



STATE DA VINCI DECATHLON 2017

CELEBRATING THE ACADEMIC GIFTS OF STUDENTS
IN YEARS 9, 10 & 11



GENERAL KNOWLEDGE

TEAM NUMBER

SECTION ONE: INTERNATIONAL ELECTROTECHNICAL COMMISSION (10 MARKS)

THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) IS “THE WORLD’S LEADING ORGANISATION FOR THE PREPARATION AND PUBLICATION OF INTERNATIONAL STANDARDS FOR ALL ELECTRICAL, ELECTRONIC AND RELATED TECHNOLOGIES.”

([HTTP://WWW.IEC.CH/ABOUT/](http://www.iec.ch/about/), FEB 10 2017)

Answer the following questions about the IEC and its work.

1. What is ‘electrotechnology’?
2. How many different types of power sockets are officially labelled alphabetically by the IEC?
3. Explain why there are there so many different sockets in use around the world. Give two specific reasons.
4. In which decade did the IEC issue its own standard for a universal plug?
5. Which two countries are the only two to have adopted this universal plug?
6. The IEC believes LVDC will play a large role in future. What does this stand for?
7. Draw a profile of the key features of plugs, which can be used throughout Europe in the answer table.

SECTION TWO: ABUSE OF POWER (10 MARKS)

THROUGHOUT HISTORY, MANY WORLD LEADERS HAVE ABUSED THEIR POWER, TO THE DETRIMENT OF THEIR CONSTITUENTS.

Answer the questions below.

1. The following questions are about Richard Nixon.
 - a. What leadership position is he most known for holding?
 - b. Who are ‘Richard Nixon’s Plumbers’?
 - c. What was controversial about the ‘Plumbers’ work?
2. The following questions are about Kim Jong-Il.
 - a. What leadership position is he most known for holding?
 - b. What did he do whilst his country’s population lived in poverty?
 - c. What was horrific about the starvation, which occurred under his rule?
3. The following questions are about Muammar Gaddafi.
 - a. What leadership position is he most known for holding?
 - b. What did he sell for his own personal benefit?
4. The following questions are about Muammar Gaddafi.
 - a. What leadership position is she most known for holding?
 - b. Why was she impeached in 2016?

SECTION THREE: ECONOMIC POWER – AUSTRALIA’S TRADE (25 MARKS)

THE ECONOMIC POWER OF AUSTRALIA IS EXEMPLIFIED IN ITS BROAD RANGE OF MAJOR TRADING PARTNERS.

Data in this question has been source from the Department of Foreign Affairs and Trade. At the time of writing, 2014 was the latest complete year of data available. Answer the following questions about Australia’s trade.

1. Fill in the table in the Student Booklet, indicating Australia’s top ten trading partners, and the trade ranking of each nation with Australia. You will receive one mark for correctly identifying the nation and a second mark for including its correct ranking. (20 marks)
2. What is Australia’s largest export industry?
3. To the nearest percentage of total exports, what was the percentage share of this export industry in 2014?
4. What is Australia’s largest import industry?
5. To the nearest percentage of total imports, what was the percentage share of this import industry in 2014?
6. Australia has a strong trading partnership with ASEAN. What does ASEAN stand for?

SECTION FOUR: POWERFUL ANIMALS (17 MARKS)

THE POWER OF ANIMALS CAN OFTEN BE DECEPTIVE, HOWEVER MANY ARE THE MOST POWERFUL ORGANISMS ON EARTH!

Answer the following questions about powerful animals.

1. How many times more powerful than the human eye is the eye of an eagle?
2. How far can an eagle see?
3. What is unique about an eagle's eyelids?
4. Which is larger by weight: an eagle's eyes or an eagle's brain?
5. What is the largest snake in the world, by weight?
6. What is the largest land mammal in the Americas?
7. What is this? When is it used?



8. Identify 6 similarities which exist between humans and gorillas. (6 marks)
9. What is unique about dung beetles?



SECTION FIVE: POWERFUL CONNECTIONS (22 MARKS)

Answer the following questions.

1. Connect each of the companies in the table in the Student Booklet with one of the options listed below. (10 marks)

Options:

- LinkedIn
- Instagram
- MySpace
- Skype
- Nest
- Beats Electronics
- WhatsApp
- Compaq
- Motorola
- Vine

2. What is the connecting feature between all pairs in Question 1?
3. Connect each of the companies in the table in the Student Booklet with one of the options listed below.

Options:

- Johannesburg
- Dubai
- Tokyo
- Dublin
- Perth
- Shanghai
- Paris
- Atlanta
- Los Angeles
- Cork

4. What is the connecting feature between all pairs in Question 3?

SECTION SIX: RECENT EVENTS (10 MARKS)

	Question	
1	What did the Turkish people recently vote to change in their constitutional referendum?	
2	What did Buckingham Palace recently announce?	
3	What country did a man come from who died recently and claimed to be the oldest man? How old was he?	
4	What famous scientist is the focus of a new mini-series and what Australian actor is playing this person?	
5	What has been declining in our oceans for 20 years according to scientists?	
6	What has Facebook recently done to address an alarming problem?	
7	What election campaign in the world of sport was brutal and aggressive?	
8	What statute in front of New York front of Wall Street's charging bull has been controversial?	



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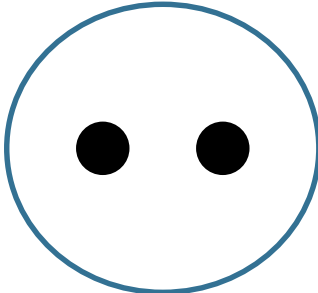
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GENERAL KNOWLEDGE ANSWERS

TEAM NUMBER _____

SECTION ONE: INTERNATIONAL ELECTROTECHNICAL COMMISSION (10 MARKS)

ANSWER		
1	The science of the application of electricity in technology	/1
2	14	/1
3	<p>Accept any two of the following reasons:</p> <ul style="list-style-type: none"> Limited international travel in early 20th century Few electrical devices were portable in early 20th century World War Two prevented standardisation discussions from occurring By the time discussions could occur in the 1950s, it was too late to introduce an international standard 	/2
4	1970s	/1
5	<p>Country 1: Brazil</p> <p>Country 2: South Africa</p>	/1 /1
6	Low-voltage (1 mark) Direct Current (1 mark)	/2
7	 <p>Two round prongs within one larger circle</p>	/1
TOTAL		/10

SECTION TWO: ABUSE OF POWER (10 MARKS)

ANSWER		
1a	President of the United States	/1
1b	White House Staffers who committed crimes to assist in his re-election	/1
1c	Nixon was aware and involved in covering it up	/1
2a	Supreme Leader of the Democratic People's Republic of Korea / North Korea	/1
2b	Lived a life of luxury	/1
2c	It was planned and preventable	/1
3a	Brotherly Leader and Guide of the Revolution of Libya OR Chairman of the Revolutionary Command Council of Libya OR Leader of Libya	/1

3b	Libya's oil	/1
4a	President of Brazil	/1
4b	Found guilty of administrative misconduct and disregarding the federal budget OR Manipulated the federal budget	/1
TOTAL		/10

SECTION THREE: ECONOMIC POWER – AUSTRALIA'S TRADE (25 MARKS)

ANSWER			
	Rank	Country	
1	1	China	/20
	2	Japan	
	3	United States	
	4	Republic of Korea OR South Korea	
	5	Singapore	
	6	New Zealand	
	7	United Kingdom or Great Britain	
	8	Malaysia	
	9	Thailand	
	10	Germany	
2	Iron ores and concentrates (accept iron ore)	/1	
3	20%	/1	
4	Personal travel services (accept travel)	/1	
5	20%	/1	
6	Association of Southeast Asian Nations	/1	
TOTAL		/25	

SECTION FOUR: POWERFUL ANIMALS (17 MARKS)

ANSWER		
1	4 to 8 times	/1
2	Approximately 2-3km	/1
3	An eagle has 3 eyelids	/1
4	Eyes	/1
5	Green anaconda	/1
6	Bison	/1
7	1 mark each: <ul style="list-style-type: none"> Bear spray/ bear repellent Type of pepper spray or capsaicin deterrent Used to deter aggressive bears 	/3
8	Similarities (1 mark each; award up to a maximum of six marks) <ul style="list-style-type: none"> Similar structural shape of the skulls Similar structural shape of skeleton 	/6

	<ul style="list-style-type: none"> • 96% of DNA is the same in both humans and gorillas • Shared hearing genes • Similar smell capabilities • Live in permanent family groups • Similar gestural language 	
9	<ul style="list-style-type: none"> • World's strongest insects (1 mark) • They can pull 1141 times their own weight. (1 mark – accept any number around 1000 times their own weight) 	/2
TOTAL		/17

SECTION FIVE: POWERFUL CONNECTIONS (22 MARKS)

ANSWER				
	Company	Answer		
1	1	Google	Motorola	/10
	2	Google	Nest	
	3	Facebook	WhatsApp	
	4	Facebook	Instagram	
	5	Microsoft	LinkedIn	
	6	Microsoft	Skype	
	7	Apple	Beats Electronics	
	8	Hewlett-Packard	Compaq	
	9	Twitter	Vine	
	10	News Corporation	MySpace	
2	Each company in the left-hand column acquired/bought the relevant company in the right hand column		/1	
	Company	Answer		
3	1	Apple	Cork	/10
	2	Airbnb	Dublin	
	3	AccorHotels	Paris	
	4	Walt Disney	Shanghai	
	5	Paramount Pictures	Los Angeles	
	6	Delta Airlines	Atlanta	
	7	Fortescue Metals Group	Perth	
	8	Dnata	Dubai	
	9	Nando's	Johannesburg	
	10	Casio	Tokyo	
4	The companies have either their regional or international headquarters in the relevant location listed		/1	
TOTAL		/22		

SECTION 6: RECENT EVENTS (10 MARKS)

	Question	
1	What did the Turkish people recently vote to change in their constitutional referendum?	Replacing its parliamentary system of government with an executive presidency.
2	What did Buckingham Palace recently announce?	95-year-old Prince Philip, Duke of Edinburgh retired.
3	What country did a man come from who died recently and claimed to be the oldest man? How old was he?	Indonesia 146
4	What famous scientist is the focus of a new mini-series and what Australian actor is playing this person?	Einstein Geoffrey Rush
5	What has been declining in our oceans for 20 years according to scientists?	Oxygen
6	What has Facebook recently done to address an alarming problem?	Employ 3000 people to stop violent broadcasts.
7	What election campaign in the world of sport was brutal and aggressive?	Australian Olympic Committee
8	What statute in front of New York front of Wall Street's charging bull has been controversial?	Fearless Girl