THE RIVERS SECONDARY COLLEGE
The heart of secondary education for Lismore

Assessment Task Notification

RICHMOND RIVER HIGH CAMPUS

Task Number	1	**Task Name**	Projectile Motion Practical Task
Course	Physics	**Faculty**	Science
Teacher	Mr Yates	**Head Teacher**	Mr Yates
Issue date	10th November 2023	**Due date**	In class 24th November 2023
Focus (Topic)	Projectile Motion	**Task Weighting**	20%

Outcomes

A student:

PH 12-2 - designs and evaluates investigations in order to obtain primary and secondary data and information
PH 12-3 - conducts investigations to collect valid and reliable primary and secondary data and information
PH 12-5 - analyses and evaluates primary and secondary data and information
PH 12-12 - describes and analyses qualitatively and quantitatively circular motion and motion in a gravitational field, in particular, the projectile motion of particles

Task description

Students will be provided two lessons in class to design and conduct a first-hand investigation to measure the variables that affect and characterise projectile motion. Using their own data, students will process and analyse their information to draw their own conclusion about projectile motion variables and how they affect the motion using qualitative and quantitative analysis. As part of the design process, students will be required to evaluate their investigation in terms of accuracy, reliability and validity.

Marking Guidelines

CRITERIA	MARK/GRADE
An OUTSTANDING performing student will produce work that: • demonstrates an extensive knowledge and understanding of scientific concepts, including complex and abstract ideas • communicates scientific understanding succinctly, logically, and consistently using correct and precise scientific terms and application of nomenclature in a variety of formats and wide range of contexts • designs and plans investigations to obtain accurate, reliable, valid and relevant primary and secondary data, evaluating risks, mitigating where applicable, and making modifications in response to new evidence • selects, processes, and interprets accurate, reliable, valid, and relevant qualitative and quantitative, primary or secondary data, and represents it using a range of scientific formats to derive trends, show patterns and relationships, explain phenomena, and make predictions • designs solutions to scientific problems, questions, or hypotheses using selected accurate, reliable, valid, and relevant primary and secondary data, and scientific evidence, by applying processes, modelling and formats • applies knowledge and information to unfamiliar situations to propose comprehensive solutions or explanations for scientific issues or scenarios	A
A HIGH performing student will produce work that: • demonstrates thorough knowledge and understanding of scientific concepts, including complex and abstract ideas • communicates scientific understanding, logically, and effectively using correct scientific terms and application of nomenclature in a variety of formats and wide range of contexts • designs and plans investigations to obtain accurate, reliable, valid and relevant primary and secondary data, evaluating risks, mitigating where applicable, and making some modifications in response to new evidence • selects, processes, and interprets accurate, reliable, valid, and relevant qualitative and quantitative, primary or secondary data, and represents it using a range of scientific formats to derive trends, show patterns and relationships • designs solutions to scientific problems, questions, or hypotheses using selected accurate, reliable, and valid primary and secondary data, and scientific evidence, by applying processes, and formats • applies knowledge and information to unfamiliar situations to propose explanations for scientific issues or scenarios	B
A SOUND performing student will produce work that: • demonstrates sound knowledge and understanding of scientific concepts • communicates scientific understanding effectively using scientific terms and application of nomenclature • designs and plans investigations to obtain primary and secondary data and evaluates risks • processes and interprets primary and secondary data, and represents it using a range of scientific formats • identifies scientific problems, questions, or hypotheses and applies processes, and formats to primary or secondary data • applies knowledge and information relevant to scientific issues or scenarios	C
A BASIC performing student will produce work that: • demonstrates basic knowledge and understanding of scientific concepts • communicates scientific understanding using basic scientific terms and application of nomenclature • implements scientific processes to obtain primary and secondary data and identifies risks • processes primary or secondary data, and represents it using scientific formats • responds to scientific problems, questions, or hypotheses recalls scientific knowledge and information	D
A LIMITED performing student will produced work that: • demonstrates limited knowledge and understanding of scientific concepts • communicates scientific understanding using limited scientific terms • partially outlines investigations to obtain data and information • provides simple descriptions of scientific phenomena • recalls basic scientific knowledge and information	E
• **Late submission – no misadventure** • **Assessment not submitted**	Parental notification