3 marks***	***4 marks***	***5 marks***	

Total	40

Feedback:

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- *If you are absent on the day that the task is due, you MUST see your teacher the next day (not your next lesson) that you are present at school to show your medical certificate or produce a misadventure form (refer to your Assessment Booklet for a copy of the form).*
- *Exemptions and extensions for any other reason will only be determined at the discretion of the Head Teacher, and only in extenuating circumstances. You must advise the Head Teacher as soon as possible if you know you are unable to submit the task on the due date.*
- *All appeals must be lodged within 48hrs of receipt of the task. Students who may consider an appeal are not permitted to take their task home. The original task cannot be altered in any way prior to the appeal process.* See Assessment booklet for details.