

ACTIVITY ONE: LEONARDO DA VINCI

Please select the best answer from the options provided.

10 Marks

1. Who wrote the da Vinci Code?
 - a. J K Rowling
 - b. Dan Brown
 - c. C S Lewis
 - d. Leonardo da Vinci

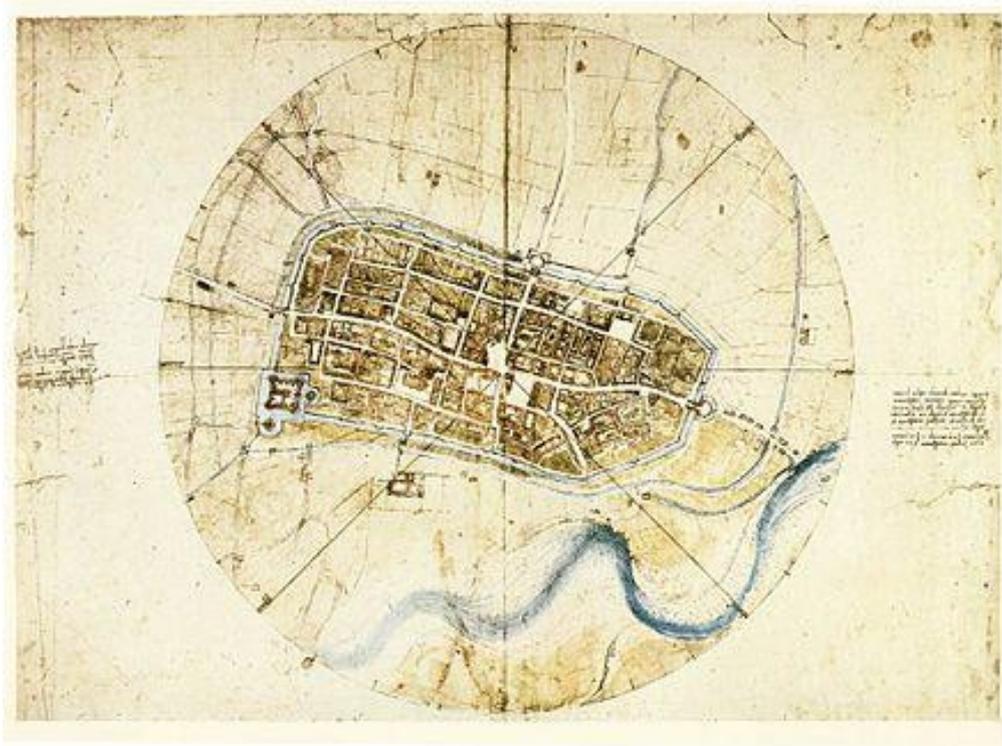
2. Leonardo is known as a pioneer of a technique known as sfumato. What is sfumato?
 - a. the technique of making a rough drawing of something.
 - b. the art of painting in oils.
 - c. the technique of allowing tones and colours to shade gradually into one another, producing softened outlines or hazy forms.
 - d. the treatment of light and shade in drawing and painting.

3. Leonardo's painting Virgin of the Rocks was restored at which museum?
 - a. Le Louvre, Paris
 - b. NGV, Melbourne
 - c. The National Gallery, London
 - d. The Met, New York

4. What was Leonardo's relationship with Luca Pacioli?
 - a. Leonardo studied maths under him.
 - b. Leonardo studied theology under him.
 - c. Pacioli was one of Leonardo's students.
 - d. Pacioli was Leonardo's great uncle.

5. Select the invention made by Leonardo from the list below which did not pass into common use on his original design.
 - a. Automated bobbin winder
 - b. Camera
 - c. Machine which tested tensile strength of wire
 - d. Strut bridge

6. Leonardo's research in which of the following fields enabled him to make discoveries in the field hydraulics?
- a. Geometry
 - b. Anatomy
 - c. Motion of water
 - d. Gravity
7. Leonardo was a cartographer. Which city is depicted in his map below?



- a. Venice, Italy
 - b. Imola, Italy
 - c. New York, USA
 - d. Nice, France
8. Which of the following is a 2010 adventurism film based on some of Leonardo's works?
- a. Legend of the Flying Cyprian
 - b. Leonardo da Vinci: the unexpected
 - c. The da Vinci Code
 - d. The Renaissance

4. There is a 2001 romantic comedy movie called 'Serendipity'. What does serendipity mean?
- a. The occurrence and development of events by chance in a happy or beneficial way.
 - b. Success or failure apparently brought by chance rather than through one's own actions.
 - c. Regard (something) as likely to happen.
 - d. Not expected or regarded as likely to happen.
5. Which phrase best fills the gap in this song's lyrics?

*Standing at the limit of an endless ocean
Stranded like a runaway, lost at sea
City on a rainy day down in the harbour
Watching as the grey clouds shadow the bay
Looking everywhere 'cause I had to find you
This is not the way that I remember it here
Anyone will tell you it's a prisoner island
Hidden in the summer for a million years
_____, burned you black*

- a. Bushfires
 - b. Waltzing Matilda
 - c. Australia
 - d. Great Southern Land
6. Which of the following movies is regarded as the most expensive movie ever made, with total production costs in excess of US\$600 million?
- a. *Avatar*
 - b. *Pirates of the Caribbean: On Stranger Tides*
 - c. *Spider-Man 3*
 - d. *The Hobbit: The Battle of the Five Armies*

MATCH THE FOLLOWING QUOTES WITH THEIR PLAY:

List of quotes:

- a. "To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them. To die: to sleep;"
- b. "Some are born great, some achieve greatness,
and some have greatness thrust upon them."
- c. "Romeo, Romeo! wherefore art thou Romeo?"
- d. "Is this a dagger which I see before me,
The handle toward my hand? Come, let me clutch thee.
I have thee not, and yet I see thee still.
Art thou not, fatal vision, sensible
To feeling as to sight? or art thou but
A dagger of the mind, a false creation,
Proceeding from the heat-oppressed brain?"

7. *Twelfth Night*

8. *Romeo and Juliet*

9. *Macbeth*

10. *Hamlet*

4. A meteor can unexpectedly enter the atmosphere of the Earth at any time. What is a meteor?
- a small rocky body orbiting the sun. Large numbers of these, ranging enormously in size, are found between the orbits of Mars and Jupiter, though some have more eccentric orbits.
 - a small body of matter from outer space that enters the earth's atmosphere, becoming incandescent as a result of friction and appearing as a streak of light.
 - a piece of rock or metal that has fallen to the earth's surface from outer space as a meteor. Over 90 per cent of meteorites are of rock while the remainder consist wholly or partly of iron and nickel.
 - the natural satellite of the earth, visible (chiefly at night) by reflected light from the sun.
5. What does this image depict?



- Fog in Sydney Harbour
 - East Australian Dust Storm 2009 – 500km wide and 1000km long dust plume
 - Australian Dust Storm 2017 – 500km wide and 1000km long dust plume
 - Smoke from bushfires in Sydney
6. How was the microwave discovered?
- In a laboratory with the intention of finding a machine to heat items quickly.
 - Accidentally, with its inventor finding a melted chocolate bar in his pocket after using a radar gun.
 - By the CSIRO, to improve the quality of life of Australians.
 - By placing food under a radar to try to heat it up.

7. What was the original intended purpose of Play-Doh?
 - a. Toy for children
 - b. Icing for a cake
 - c. To help children develop their gross motor skills
 - d. Wallpaper cleaner
8. Which of the following items did NASA make mainstream?
 - a. Velcro
 - b. Blutak
 - c. Sticky tape
 - d. 3M adhesive
9. Where was Vaseline discovered?
 - a. In a laboratory
 - b. In the gears of a train
 - c. In an oil mine
 - d. In a scientist's kitchen
10. During which war was super glue invented?
 - a. Second Boer War
 - b. World War Two
 - c. Cold War
 - d. War in Iraq

ACTIVITY FOUR: PEOPLE

Please select the best answer from the options provided.

10 Marks

1. What role did 'Gunner the dog' play in World War Two?
 - a. He was able to reliably alert Allied forces that Japanese aircraft were approaching Darwin
 - b. He manned the guns in Sydney Harbour
 - c. He supported casualties in Gallipoli
 - d. He was able to reliably alert Allied forces that Japanese aircraft were approaching Tokyo
2. Who was sent to South Korea as North Korea's delegate for an historic trip for the 2018 PyeongChang Winter Olympics?
 - a. Kim Jong Il
 - b. Kim Jong Un
 - c. Kim Yo Jong (Kim Jong Un's sister)
 - d. There was no delegation
3. What position did Nicholas II hold until he was unexpectedly forced to abdicate in 1917?
 - a. President of Russia
 - b. Prime Minister of Russia
 - c. Foreign Minister of Russia
 - d. Emperor of Russia
4. What is Roger Bannister most well-known for?
 - a. Inventing the telephone
 - b. Running the first sub-four-minute mile
 - c. Winning the 2018 Australian Open
 - d. Writing the Declaration of Human Rights
5. Who gave the Gettysburg Address?
 - a. Barack Obama
 - b. Emanuel Macron
 - c. Abraham Lincoln
 - d. Kevin Rudd

6. According to the Imperial War Museum, “Until the release of the Oscar-nominated film *The Imitation Game* in 2014, the name ‘Alan Turing’ was not very widely known. But Turing’s work during the Second World War was so crucial that Winston Churchill acknowledged his role, saying that Turing made the single biggest contribution to Allied victory.” What was Turing’s contribution to World War Two?
 - a. He cracked the Engima code which allowed the Allies to read coded German messages.
 - b. He was a military commander in the British Army
 - c. He was a member of the Royal Family
 - d. He helped rebuild London after it was bombed
7. Who is the current UN Secretary General?
 - a. Ban Ki-Moon
 - b. Kofi Annan
 - c. Jorge Sampaio
 - d. António Guterres
8. Whose autobiography is entitled *Mein Kampf*?
 - a. Angela Merkel
 - b. Nelson Mandela
 - c. Anne Frank
 - d. Adolf Hitler
9. I am an American film producer. I originally ran a film studio with my brother until it was bought by Disney. I came into the global spotlight in October 2017 when over 80 women made allegations of sexual abuse and misconduct against me. These allegations began the #MeToo campaign and led to the dismissal of many male leaders around the world due to similar allegations. Who am I?
 - a. Ben Affleck
 - b. Donald Trump
 - c. Harvey Weinstein
 - d. Barnaby Joyce
10. Who is New Zealand’s Prime Minister?
 - a. Jacinda Arden
 - b. Bill English
 - c. John Key
 - d. Helen Clark

ACTIVITY FIVE: GEOGRAPHY

Please select the best answer from the options provided.

10 Marks

1. Define existence value.
 - a. The benefits derived from the goods and services provided by an ecosystem that are used indirectly by an economic agent.
 - b. The benefit people receive from knowing that a particular environmental resource exists.
 - c. The benefits derived from the services provided by an ecosystem that are used directly by an economic agent.
 - d. The usefulness of something.
2. Define direct use value.
 - a. The benefits derived from the goods and services provided by an ecosystem that are used indirectly by an economic agent.
 - b. The benefit people receive from knowing that a particular environmental resource exists.
 - c. The benefits derived from the services provided by an ecosystem that are used directly by an economic agent.
 - d. The usefulness of something.
3. 'Unexpected Port' is a program running in South Australia. What does it seek to do?
 - a. Support artists in a quest to gentrify the historic Port Adelaide area
 - b. Find a way to solve the state's power issues
 - c. Create a new type of computer port for the next iPhone
 - d. Build a new shipping port in the state
4. The world's smallest country has an area of 0.44 square kilometres. Which country is this?
 - a. Vatican City
 - b. San Marino
 - c. Monaco
 - d. Nauru

5. What does this image relate to?



- a. The Demilitarised Zone in Korea
- b. Fall of the Berlin Wall
- c. Nelson Mandela leaving prison
- d. Kevin Rudd's 'Sorry' speech

6. Choose the phrase which best fills the gaps in the passage below.

The _____ is an integrated water and hydro-electric power utility located in Australia's Southern Alps which is operated.

The _____ diverts the headwaters of the Snowy, Eucumbene and Murrumbidgee Rivers westward through the Great Dividing Range, releasing water into the Murray and Murrumbidgee Rivers. This long-term water regulation is designed to counteract the effects of severe drought sequences and raise productivity in the Murray Darling Basin. In addition, water from the _____ underwrites the production of around \$3 billion worth of agricultural products every year.

- a. Hydro
- b. NSW Water Management
- c. Snowy Mountains Scheme
- d. Murray Darling Basin Agreement

7. Where are these icons?



- a. Phillip Island
 - b. Tahiti
 - c. Iceland
 - d. Easter Island
8. These free-standing stones are the largest collection of megalithic standing stones in the world. Which country are they in?



- a. New Zealand
- b. USA
- c. France
- d. UK

9. Which of the following songs was not a contender to become Australia's national anthem in the 1977 plebiscite?
- a. God Save the King
 - b. Song of Australia
 - c. Waltzing Matilda
 - d. Advance Australia Fair
10. Which of the following individuals was involved in the historic crossing of the Blue Mountains in 1813?
- a. William Wentworth
 - b. Lachlan Macquarie
 - c. Charles Sturt
 - d. Marco Polo

ACTIVITY SIX: PAST, PRESENT & FUTURE

Please select the best answer from the options provided.

10 Marks

1. Read the following passage. What invention is this about?

“Our wireless invention lies at the heart of what is now the most popular way to connect computers without wires. It is used in offices, public buildings, homes and coffee shops. The invention came out of our pioneering work in radioastronomy.” (CSIRO, 2018)

- a. Wireless network drives
- b. WiFi
- c. Ethernet internet
- d. Contactless card payments

2. Read the following passage. Choose the word that fills the gaps.

“Australia's introduction of _____ bank notes with optically variable devices (OVDs), developed by CSIRO, was a world's first and represented a paradigm shift towards a currency secure against forgery. This was one of our longest and most successful research initiatives.

The research began in 1968 following a request from the Reserve Bank of Australia for a scientific solution to combat forgeries of the new decimal currency. Our solution was to have a see-through panel and hologram embedded in the note and to use _____. In addition to their inability to be forged, the new notes were also more durable, more environmentally friendly and less likely to carry dirt and disease.” (CSIRO, 2018)

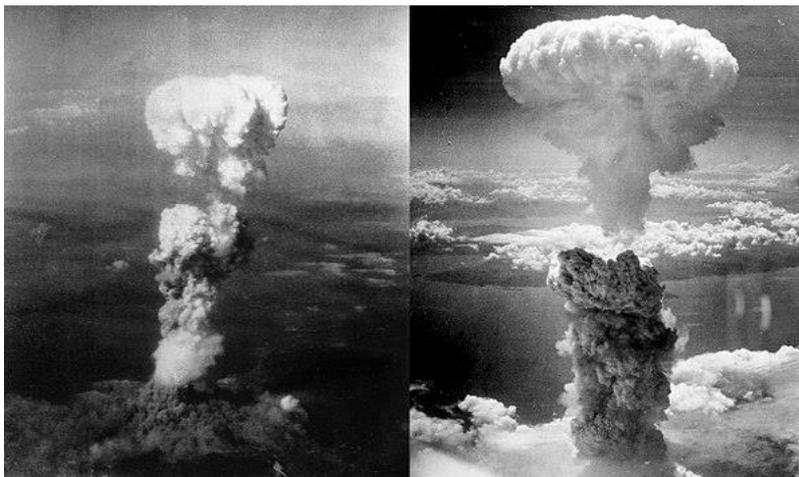
- a. Paper
- b. Recyclable
- c. Cardboard
- d. Plastic

3. Read the following passage. What is the name of the product?

“Our scientist, Tom Pressley, partnered with the Royal Melbourne Hospital’s Central Linen Service to find a solution. Not only did Pressley develop a high standard procedure for shrink-proofing wool so it could be laundered at high temperatures, he pioneered a pH neutral detergent that would clean the wool without causing damage at high water temperatures. In the 1960s, the detergent was taken up by hygiene and personal care company Unilver, which marketed it as _____®, a brand that sits on supermarket shelves to this day.” (CSIRO, 2018)

- a. Windex
- b. Ajax
- c. Omo
- d. Softly

4. Tesla is known for its innovation in developing electric cars. In order to make the process of charging easy for customers, it has developed a network of chargers which can charge their cars in a matter of minutes, rather than hours. What are these chargers called?
 - a. Superchargers
 - b. Tesla Chargers
 - c. RapidCharge
 - d. Fastchargers
5. What were the 1989 Tiananmen Square protests aiming to achieve?
 - a. Environmentally efficient energy policy
 - b. Creation of a new student loan policy
 - c. Corruption-free Communist Party
 - d. The return of Hong Kong to China
6. The US dropped two atomic bombs over Japanese cities in World War Two. What were the two cities?



- a. Tokyo and Osaka
 - b. Hiroshima and Nagasaki
 - c. Hiroshima and Tokyo
 - d. Kyoto and Nagasaki
7. The Exxon Valdez oil spill inflicted an estimated \$7 billion worth of damages on the environment in 1989. What is Exxon Valdez?
 - a. An oil company
 - b. A geographic region
 - c. An oil tanker
 - d. A person, after which the spill was named

8. In late 2017, plane debris washed ashore in Madagascar. Which flight is this thought to have belonged to?

- a. MH17
- b. AF447
- c. MH370
- d. QF32

9. Select the phrase which best fills the gaps.

“The _____ were a confederacy of naval raiders who harried the coastal towns and cities of the Mediterranean region between c. 1276-1178 BCE, concentrating their efforts especially on Egypt. The nationality of the _____ remains a mystery as the existing records of their activities are mainly Egyptian sources who only describe them in terms of battle such as the record from the Stele at Tanis which reads, in part, “They came from the sea in their war ships and none could stand against them.” This description is typical of Egyptian references to these mysterious invaders.” (Ancient History Encyclopaedia, 2009)

- a. Sea Peoples
- b. Pirates
- c. British Explorers
- d. Ancient Romans

10. Which city is associated with Jack the Ripper?

- a. Moscow
- b. Bangkok
- c. London
- d. San Francisco

ACTIVITY SEVEN: RECENT EVENTS

Please select the best answer from the options provided.

10 Marks

NO.	QUESTION	ANSWER
1	<p>Severe Tropical Cyclone Gita was the most intense tropical cyclone to impact Tonga since reliable records began. Which of the countries below were in the path of the cyclone and affected? Indicate all that were affected.</p> <ul style="list-style-type: none"> A. Vanuatu B. New Zealand C. New Caledonia D. American Samoa 	
2	<p>There have been fatalities recently involving autonomous car trials. Where did they occur and who operated the trials? Indicate all that apply.</p> <ul style="list-style-type: none"> A. Mountain View, California, operated by Tesla B. Silicon Valley, operated by Google C. Tempe, Arizona, operated by Uber D. Mountain View in Silicon Valley, a cooperation between NASA and Tesla 	
3	<p>Famous theoretical physicist, Stephen Hawking died in March. Where will his remains be placed and what significance does this choice have?</p> <ul style="list-style-type: none"> A. His ashes will be interred at Westminster Abbey, close to Sir Isaac Newton who is also a famous physicist. B. He will be buried at Westminster Abbey close to both Charles Darwin and Sir Isaac Newton to acknowledge his contribution to science. C. He will be buried at Great St Mary's Church in Cambridge, which is where he studied. D. His ashes will be interred in Great St Mary's Church in Cambridge where he lectured and studied. 	
4	<p>Stephen Hawking wrote a children's book with his daughter Lucy, to explain theoretical physics in an accessible fashion: George's Secret Key to the Universe. Several sequels followed it. Which is the latest in the series?</p> <ul style="list-style-type: none"> A. George's Cosmic Treasure Hunt B. George and the Blue Moon C. George and the unbreakable code D. George and the Big Bang 	
5	<p>What is the recently released children's movie that is a sequel to Gnomeo and Juliet?</p> <ul style="list-style-type: none"> A. Gnome and Away 	

	<p>B. Pirate Gnomeo C. Sherlock Gnomes D. Gnome Fairytale: No Place Like Gnome</p>	
6	<p>Michelle de Kretser, Shokoofeh Azar and Alexis Wright are 3 of the 6 writers shortlisted for a 2018 Australian literature award for women. What is the name of the award?</p> <p>A. Stella Prize B. Barbara Jefferis Award C. Prime Minister's Prize for Literature D. Miles Franklin Award</p>	
7	<p>The Laureus World Sports Awards were recently held in Monaco. Who was the only sports person to win two awards this year?</p> <p>A. Serena Williams B. Sergio Garcia C. Roger Federer D. Edwin Moses</p>	
8	<p>Australia recently sent a team of students for the first time to which academic Olympiad?</p> <p>A. Information Technology B. Mathematics for Girls C. STEM D. Neuroscience</p>	
9	<p>Qantas flight QF9 departing Perth on the evening of 24 March marked a significant event. What was it?</p> <p>A. Anniversary of disappearance of Malaysia flight 370 and the cooperation of Qantas in the search. B. Introduction of Nancy Bird Walton initiative – named after the pioneering Australian aviator – to improve on its 5 per cent proportion of female pilots C. Other than the Concord, the fastest recorded flight to the UK. D. First non-stop commercial flight between Australia and Europe.</p>	
10	<p>Recently, Facebook has been in the news as its data was used inappropriately. They suspended a company that failed to delete data collected in violation of Facebook user policy. What app was used to collect the data and when was it collected?</p> <p>A. Cambridge Analytica, 2016 B. thisisyourdigitallife, 2015 C. Personality test, 2015 D. Cambridge Analytica, 2015</p>	