

Assessment Task Notification

RESPECT | RESPONSIBILITY | PERSONAL BEST



Faculty: Science	Course: Physics	Time allowed: 6 weeks
Teacher: Frank Mesina		Email: frank.mesina@det.nsw.edu.au
Task number: 3	Title: Research Task	
Year: 12	Due date: 26/7/24	Weighting: 20%

Course Outcomes That May be assessed in this assessment task:

Skills:

- PH11/12-4 selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media
- PH11/12-5 analyses and evaluates primary and secondary data and information
- PH11/12-6 conducts investigations to collect valid and reliable primary and secondary data and information
- PH11/12-7 communicates scientific understanding using suitable language and terminology for a specific audience or purpose

Knowledge and Understanding:

- PH12-14 describes and analyses evidence for the properties of light and evaluates the implications of this evidence for modern theories of physics in the contemporary world

21st Century and employment related skills:

<input checked="" type="checkbox"/>	Communication	<input type="checkbox"/>	Use of technology
<input checked="" type="checkbox"/>	Critical Thinking	<input checked="" type="checkbox"/>	Self-reflection and refinement
<input checked="" type="checkbox"/>	Creativity	<input checked="" type="checkbox"/>	Problem Solving
<input type="checkbox"/>	Collaboration	<input type="checkbox"/>	Initiative and Enterprise
<input checked="" type="checkbox"/>	Planning and Organising	<input type="checkbox"/>	Cross-Cultural Understanding

TASK DESCRIPTION

The 20th century saw major developments in physics as existing theories and models were challenged by new observations that could not be explained. These observations led to the development of quantum theory and the theory of relativity. Technologies arising from these theories have shaped the modern world. For example, the independence of the speed of light on the frame of observation or the motion of the source and observer had significant consequences for the measurement, and concepts about the nature, of time and space.

Assessment criteria:**You will be assessed on your ability to:**

- Process appropriate data and information using a range of appropriate media
- Analyse secondary data and information
- Solves scientific problems using secondary data and critical thinking skills
- Communicate scientific understanding using suitable language and terminology for a specific audience or purpose

Method of task submission:

This task is to be submitted to the library as a hard copy no later than 8.15 on the due date. In addition this may also be submitted as an electronic copy if you feel that this will show your work in a better light, but this does not remove the requirement to hand in a hard copy

Marking guidelines:

Grade	Descriptor	Mark
A	See attached marking rubric	
B		
C		
D		
E		
N (Stages 5 and 6)		