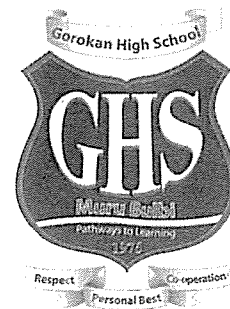


Assessment Task Notification

RESPECT | RESPONSIBILITY | PERSONAL BEST



Faculty: Science	Course: Stage 4 - Year 7	Time allowed: 4 Weeks
Teacher: Mesina	Email: frank.mesina@det.nsw.edu.au	
Task number: 1	Title: Branches of Science Research Task	
Year: 7	Due date: Friday 24 March 2023	Weighting: 15%

Syllabus outcomes assessed:

SC4-7WS: processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions

SC4-9WS: presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations

21st Century and employment related skills:

<input checked="" type="checkbox"/>	Communication	<input type="checkbox"/>	Use of technology
<input type="checkbox"/>	Critical Thinking	<input checked="" type="checkbox"/>	Self-reflection and refinement
<input checked="" type="checkbox"/>	Creativity	<input 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:

Students complete the task Branches of Science on the handout provided.

The task is divided into 4 sections:

1. Definition of science in their own words
2. Research of the meanings of different areas of research in science
3. Group those areas of work/research into the major branches of science
4. Research an Australian and an international scientist and complete the scaffold table.

Assessment criteria:

You will be assessed on your ability to: See attached criteria

Method of task submission:

Hand in to your teacher by written report by 24 March 2023 (Friday, Week 8)

Marking guidelines: *See Marking Criteria attached to the task.*

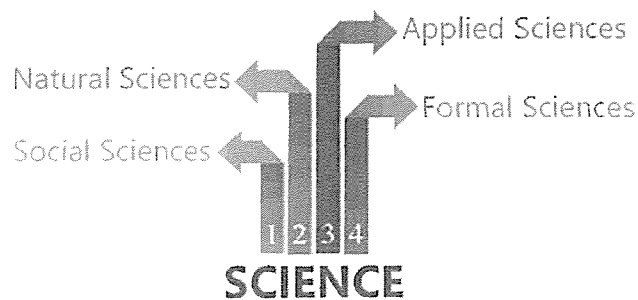
Grade	Descriptor	Mark
A		
B		
C		
D		
E		
N (Stages 5 and 6)		

Year 7 Branches of Science

Assessment Task 1

Due date: _____

Name: _____



Task 1: What is Science?

In your own words describe what Science is. (2 marks)

Task 2: Studies of Science

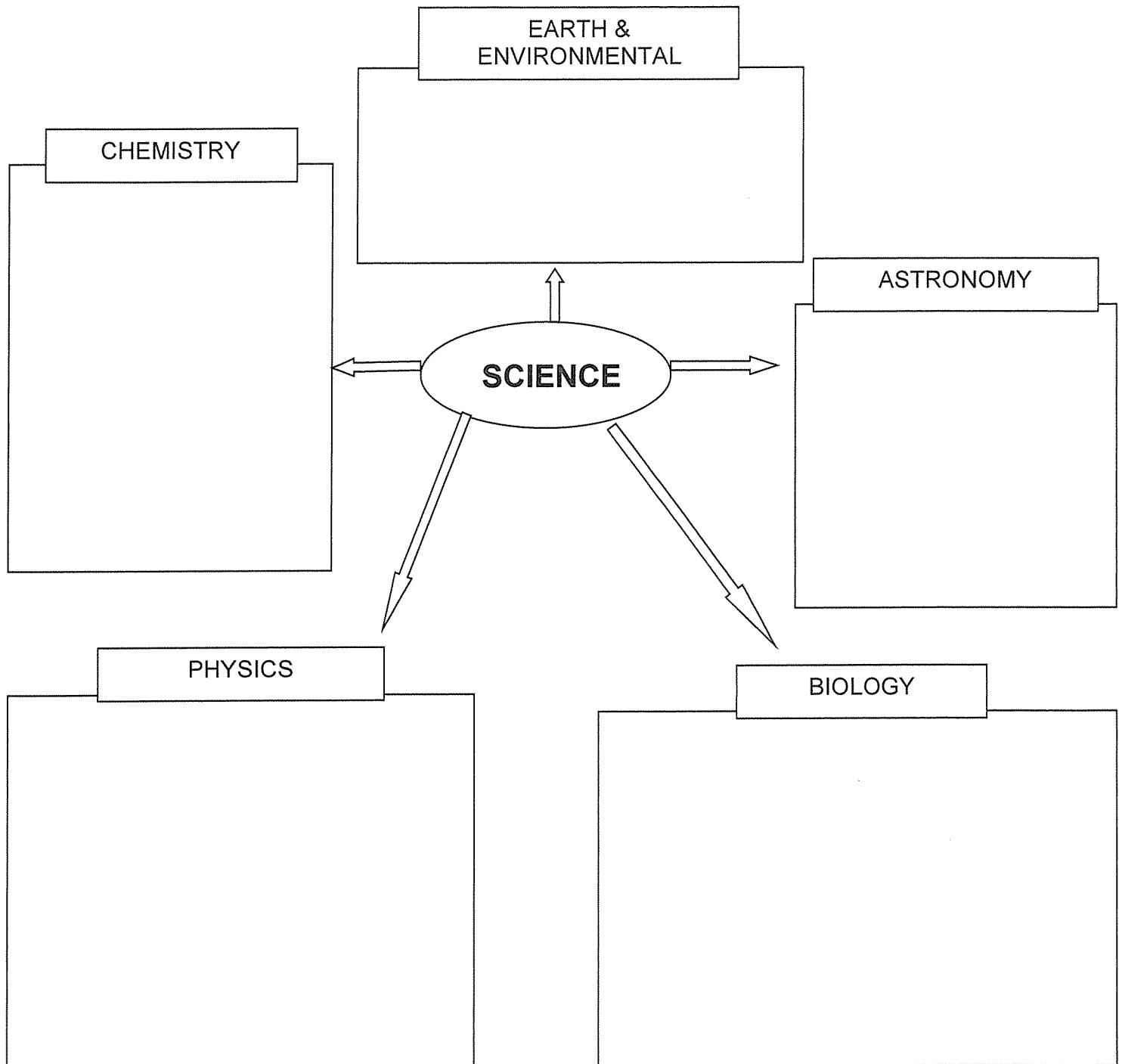
Complete the table below by researching certain areas of science that can be studied (36 marks)

Area of Science	Type of Scientist	What is studied or learnt
Zymurgy	Zymurgyologist	The branch of chemistry concerned with fermentation (as in making wine or brewing or distilling)
Astronomy		
Physics		
Chemistry		
Botany		
Biology		
Geology		

Palaeontology		
Meteorology		
Astronautics		
Aerodynamics		
Pharmaceutical		
Pathology		
Radiology		
Forensics		
Genetics		
Ecology		
Metallurgy		
Optics		

Task 3: Branches of Science

From the table above which you have just completed, choose 10 branches of science and identify what science belongs to the major branches of Science. Some of them can be the common across branches but you have to place it on only one spot. (10 marks).



Task 4: Famous Australian Scientists

Research an Australian and an International Scientist and find out what they have contributed to the world of Science. (16 marks)

Note: you can submit extra pages for this section. The table below is to guide you to gather your information.

AUSTRALIAN SCIENTIST	INTERNATIONAL SCIENTISTS
NAME:	NAME:
Background Information/biography: <i>Date of Birth (and Death if applicable), Where did the live? Family...any famous family members?</i>	Background Information/biography: <i>Date of Birth (and Death if applicable), Where did the live? Family...any famous family members?</i>
What did they discover/invent:	What did they discover/invent:
How did they make their discovery or what lead to the creation of their invention:	How did they make their discovery or what lead to the creation of their invention:
When and where was the discovery/invention made:	When and where was the discovery/invention made:

Marking Sheet (Teacher Use Only)

Students Name: _____

Class: _____

Grade: _____ Mark: / 64

Description	Level Of Achievement
<ul style="list-style-type: none">Provides a detailed personal description of what Science isIdentifies all types of Scientists in tableDescribes what is studied or learnt for all areas of Science in the tableCorrectly places all areas of Science into the correct branches of Science diagramProvide accurate, informative and reliable information on both Australian and International ScientistWriting is neat and legible	A (64 – 57)
<ul style="list-style-type: none">Provides a description of what Science isIdentifies most types of Scientists in table (4 or less not completed)Describes most of the areas studied or learnt in the table (4 or less not completed)Places most of the areas into the correct branches of Science diagramProvides most of the information on both scientistsWriting is neat and legible	B (56 – 47)
<ul style="list-style-type: none">Provides a brief description of what Science isIdentifies some types of Scientists in table (8-5 not completed)Describes some of the areas studied or learnt in the table (8-5 not completed)Provides some of the information on both scientistsWriting is neat and legible	C (46 – 35)
<ul style="list-style-type: none">Attempts to describe what Science isIdentifies some types of Scientists in table (9-13 not completed)Describes some of the areas studied or learnt in the table (9-13 not completed)Places some of the areas into the correct branches of Science diagramProvides information on a scientist, who is Australian or internationalWriting is legible	D (34 – 22)
<ul style="list-style-type: none">No attempt made to describe what Science isIdentifies a few types of Scientists in table (14 or more not completed)Describes a few of the areas studied or learnt in the table (14 or more not completed)Very few of the areas into the correct branches of Science diagramProvides very little information on one scientistWriting is untidy and illegible	E (21 – 0)

SC4-7WS: processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions

SC4-9WS: presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations

Famous Australian Scientists:

Arthur John Birch	Ernst Johannes Hartung	Gustav Joseph Victor Nossal
Peter Orlebar Bishop	Dorothy Hill	Marcus Oliphant
Nancy Burbidge	Henry Ambrose Hunt	Richard Owen
Frank Macfarlane Burnet	Elizabeth Kenny	Elizabeth Pope
John Warcup Cornforth	Esmond Venner Keogh	Edward Henry Rennie
Suzanne Cory	Kerr Grant	Emma Stone
Richard Daintree	Phillip Parker King	Ralph Tate
Tannant William Edgeworth David	Thomas Howell Laby	John Tebbutt
Amalie Dietrich	Friedrich Wilhelm Ludwig Leichhardt	Helen Alma Newton Turner
William James Farrer	Thomas Ranken Lyle	David Ngunaitponi (David Unaipon(Anglicisation))
Frank John Fenner,	William John Macleay	John Paul Wild
Howard Walter Florey	Annie Jean Macnamara	Richard van der Riet Woolley
Joan Freeman	David Orme Masson	
Lawrence Hargrave	Frederick McCoy	
Elizabeth Blackburn	Priscilla Kincaid-Smith	Alf Howard
Isobel Bennett	Douglas Mawson	John R. Philip
William Lawrence Bragg and William Henry Bragg	Henry Harris	Albert Pugsley
Graeme Clark John Eccles	David Karoly	John O. Limb
Bernard Katz	Bruce Edward Hobbs	W. A. S. Butement
	Basil Hetzel	

<https://www.famousscientists.org/25-famous-australian-scientists-contributions/> January 2017

List of Famous Scientists (Alphabetical BY FIRST NAME)

- Aage Bohr
- Ada Lovelace
- Agnes Arber
- Al-Battani
- Alan Turing
- Albert Abraham Michelson
- Albert Einstein
- Alberto Santos-Dumont
- Aldo Leopold
- Alessandro Volta
- Alexander Bain
- Alexander Fleming
- Alexander Graham Bell
- Alexander Von Humboldt
- Alfred Binet
- Alfred Kinsey
- Alfred Nobel
- Alfred Russel Wallace
- Alfred Wegener
- Amedeo Avogadro
- Anders Celsius
- André Marie Ampère
- Andreas Vesalius
- Angel Alcalá
- Antoine Lavoisier
- Antonie van Leeuwenhoek
- Antonio Meucci
- Archimedes
- Aristarchus
- Aristotle
- Arnold Sommerfeld
- Arthur Compton
- Arthur Eddington
- Avicenna
- B. F. Skinner
- Barbara McClintock
- Beatrix Potter
- Benjamin Franklin
- Blaise Pascal
- Brian Cox
- C. V. Raman
- Carl Friedrich Gauss
- Carl Sagan
- Carolus Linnaeus
- Charles Babbage
- Charles Darwin
- Charles Lyell
- Charles-Augustin de Coulomb
- Chen-Ning Yang
- Christiaan Huygens
- Christiane Nusslein-Volhard
- Clarence Birdseye
- Claude Bernard
- Claude Lévi-Strauss
- Claudius Ptolemy
- Clyde Tombaugh
- Daniel Bernoulli
- David Hilbert
- Dian Fossey
- Dmitri Mendeleev
- Dorothy Hodgkin
- E. O. Wilson
- Edmund Halley
- Edward Jenner
- Edward Teller
- Edwin Herbert Land
- Edwin Hubble
- Elizabeth Blackwell
- Emil Kraepelin
- Emile Berliner
- Empedocles
- Enrico Fermi
- Ernest Lawrence
- Ernest Rutherford
- Ernst Haeckel
- Ernst Mach
- Ernst Mayr
- Ernst Werner von Siemens
- Erwin Chargaff
- Erwin Schrödinger
- Euclid
- Evangelista Torricelli
- Fibonacci
- Florence Nightingale
- Francesco Redi
- Francis Bacon
- Francis Crick
- Frank Drake
- Franz Boas
- Franz Mesmer
- Fred Hoyle
- Frederick Sanger
- Friedrich August Kekulé
- Friedrich Wöhler
- Fritz Haber
- Galen
- Galileo Galilei
- Gene Shoemaker
- Georg Brandt
- Georg Ohm
- George Washington Carver
- Georges-Louis Leclerc, Comte de Buffon
- Gertrude Elion
- Gerty Theresa Cori
- Glenn Seaborg
- Gottfried Leibniz
- Gottlieb Daimler
- Grace Murray Hopper
- Gregor Mendel
- Guglielmo Marconi
- Gustav Kirchhoff
- Hans Christian Oersted
- Hans Selye
- Harold Urey
- Harriet Quimby
- Hedy Lamarr
- Heinrich Hertz
- Henri Becquerel
- Henrietta Swan Leavitt
- Henry Bessemer
- Henry Cavendish
- Henry Ford
- Henry Moseley
- Hermann Rorschach
- Hermann von Helmholtz
- Hipparchus
- Homi Jehangir Bhabha
- Humphry Davy
- Ibn Battuta
- Ibn Rushd
- Inge Lehmann
- Irene Joliot-Curie
- Isaac Newton
- Ivan Pavlov
- J. J. Thomson
- J. Robert Oppenheimer
- J. Willard Gibbs
- Jacques Cousteau
- Jagadish Chandra Bose
- James Chadwick
- James Clerk Maxwell
- James Hutton
- James Prescott Joule
- James Watson
- James Watt
- Jan Baptist van Helmont

- Jane Goodall
- Jane Marcet
- Jean Piaget
- Jean-Baptiste Lamarck
- Jocelyn Bell Burnell
- Johannes Kepler
- John Dalton
- John Locke
- John Logie Baird
- John Napier
- John Needham
- John Ray
- John von Neumann
- Jonas Salk
- Joseph Banks
- Joseph Henry
- Joseph Lister
- Joseph Priestley
- Justus von Liebig
- Karl Landsteiner
- Karl Popper
- Katharine Burr Blodgett
- Konrad Lorenz
- Lawrence Bragg
- Lee De Forest
- Leonardo da Vinci
- Leonhard Euler
- Linus Pauling
- Lise Meitner
- Louis de Broglie
- Louis Pasteur
- Ludwig Boltzmann
- Luigi Galvani
- Luis Alvarez
- Luther Burbank
- Lynn Margulis
- Mae Carol Jemison
- Marcello Malpighi
- Marguerite Perey
- Maria Gaetana Agnesi
- Maria Goeppert-Mayer
- Maria Mitchell
- Marie Curie
- Mario Molina
- Mary Anning
- Maurice Hilleman
- Maurice Wilkins
- Max Born
- Max Planck
- Michael E. Brown
- Michael Faraday
- Michio Kaku
- Muhammad ibn Musa al-Khwarizmi
- Nettie Stevens
- Niccolo Tartaglia
- Nicolaus Copernicus
- Niels Bohr
- Nikola Tesla
- Noam Chomsky
- Omar Khayyam
- Oswald Avery
- Otto Hahn
- Paul Dirac
- Paul Ehrlich
- Percy Lavon Julian
- Philippe Pinel
- Pierre Curie
- Pierre de Fermat
- Pierre-Simon Laplace
- Prafulla Chandra Ray
- Pythagoras
- Rachel Carson
- René Descartes
- Richard Feynman
- Rita Levi-Montalcini
- Robert Boyle
- Robert Brown
- Robert Bunsen
- Robert Goddard
- Robert Hooke
- Robert Koch
- Ronald Fisher
- Rosalind Franklin
- Rudolf Christian Karl Diesel
- Rudolf Virchow
- S. N. Bose
- Salim Ali
- Sally Ride
- Santiago Ramón y Cajal
- Sergei Winogradsky
- Sigmund Freud
- Srinivasa Ramanujan
- Stephanie Kwolek
- Stephen Hawking
- Subrahmanyan Chandrasekhar
- Svante Arrhenius
- Thales
- Theodor Schwann
- Theodosius Dobzhansky
- Thomas Alva Edison
- Thomas Hunt Morgan
- Thomas Newcomen
- Tim Noakes
- Timothy John Berners-Lee
- Tycho Brahe
- Virginia Apgar
- Werner Heisenberg
- Wernher Von Braun
- Wilbur and Orville Wright
- Wilhelm Conrad Roentgen
- Wilhelm Röntgen
- Wilhelm Wundt
- William Buckland
- William Harvey
- William Herschel
- William Ramsay
- William Smith
- William Thomson
- Wolfgang Ernst Pauli
- Zora Neale Hurston

THERE ARE HEAPS OF SCIENTISTS THAT HAVE ENRICHED OUR LIVES.....

You are welcome to find others that are not on this list!