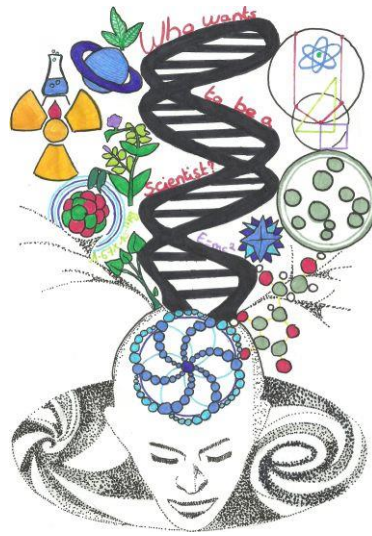


WHO WANTS TO BE A SCIENTIST

RULES



GAME DESCRIPTION

Who Wants to be a Scientist is a knowledge game about science. On the game board, you have an atom and the goal is to access the center of the atom and collect a number of coins.

PLAYERS

This game can be played from two to four players who have to be at least fourteen years old. If more players want to play, you are allowed to create teams of two players.

CONTENT

To play this game, you need the cards, a token per player or per team (if you are more than 4 players) and coins.

RULES

Before beginning to play, the players choose the number of coins they have to collect during the game. Then, they put their token on the game board, on the greatest circle of the atom.

Now, the game can begin. The younger player chooses a category and the player who is on his left take the first card of the category that the player chose. The player on the left reads the question that is on the card and the other player tries to give an answer.

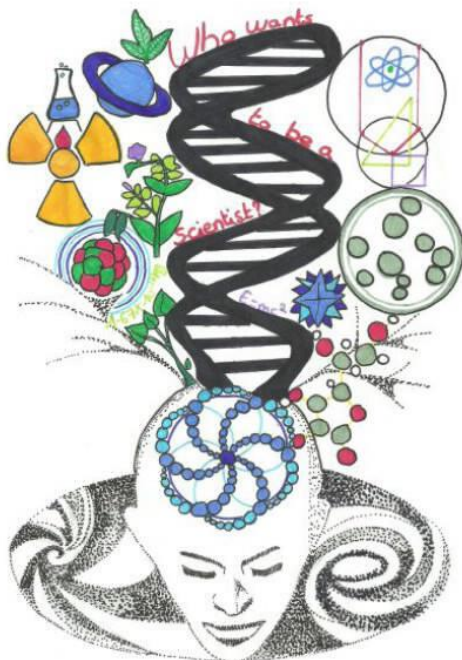
If the answer is correct, the player collects a coin and moves forward. If the answer is incorrect, the player doesn't collect a coin and moves backward.

The player, who is on the left, plays and tries to give an answer. Once a player has arrived at the center of the game board with his 6 chips, he has to answer a final question chosen by his opponents.

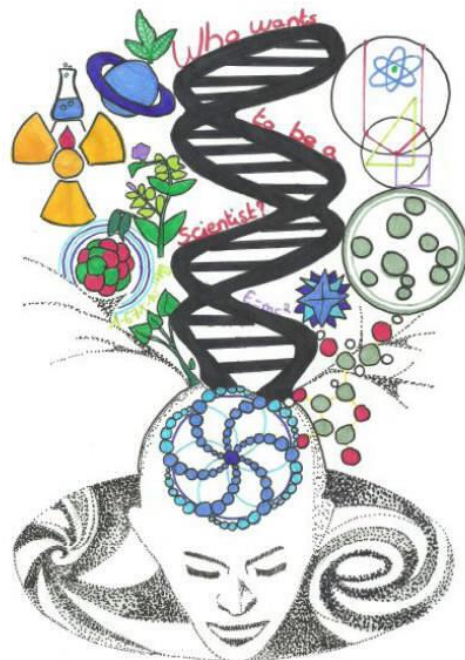
END OF THE GAME

The game ends when a player or a team reaches the center of the game board and successfully answers the last question.

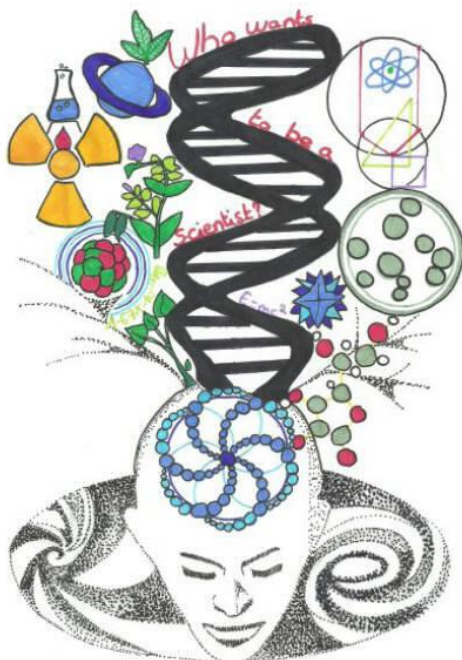
WHO WANTS TO BE A SCIENTIST
EUROPE



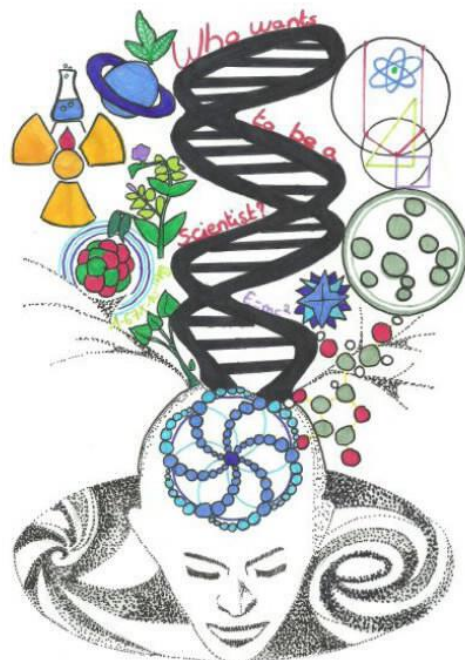
WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

QUESTION

Who is the president of France in 2016?

- 1) Manuel Valls
- 2) François Hollande
- 3) Nicolas Sarkozy
- 4) Marine Le Pen

François Hollande

EUROPE

Who is the Prime Minister of France in 2016?

- 1) Manuel Valls
- 2) François Hollande
- 3) Nicolas Sarkozy
- 4) Marine Le Pen

Manuel Valls

EUROPE

Who sings the song "Allumer le feu"?

1. Claude François
2. Francis Lalanne
3. Johnny Halliday
4. Michael Jackson

Johnny Halliday

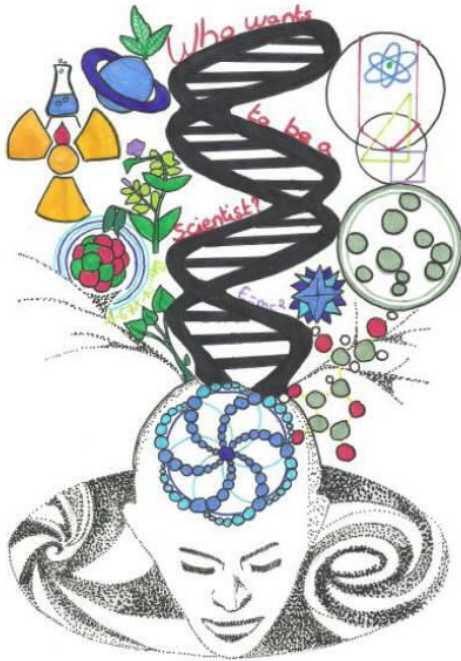
EUROPE

Who is the main actor of "the Artist"?

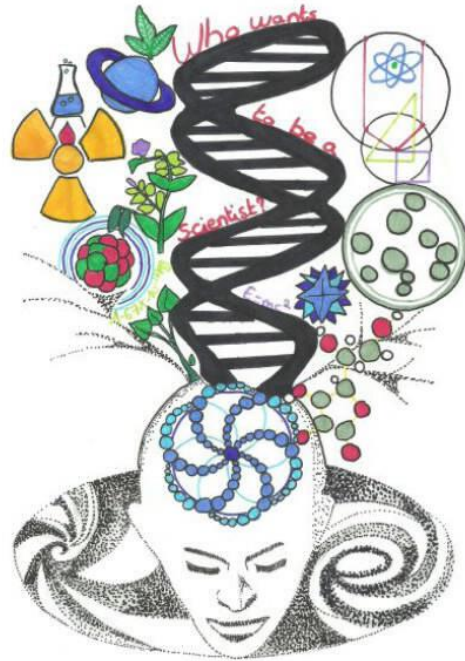
1. Omar Sy
2. Michel Hazanavicius
3. Dany Boon
4. Jean Dujardin

Jean Dujardin

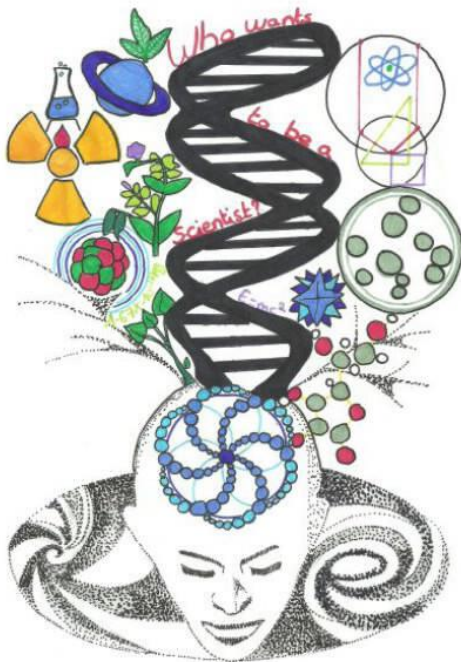
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EUROPE



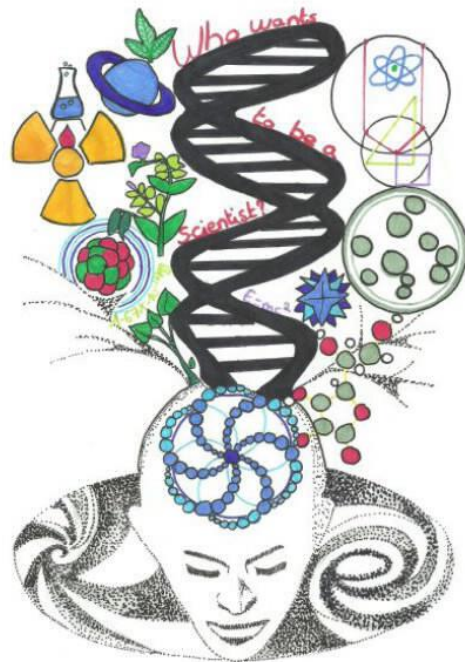
WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

Who is the actress who played Edith Piaf (a French singer)?

1. Marion Cotillard
2. Mimi Mathy
3. Mélanie Laurent
4. Jennifer Lawrence

Marion Cotillard

EUROPE

Who is the main actor of "Untouchable"?

1. Francois Cluzet
2. Marion Cotillard
3. Guillaume Canet
4. Romain Faubert

François Cluzet

EUROPE

What is the river which crosses Paris?

1. The Seine
2. The Rhône
3. The Loire
4. The Rhin

The Seine

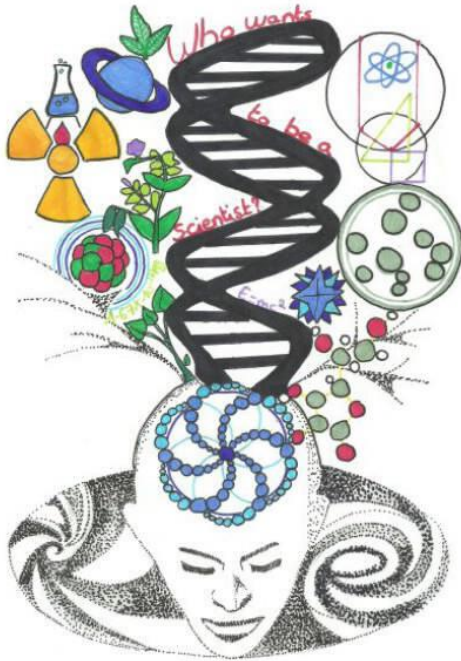
EUROPE

What is the capital of France?

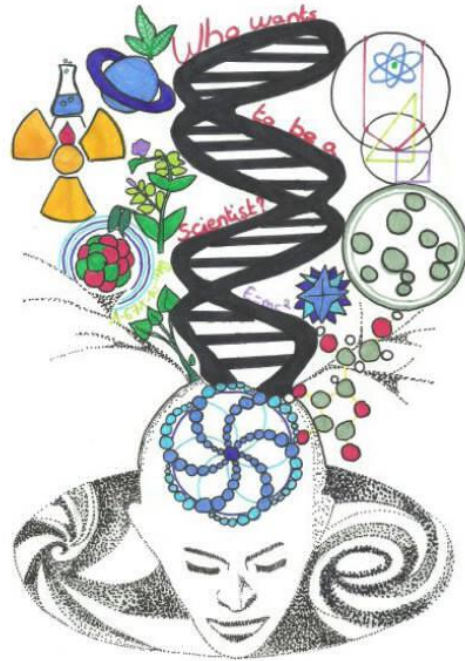
1. Marseille
2. Paris
3. Lyon
4. Bordeaux

Paris

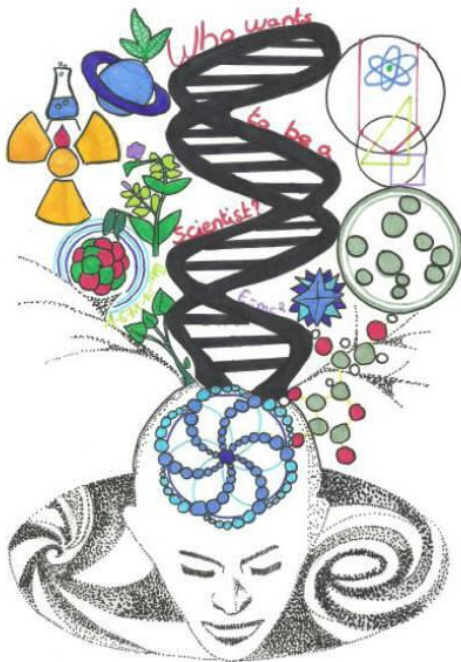
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EUROPE



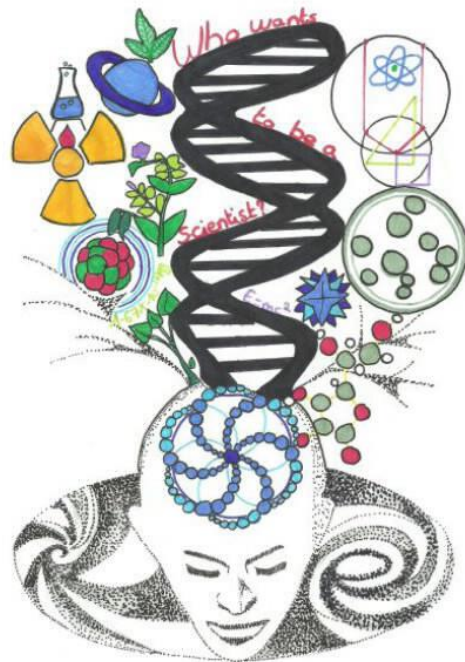
WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

In which region is Paris?

1. Ile de France
2. Normandy
3. Brittany
4. Aquitaine

Ile de France

EUROPE

In which region is Nice situated?

1. Aquitaine
2. Ile de France
3. Corsica
4. Provence Alpes Côte d'Azur

Provence Alpes Côte d'Azur

EUROPE

What specialty is a French one?

1. Hamburger
2. Snails
3. Scrambled eggs
4. Sushi

Snails

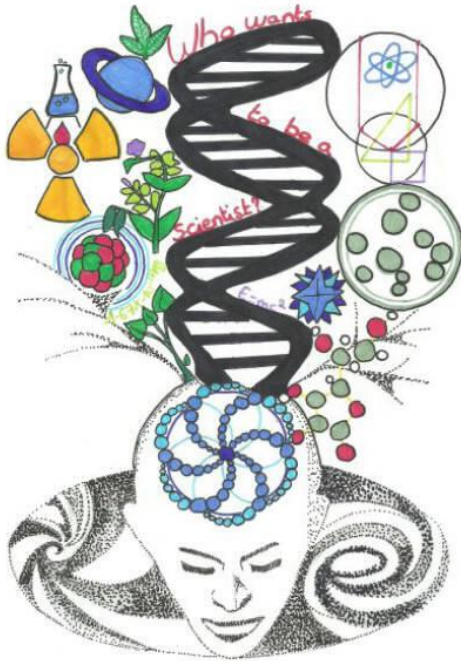
EUROPE

What do French people sometimes eat for breakfast?

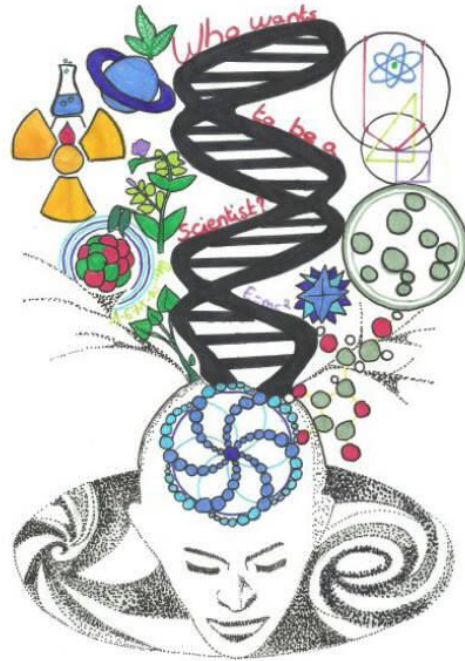
1. eggs
2. bacon
3. croissant
4. rice

croissant

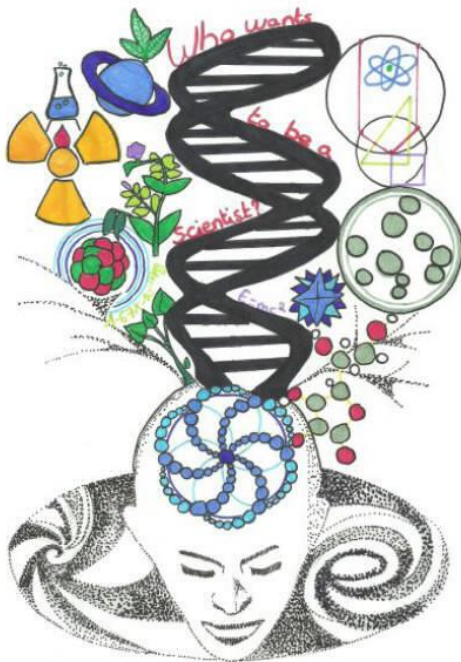
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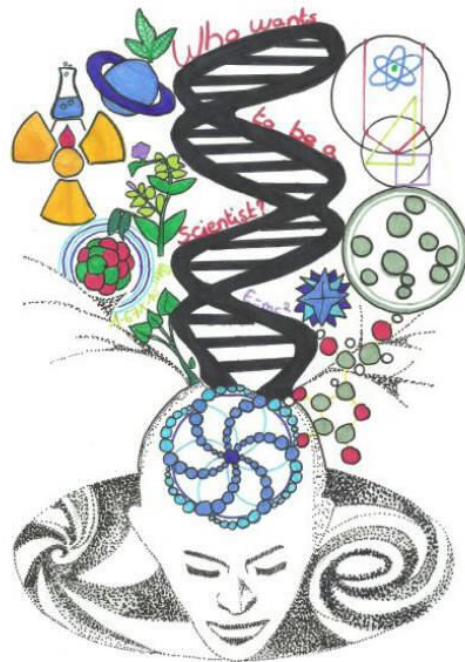
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EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

What is the best French football team?

1. Paris Saint Germain
2. RC Lens
3. Racing 92
4. OGC Nice

Paris Saint Germain

EUROPE

Who is the world champion of judo?

1. Tony Parker
2. Yannick Noah
3. Sébastien Loeb
4. Teddy Riner

Teddy Riner

EUROPE

Who is the French player in Charlotte
Hornet In NBA?

1. Tony Parker
2. Rudy Gobert
3. Joffrey Lauvergne
4. Nicolas Batum

Nicolas Batum

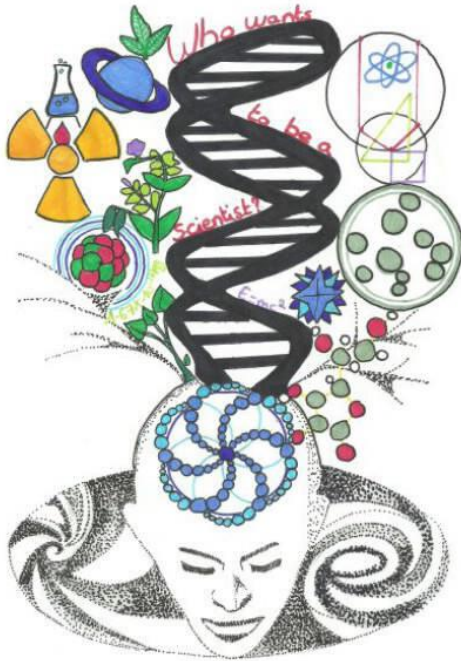
EUROPE

Who is currently (in 2016) the coach of the
French football team?

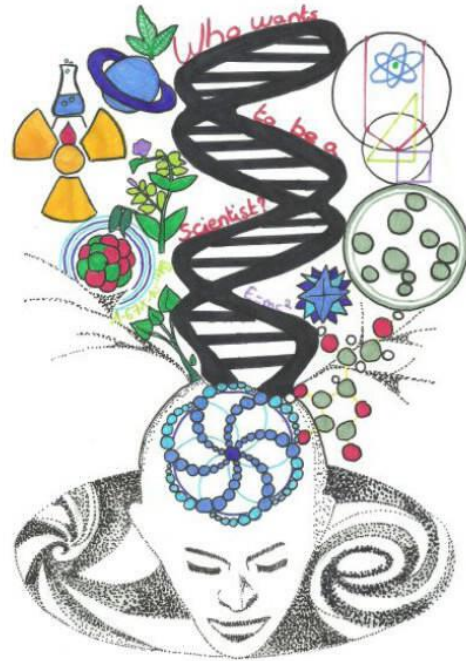
1. Zinédine Zidane
2. Didier Deschamps
3. Laurent Blanc
4. Rudy Garcia

Didier Deschamps

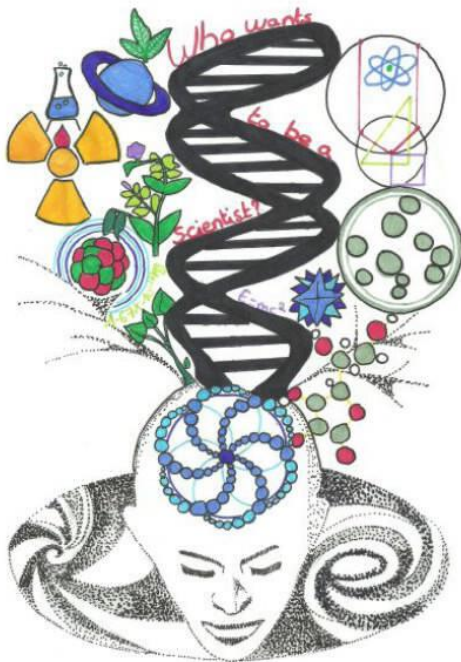
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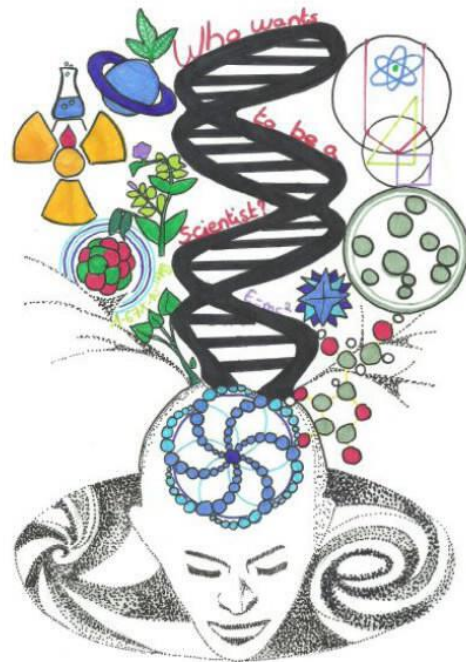
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WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

What's Louis XIV's nickname?

1. the Divine King
2. the King of Heaven
3. the Sun King
4. Louis the Great

The Sun King

EUROPE

When was the French revolution?

1. 1657
2. 1789
3. 1799
4. 1817

1789

EUROPE

Who led the French resistance from London during the Second World War?

1. Winston Churchill
2. Staline
3. Charles de Gaulle
4. John Kennedy

Charles de Gaulle

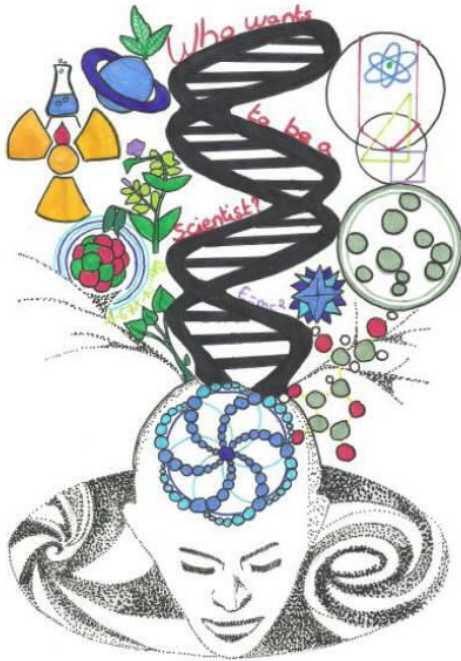
EUROPE

In which country (other than France) can you hear French speakers?

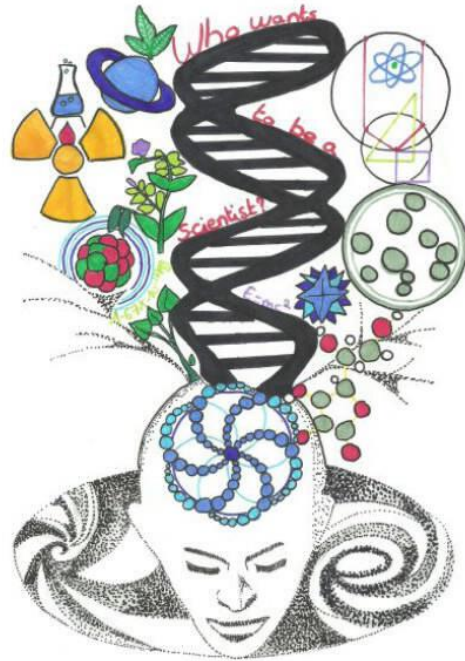
1. Quebec
2. Indonesia
3. Australia
4. Russai

Quebec

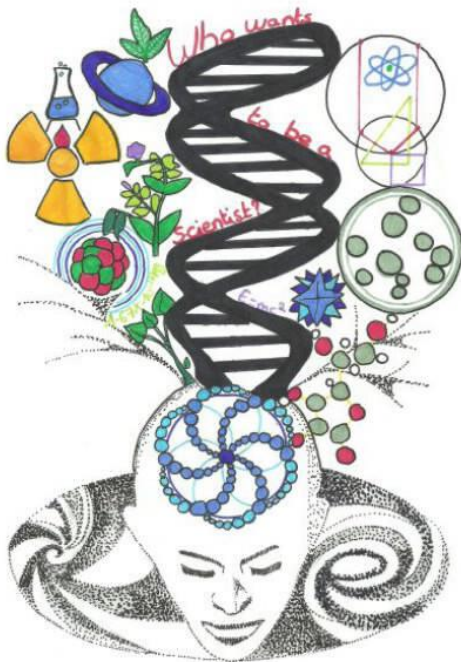
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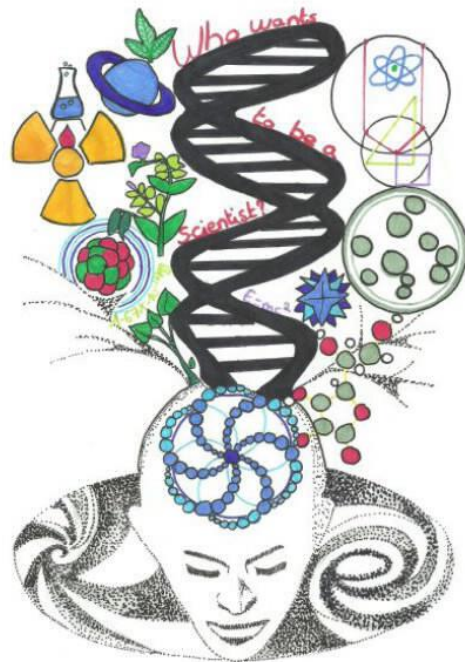
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EUROPE

How many inhabitants live in France in 2016?

1. 66 million
2. 78 million
3. 94 million inhabitants
4. 123 million

66 million

EUROPE

What is the name of the famous cathedral in Paris?

1. Notre-Dame-De-Paris
2. Notre-Dame-De-Chartre
3. Notre-Dame-De-Reims
4. Saint-Etienne-De-Sens

Notre-Dame-De-Paris

EUROPE

What monument is located at the top of the Avenue des Champs-Élysées?

1. The Arc de Triomphe
2. The Eiffel Tower
3. The Louvres
4. The Luxembourg Palace

The Arc de Triomphe

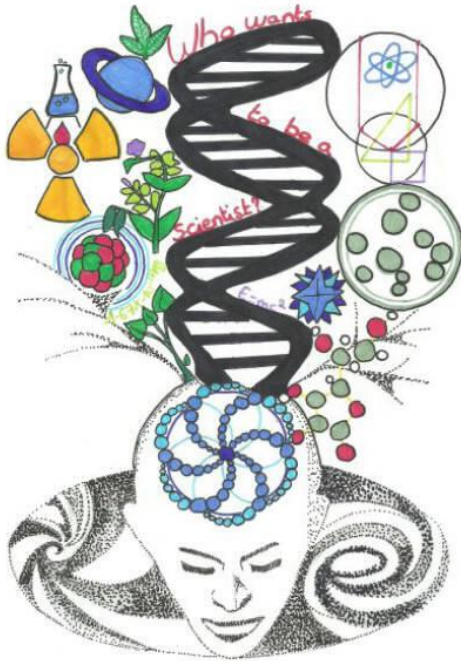
EUROPE

Where does the French president live?

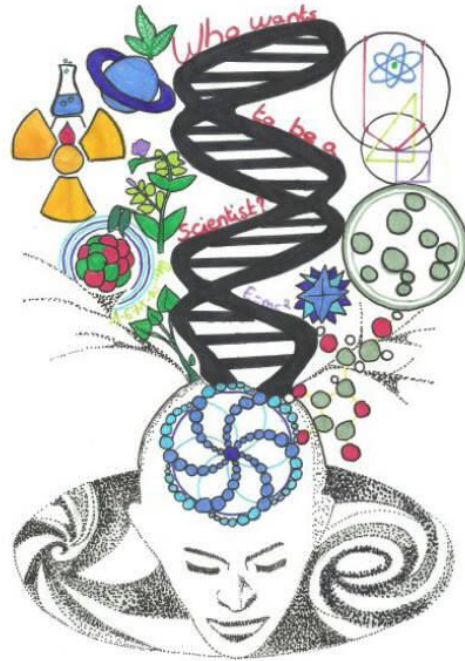
1. White house
2. The Palais de l'Elysée
3. The louvre
4. The Eiffel tower

The Palais de l' Elysée

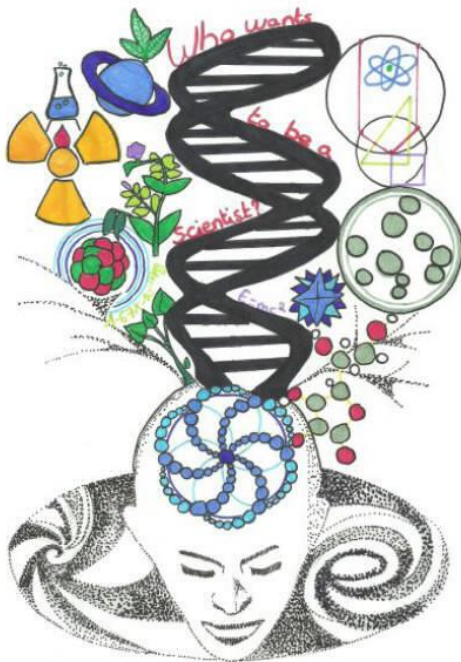
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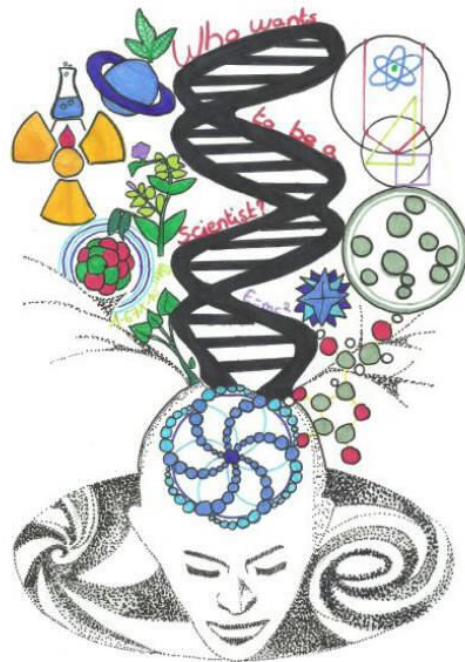
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EUROPE

What is the famous palace that was built during Louis XIV's reign?

1. The Louvres
2. Versailles
3. The Eiffel Tower
4. Chambord

Versailles

EUROPE

It is a Spanish river which has its source in the Montes Universales in the mountain ranges of the north westernmost end of the Sistema Ibérico. It discharges into the Mediterranean sea near the city of Valencia.

Which river is it?

- a) Ebro
- b) Turia
- c) Guadalquivir
- d) Miño

Turia

EUROPE

He was born in Barcelona. He began playing basketball as a center with his school team, he began playing for Barcelona's junior team. In 2001 he was named Player. After entering the NBA draft, he was selected third overall in the first round in the 2001 NBA draft by the Atlanta Hawks.

- a) Marc Gasol
- b) Juan Carlos Navarro
- c) Pau Gasol
- d) Ricky Rubio

Pau Gasol

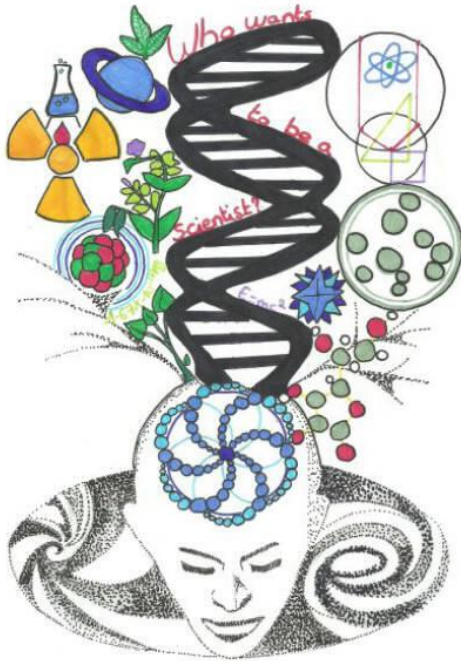
EUROPE

This monument is a cathedral localized in Galicia, Spain. His architectural style is Romanesque, Gothic and Baroque. It was built in 1211. It has historically been a place of pilgrimage on the Way of St. James, since the Early Middle Ages, What is the name of this important monument here in Spain?

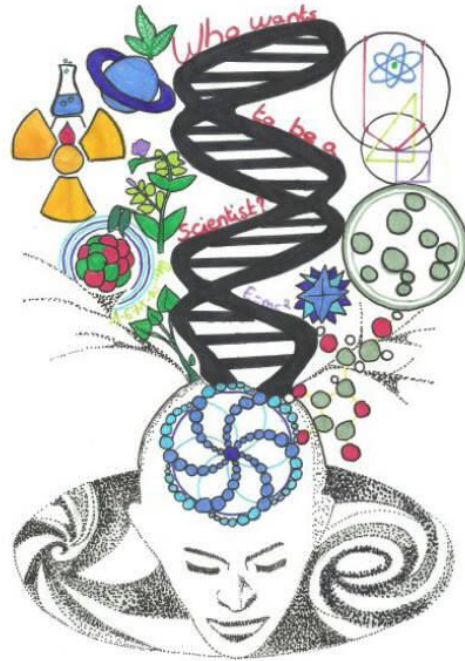
- a) Sagrada Familia
- b) Catedral de Burgos
- c) Catedral de Santiago de Compostela
- d) Catedral de Toledo

Catedral de Santiago de Compostela

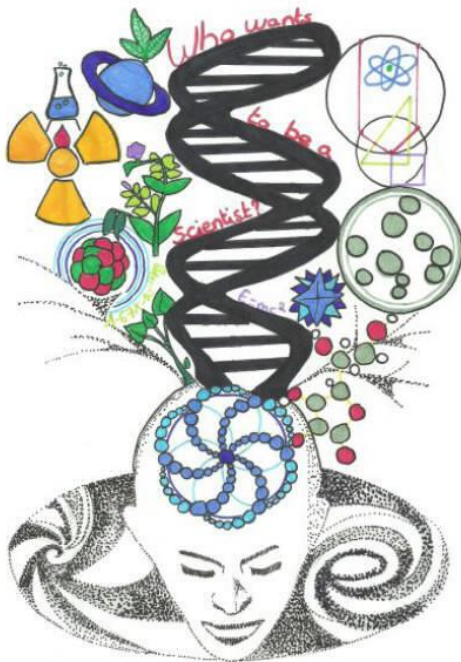
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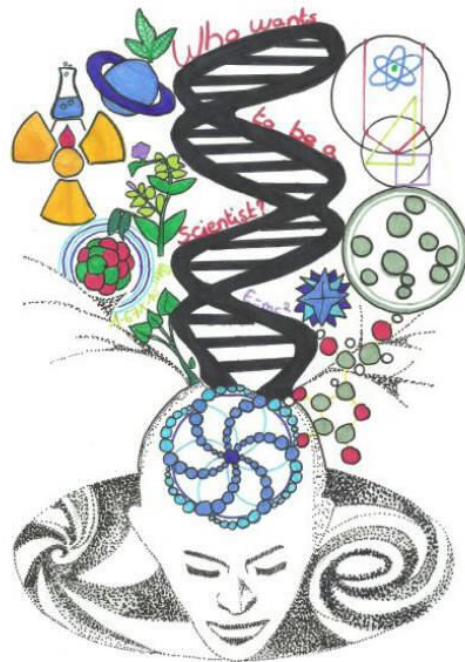
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WHO WANTS TO BE A SCIENTIST
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EUROPE

I'm Spanish humoristic actor and I do monologues. I'm the winner of the Goyas awards to the best revelation actor 2014 for the film "Ocho apellidos vascos"

- a) Mario Casas
- b) Dani Rovira
- c) Antonio Banderas
- d) Pablo Alborán

Dani Rovira

EUROPE

I'm a language, I'm from Valencia, and 2000000 of people speak me. I am governed by the rules of the Valencian Academy of Language. The schools teach me, I am a subject. What language am I?

- a) Euskera
- b) Valencian
- c) Gallego
- d) Catalán

Valencian

EUROPE

This sport sport was unveiled at the end of the century XIX The first team in Spain was Recreativo of Huelva in 1884. You can now Barça, Valencia, Real Madrid and other team. Which is the most Spanish popular sport?

- a) Basketball
- b) Swimming competition
- c) Football
- d) Equitation

Spanish football

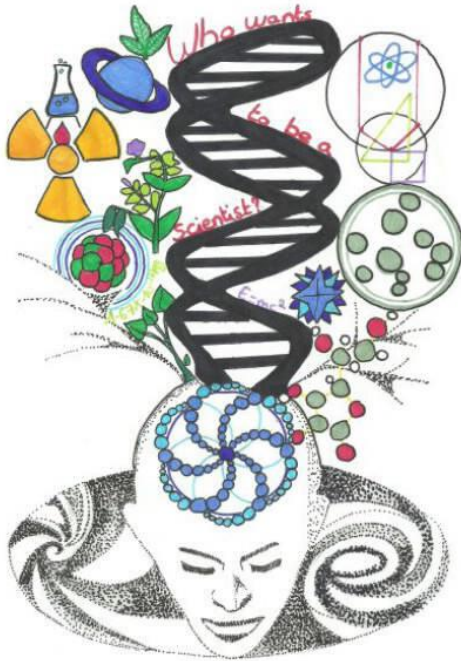
EUROPE

This food is very typical in Spain, but it was born in Valencia. It is a rice-based meal, that appears yellow once completely done. You can either make it with different types of fish (prawns, lobster, etc), or with meat (chicken, rabbit, etc). It also has a few vegetables and it's very tasty! What dish is it?

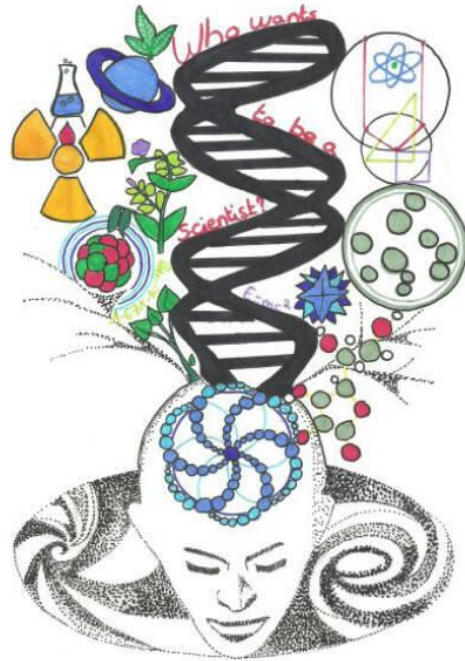
- a) Arroz a la cubana
- b) Arroz caldoso
- c) Paella
- d) Arroz tres delicias

Paella

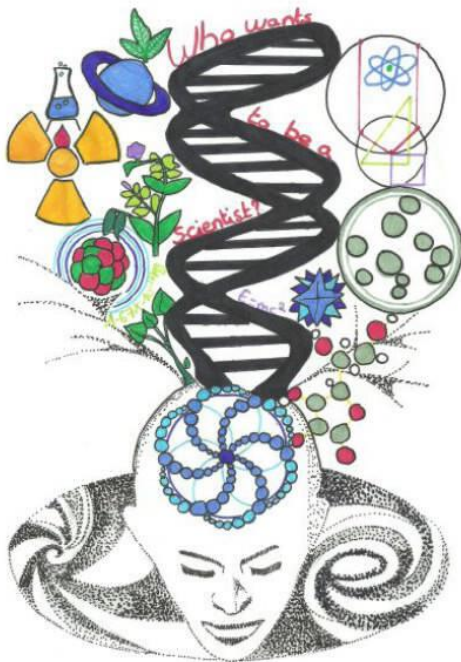
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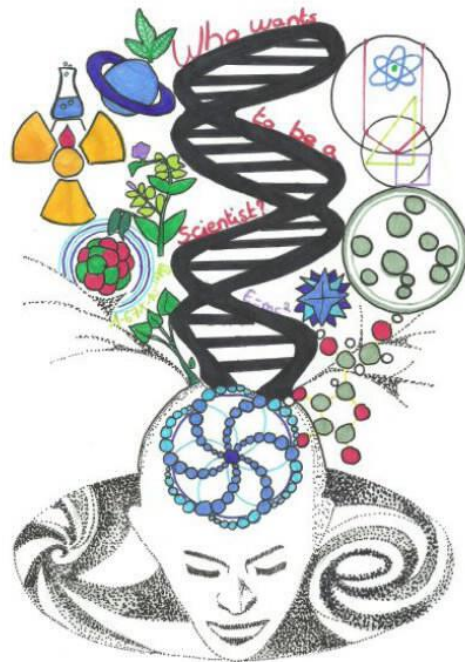
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EUROPE

He is one of the most famous singers in Spain. He has dark blonde curly hair. He is famous thanks to a famous TV programme that they used to do called "operación triunfo" and he raised as a star in 2001. He is from Andalucía, Almería (Southern Spain)

Who is he?

- a) David Bustamante
- b) David Bisbal
- c) Pablo Alborán
- d) Paquirrin

David Bisbal

EUROPE

In Spain there was a civil war between the Nationalist side and the Republican side. The war began on July 17th, 1936.

When did the Spanish Civil War end?

- a) 1942
- b) 1987
- c) It has not yet finished
- d) 1939
- e) 1992

1939

EUROPE

Which is the longest river in Spain?

- a) Duero (Douro)
- b) Tajo (Tagus)
- c) Ebro
- d) Túría (Turia)
- e) Guadalquivir

Tajo

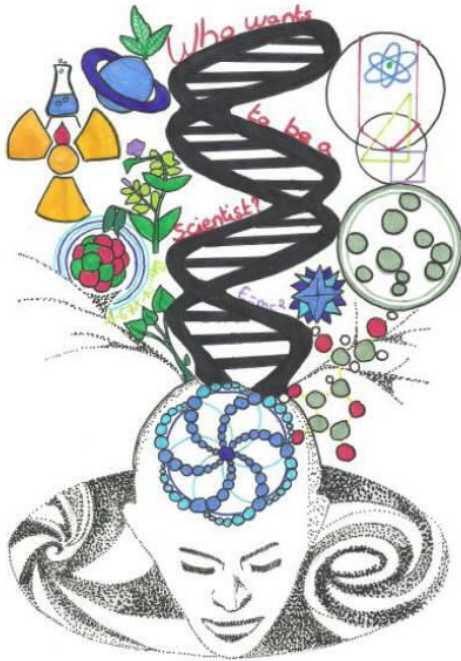
EUROPE

He is a Spanish musician, singer, and songwriter. He born in 1989 in Málaga (Spain) In 2011, he was nominated for three Latin Grammy Awards. "Solamente tú" was his first single.

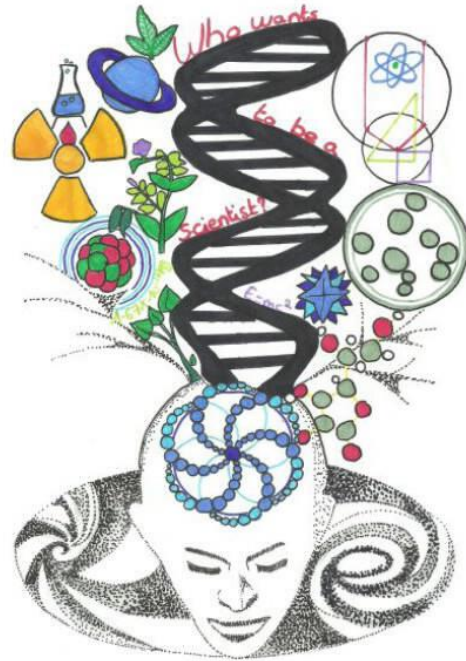
- a) Enrique Iglesias
- b) Pablo Alborán
- c) David Bisbal
- d) Chenoa

Pablo Alborán

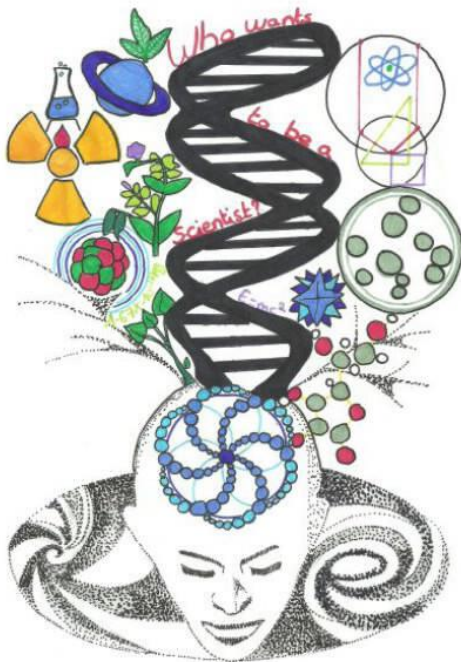
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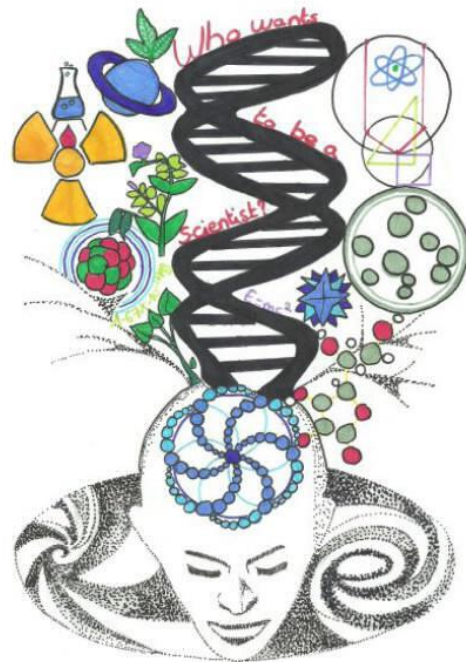
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EUROPE

Which is the longest Italian river?

- A. Po
- B. Tevere
- C. Adige
- D. Sangro

Po

EUROPE

Who's the name of the famous Olympic champion (200 m) known as The South's Arrow?

- A. Fausto Coppi
- B. Pietro Mennea
- C. Francesco Totti
- D. Sara Simeoni

Fausto Coppi

EUROPE

Who painted the Mona Lisa?

- A. Tintoretto
- B. Michelangelo Buonarroti
- C. Raffaello Sanzio
- D. Leonardo da Vinci

Leonardo da Vinci

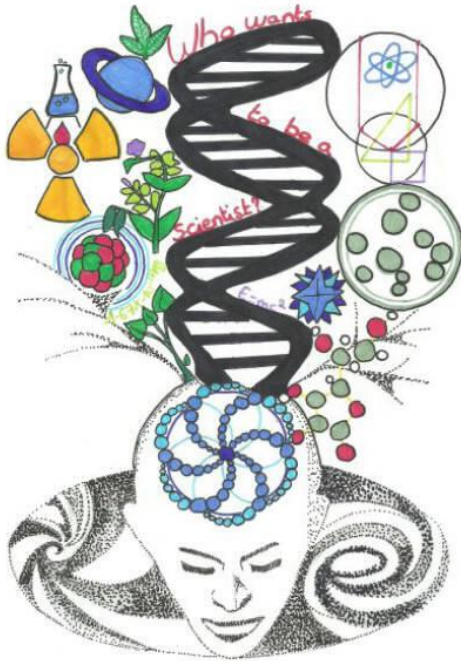
EUROPE

Who painted the Sistine Chapel?

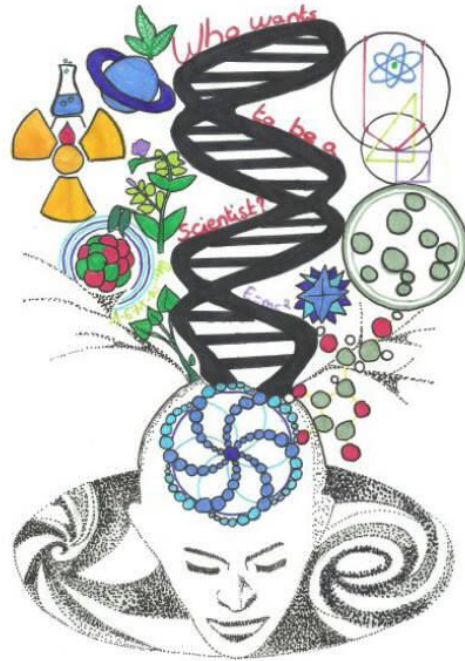
- A. Piero della Francesca
- B. Giotto
- C. Michelangelo Buonarroti
- D. Il Perugino

Michelangelo Buonarroti

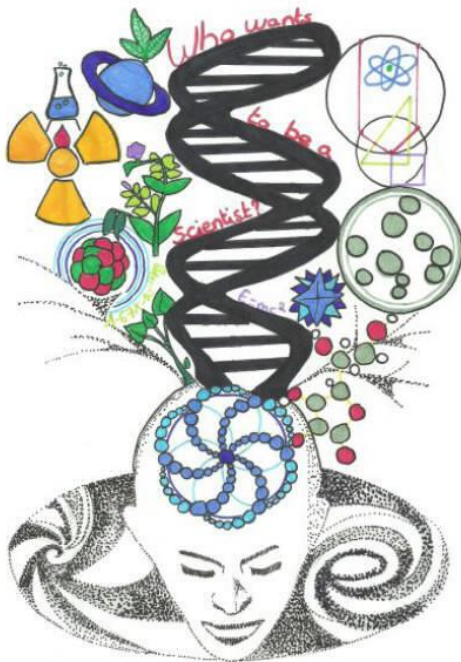
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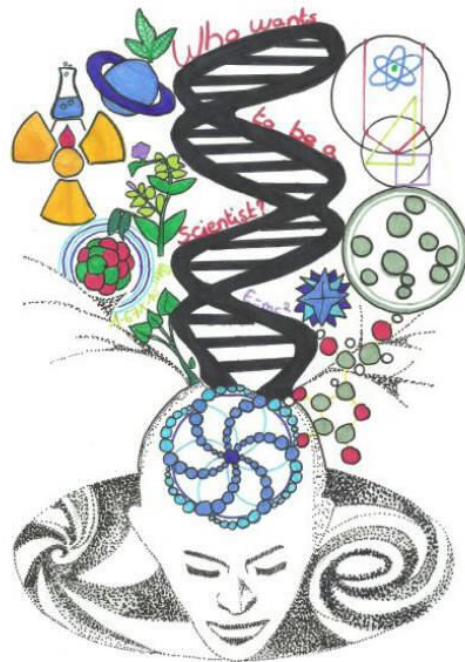
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EUROPE

What is the smallest region in Italy?

- A. Molise
- B. Valle d'Aosta
- C. Liguria
- D. Basilicata

Valle d'Aosta

EUROPE

Which city is to the north of Naples?

- A. Potenza
- B. Bari
- C. Catanzaro
- D. Palermo

Bari

EUROPE

What year Italy became a republic?

- A. 1920
- B. 1969
- C. 1870
- D. 1946

1946

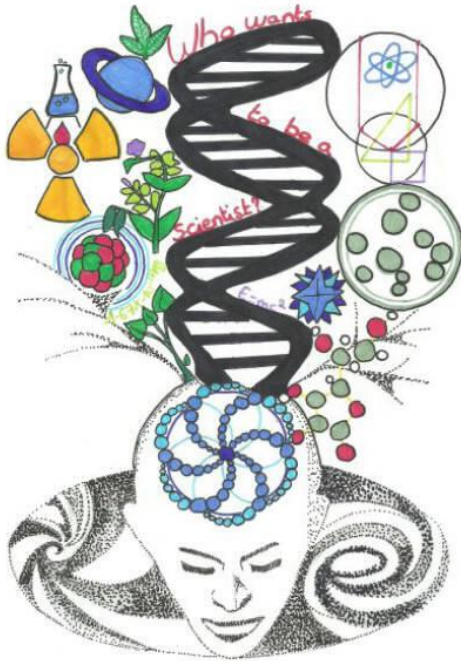
EUROPE

Who was the first king of Rome?

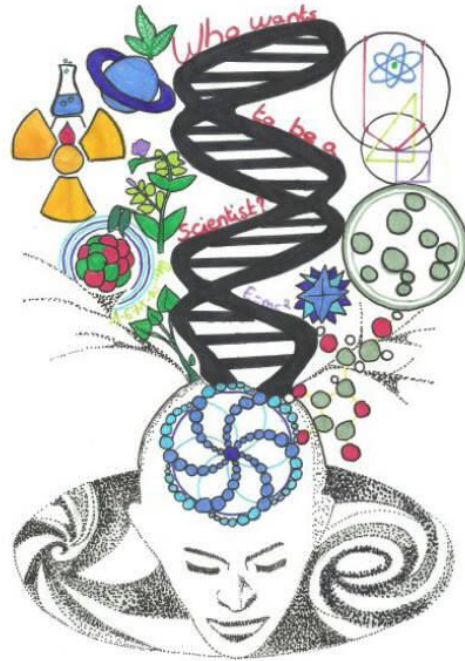
- A. Tarquinio Prisco
- B. Giulio Cesare
- C. Romolo
- D. Ottaviano Augusto

Romolo

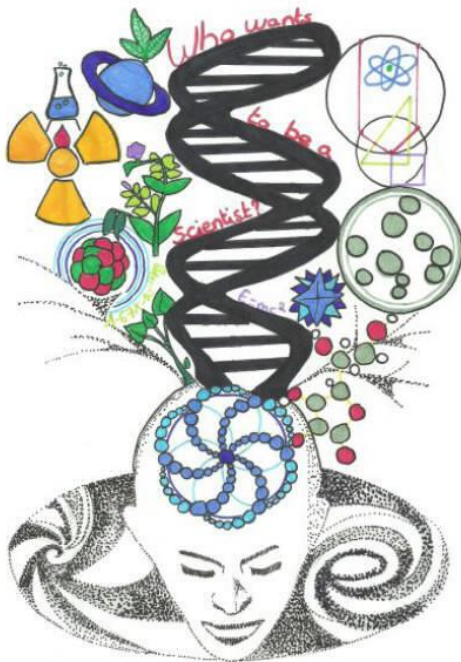
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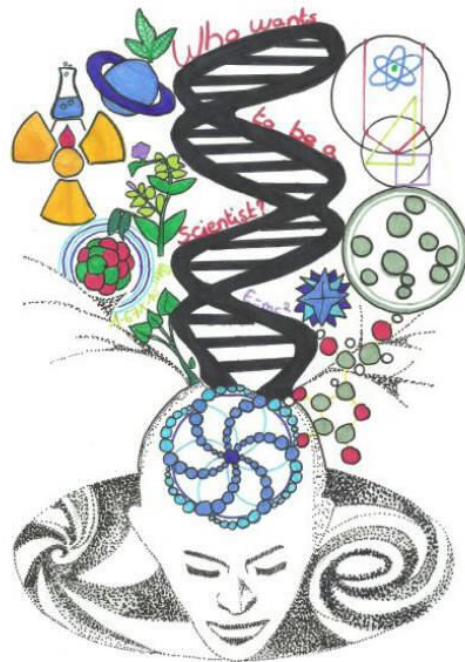
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WHO WANTS TO BE A SCIENTIST
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WHO WANTS TO BE A SCIENTIST
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EUROPE

Who is the head of the Italian government in 2016?

- A. Matteo Renzi
- B. Giulio Andreotti
- C. Silvio Berlusconi
- D. Beppe Grillo

Matteo Renzi

EUROPE

What is the symbol of Rome?

- A. The she-wolf
- B. The wild boar
- C. The deer
- D. The dragon

The she-wolf

EUROPE

QUESTION

The President of Portugal is...

- A. ...Cristiano Ronaldo.
- B.Marcelo Rebelo de Sousa.
- C. ...Pedro Passos Coelho
- D. ...António Costa

Marcelo Rebelo de Sousa

EUROPE

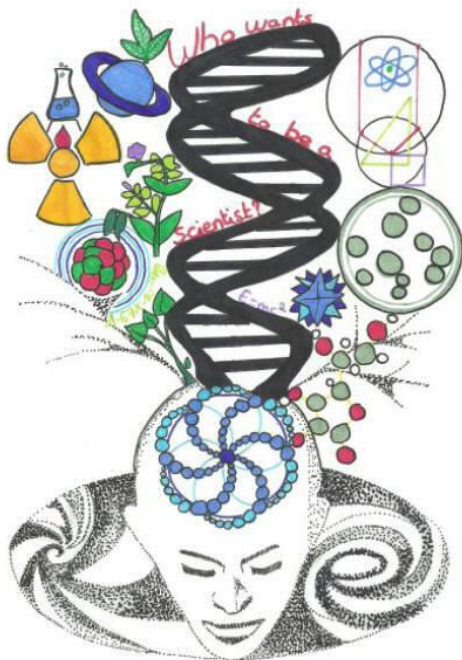
QUESTION

The population of Portugal is about...

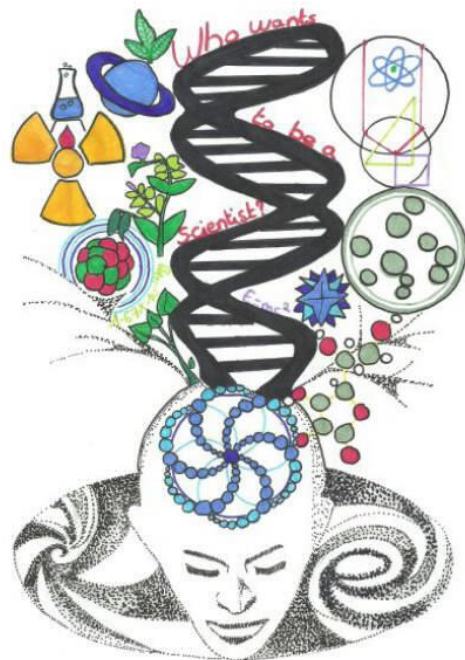
- A. 20,813,834
- B. 5,813,834
- C. 10,813,834
- D. 40,813,834

10,813,834

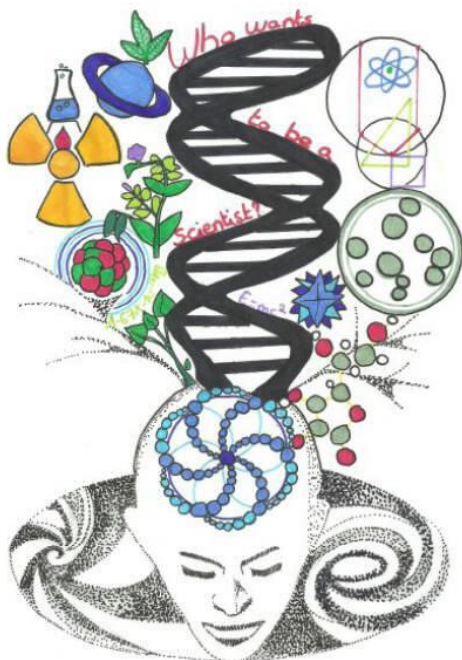
WHO WANTS TO BE A SCIENTIST
EUROPE



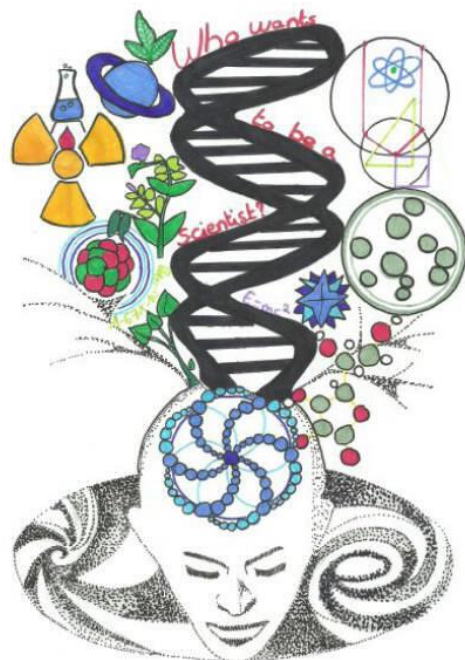
WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

QUESTION

How many hours of sunshine there is in Portugal per year?

- A. 1000 h
- B. 3000h
- C. 500h
- D. 2000h

3000 hours

EUROPE

QUESTION

What is the name of the capital of Portugal?

- A. Lisbon
- B. Porto
- C. Faro
- D. Coimbra

Lisbon

EUROPE

QUESTION

When was monarchy abolished in Portugal?

- A. 1822
- B. 1910
- C. 1974
- D. 1920

1910

EUROPE

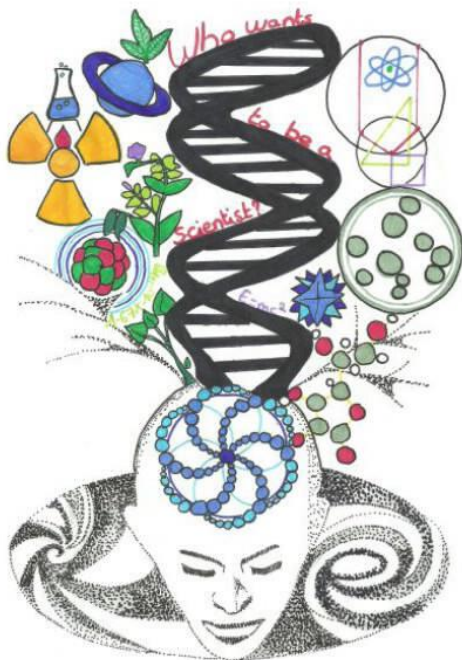
QUESTION

Which is the longest bridge in Europe?

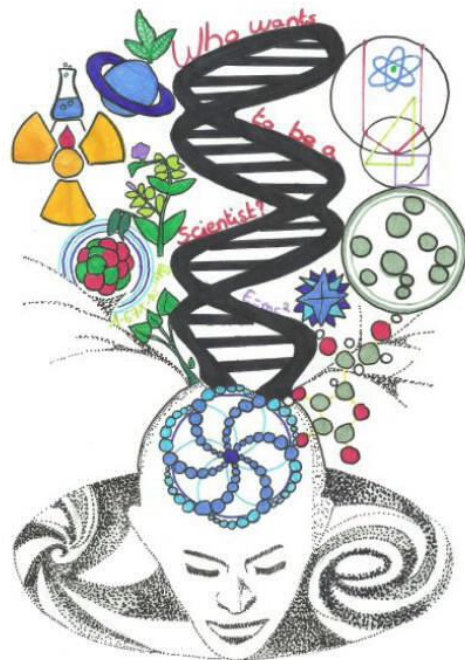
- A. Vasco da Gama (Portugal)
- B. London bridge
- C. Golden Gate Bridge
- D. Lupu Bridge

Vasco da Gama Bridge

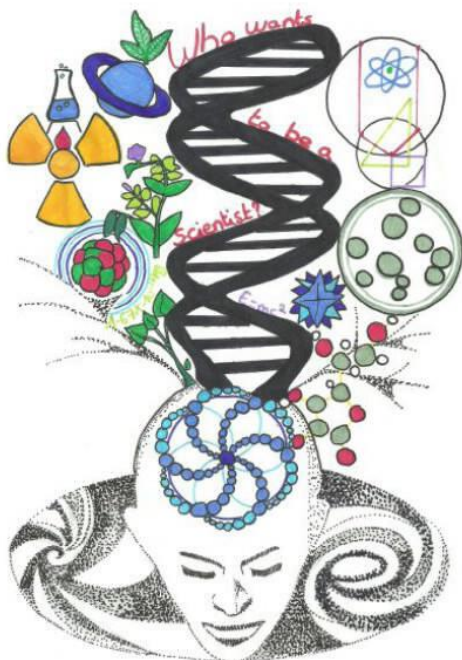
WHO WANTS TO BE A SCIENTIST
EUROPE



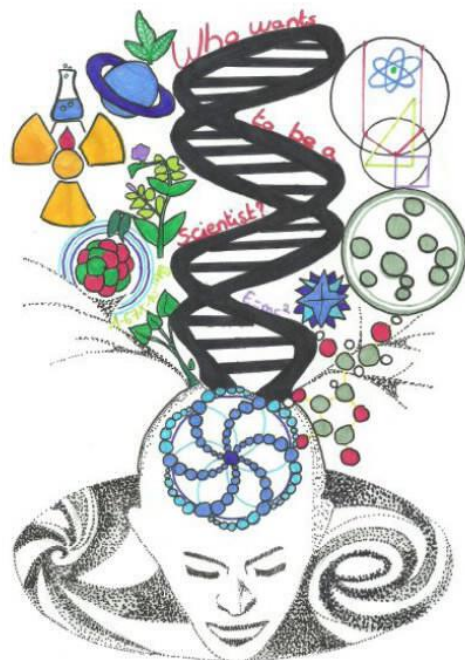
WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



WHO WANTS TO BE A SCIENTIST
EUROPE



EUROPE

QUESTION

Where is Cristiano Ronaldo from?

- A. Madeira
- B. Açores
- C. Alentejo
- D. Algarve

Madeira

EUROPE

QUESTION

It became the kingdom of Portugal in 1139, and Portugal's borders have barely changed since....

- A.1297.
- B.1970.
- C.1910.
- D.1889.

1297

EUROPE

QUESTION

How many countries have Portuguese as the official language?

- A. 2
- B. 1
- C. 8
- D. 4

8

EUROPE

QUESTION

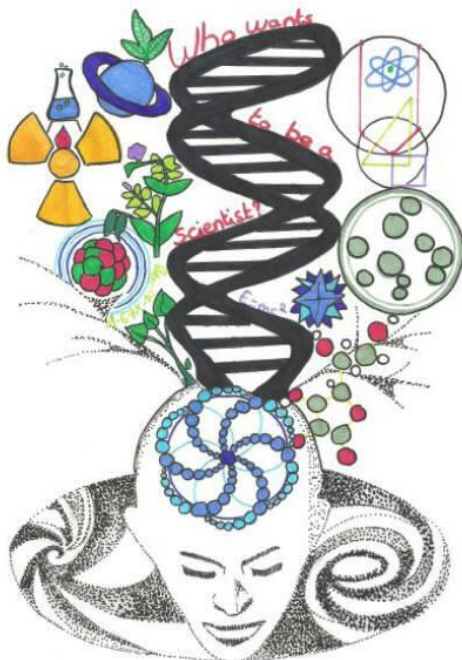
The biggest wave ever surfed was in Portugal.

In

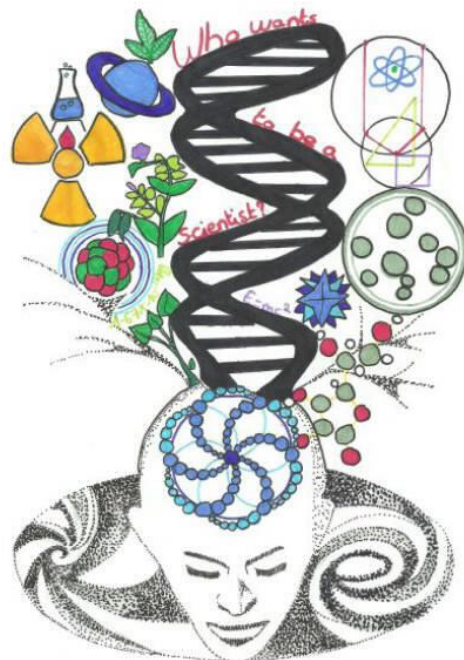
- A....Nazaré.
- B....Albufeira.
- C. ...Lisbon
- D. ...Cape Roca

Nazaré

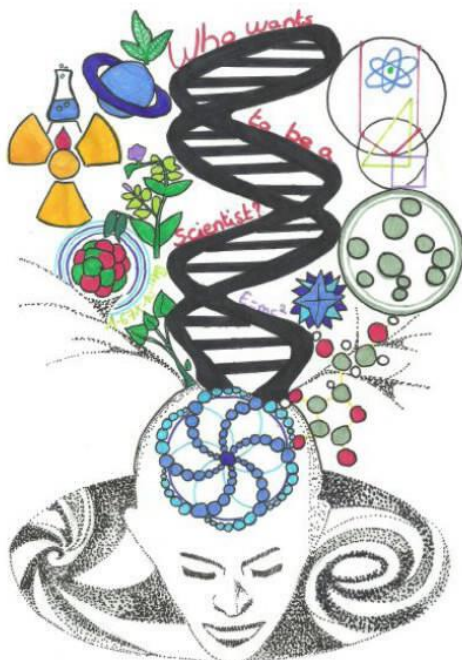
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



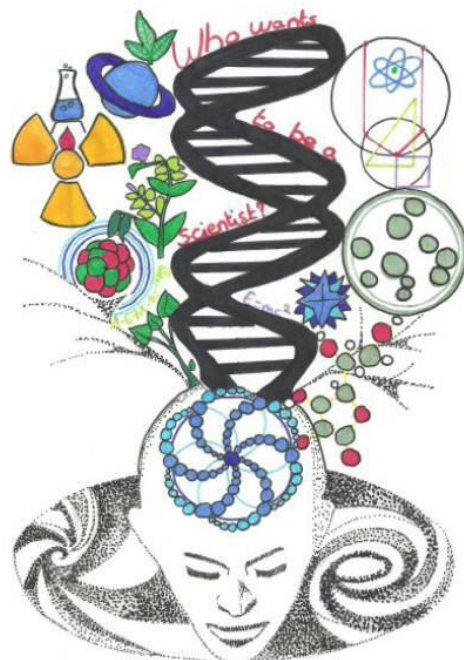
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1. I was born on August 1887 the 12th and died on January 1961 the 4th. I was an Austrian but used to live in Ireland.
2. I am known as the father of quantum mechanics and am famous for an experiment linked with a cat.
3. I discovered an equation that was named after my own name, and that is also called the wave equation.
4. I won a Nobel Prize that I shared with Paul Dirac in 1933.
5. I discovered the first quantum model of atoms by understanding that electrons couldn't be precisely situated in the electrons cloud.

Erwin Schrödinger

GREAT SCIENTISTS

1. I was born in 1881 and died in 1955. I was Irish and I lived in London.
2. I was a biologist and a pharmacologist. I carried out a lot of experiments.
3. In 1928 I discovered penicillin. Penicillin is used to treat infections caused by bacteria. It's an antibiotic.
4. I won the Nobel Prize in medicine in 1945.
5. One day I said "One sometimes finds what one is not looking for".

Alexander Fleming

GREAT SCIENTISTS

1. I was born in 1745. I died in 1827. I was Italian.
2. I was a physicist and a chemist. I worked on electricity.
3. In 1799 I created the first electrical battery, called the voltaic pile. It consists of two electrodes made of copper and zinc with an electrolyte.
4. With my invention, I proved that electricity could be generated chemically.
5. The SI unit of electric potential (voltage) was named in my honour.

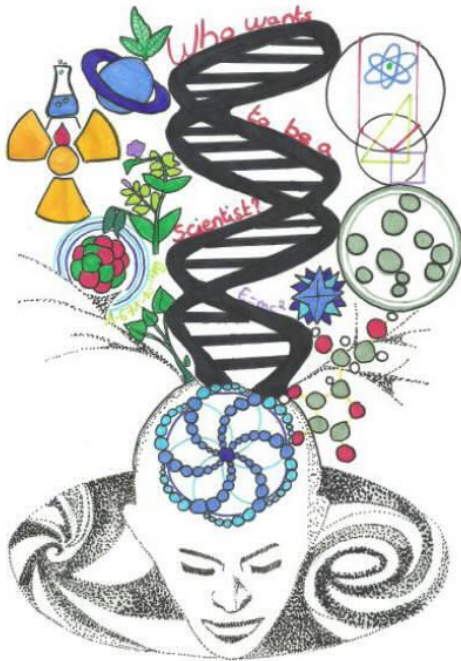
Alessandro Volta

GREAT SCIENTISTS

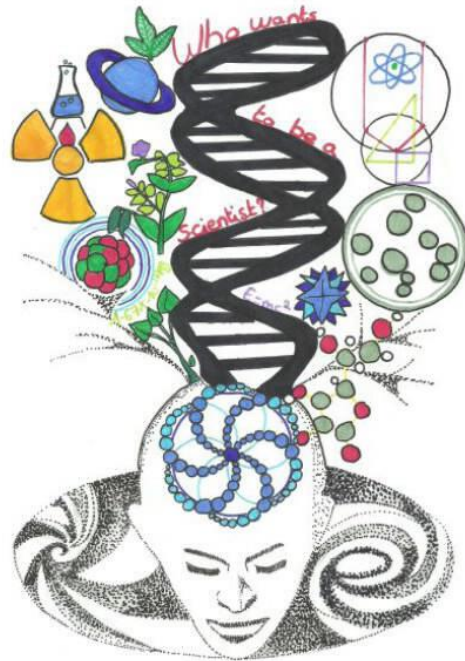
1. I was born on February 22nd 1857 and died on January 1st 1894. I was German.
2. I am famous because I proved experimentally the existence of electromagnetic waves in the years 1885-1889.
3. My experiments confirmed Maxwell's theory of electromagnetism published in 1865.
4. I was the first to set up an experiment which transmitted and received radio waves, part of electromagnetic waves.
5. I gave my name to the unit of frequency.

Heinrich Hertz

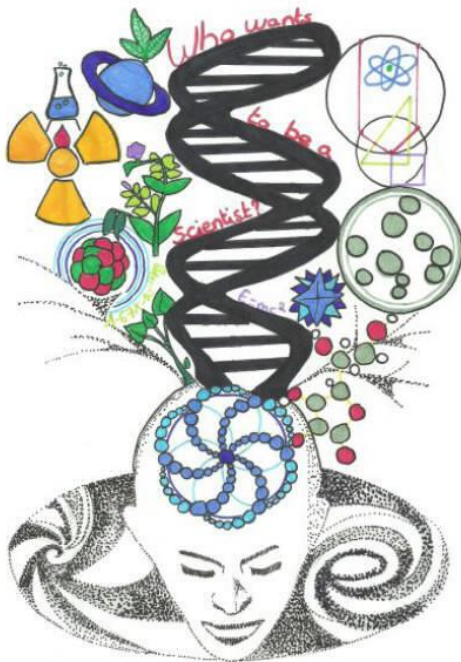
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



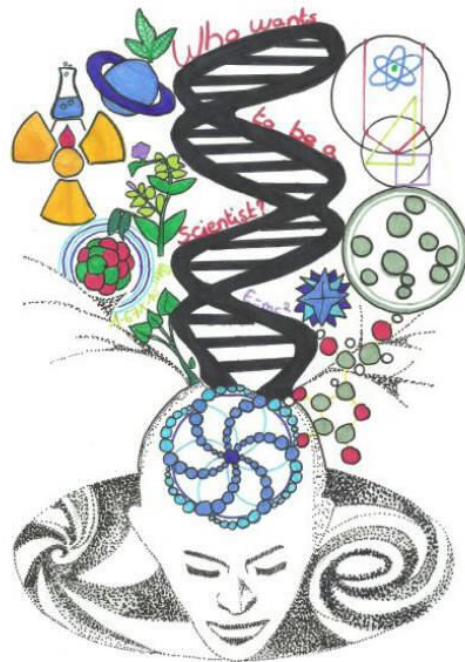
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1. I was born in 1871 and I died in 1937. I'm a New Zealander and British.
2. I worked in Montreal, Manchester and Cambridge as a teacher.
3. In 1908 I won the Nobel Prize in Chemistry for my works on radioactivity and disintegrations of the elements.
4. In 1909, I proved the existence of the nucleus in an atom, thanks to the gold leaf experiment.
5. In 1911 I gave my name to the atomic model where electrons orbit the nucleus.

Ernest Rutherford

GREAT SCIENTISTS

1. I was born in Paris, France, on December 15, 1852, into a family of scientists. I died on August 25th 1908.
2. I was an esteemed member of the European scientific community. I was elected a member of the Academie des Sciences de France in 1889.
3. In 1896 I discovered the radioactivity of uranium.
4. I shared a Nobel Prize in 1903 with Marie Curie.
5. I gave my name to the unit of a radioactivity quantity. The symbol of this unit is Bq.

Henri Becquerel

GREAT SCIENTISTS

1. I was born in 1642 and died in 1727. I was English.
2. I was a physicist, mathematician, astronomer and philosopher.
3. I formulated the laws of motion and universal gravitation.
4. I made my first discoveries by observing an apple falling from a tree.
5. My name was given to the SI unit of force.

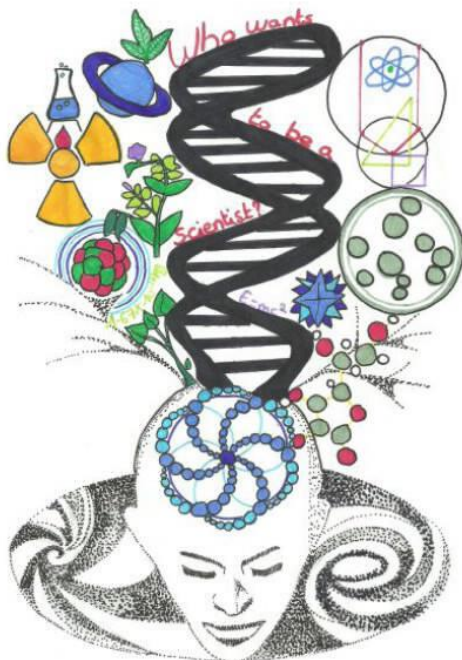
Isaac Newton

GREAT SCIENTISTS

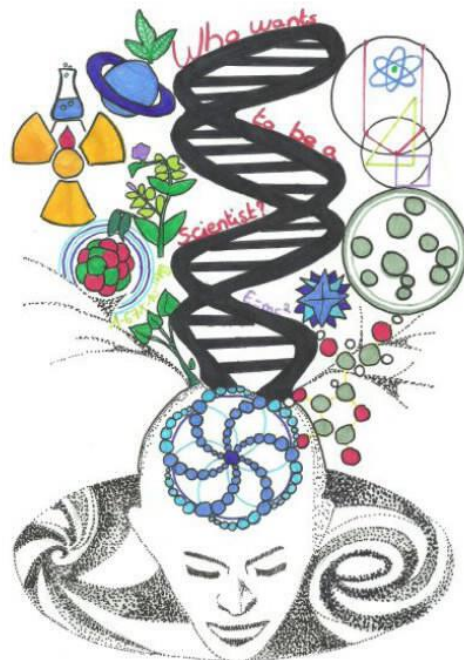
1. I was born in 1736 and died in 1819. I was a Scottish scientist.
2. I was an inventor, a mechanical engineer and a chemist.
3. I worked about steam engines where the thermal energy of the steam is converted into mechanical energy
4. My improvements to the steam engines contributed to the Industrial Revolution and to the invention of locomotives
5. My name was given to the SI unit of power

James Watt

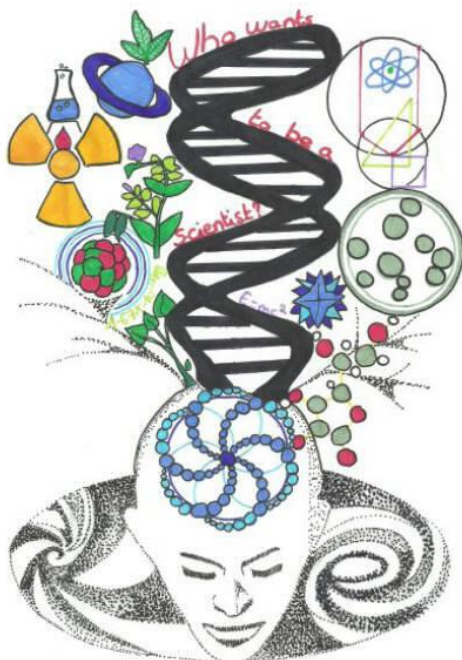
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



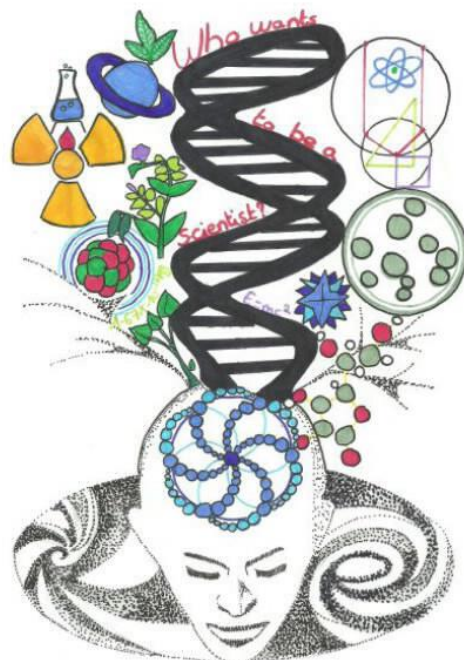
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1. I am a British scientist born on 8th January of 1942 in England
2. I work as theoretical physicist, and cosmologist in Cambridge University
3. I have motor neuron disease
4. I worked on cosmology particularly on the theory of black Holes.
5. I wrote two famous books named "A Brief History of Time" and "The Universe in a Nutshell".

Stephen Hawking

GREAT SCIENTISTS

1. I was born on February 15th 1564 and I died on January 8th 1642. I'm from Italy.
2. I was an astronomer, physicist, engineer, philosopher and mathematician.
3. I discovered the four largest satellites of Jupiter and the telescopic confirmation of the phases of Venus.
4. I supported the Copernican theory that the sun was at the center of the solar system.
5. In 1632 I wrote a book called "dialogue concerning the two chief world systems". Because of this book I was found to be guilty of heresy and sentenced to house arrest for the rest of my life.

Galileo Galilei

GREAT SCIENTISTS

1. I was born in Paris, France (26 August 1743) and I died in Paris (8 May 1794).
2. I was a French nobleman and chemist central to the 18th-century chemical revolution and I had a large influence on both the history of chemistry and the history of biology.
3. I studied which is the role of oxygen in combustion reactions.
4. I helped to construct the metric system and I wrote the first extensive list of chemical elements.
5. I was considered the father of the scientist methods.

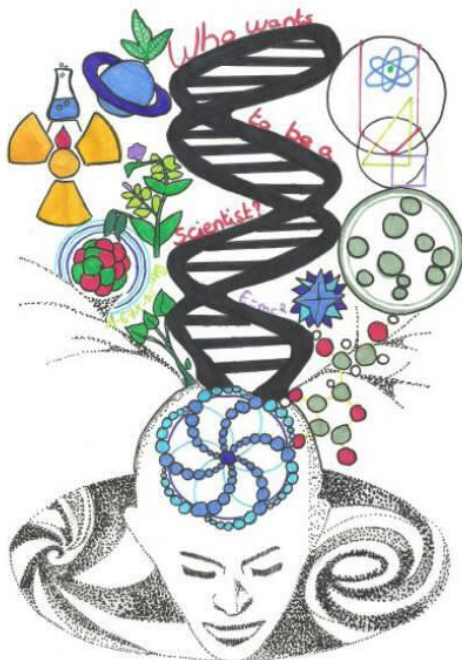
Lavoisier

GREAT SCIENTISTS

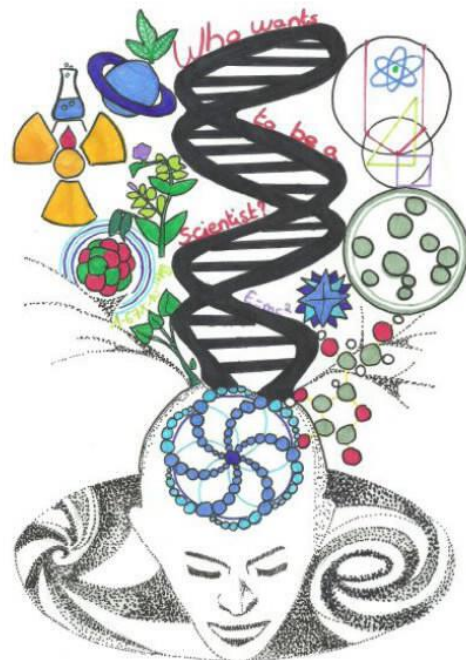
1. I was born in Clermont-Ferrand (France) in 1623 and I died in Paris in 1662.
2. I was an important mathematician, physicist, inventor, writer and Christian philosopher.
3. I made important contributions to the study of fluids in order to clarify the concepts of pressure and vacuum. I invented the hydraulic press.
4. I defended the scientific method.
5. In maths my contribution is a peculiar triangle. My book *Traité du triangle arithmétique* of 1653 described a convenient tabular presentation for binomial coefficients.

Pascal

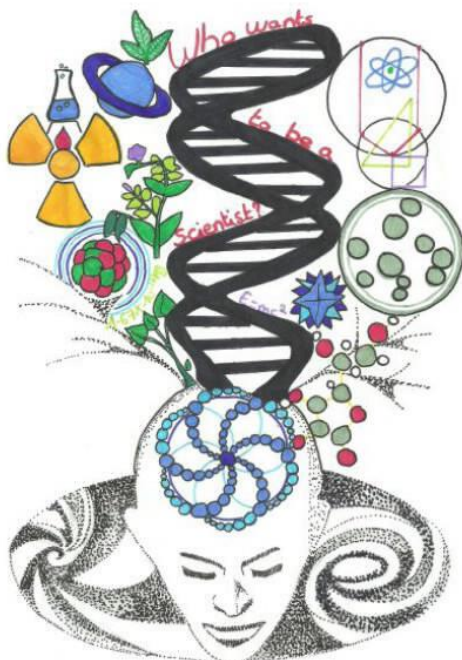
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



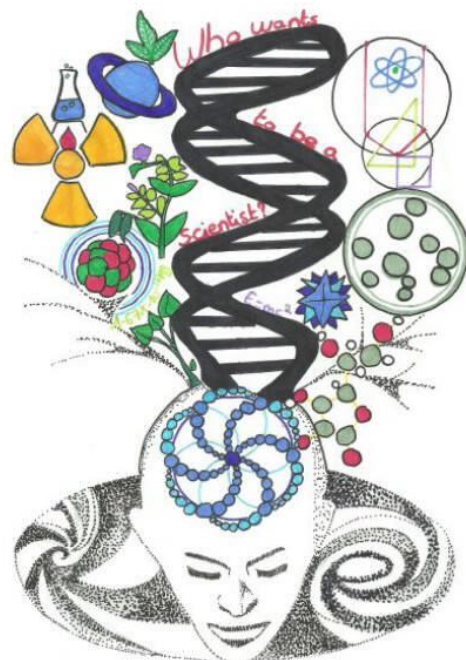
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1. I was born at December 27, 1822 and I died at September 28, 1895.
2. I was appointed to the Chair of Chemistry in the faculty of sciences of the University of Strasbourg in 1848. 6 years later, he was named dean of the new faculty of sciences at Lille University.
3. I demonstrated that fermentation is caused by the growth of micro-organisms.
4. My pasteurization process is applied in milk industrial process.
5. I also made significant discoveries in chemistry, most notably on the molecular basis for the asymmetry of certain crystals and racemisation.

Pasteur

GREAT SCIENTISTS

1. I was born the 22 September of 1791 in Newington, England. I died at Hampton Court on 25 August 1867, aged 75.
2. My inventions of electromagnetic rotary devices formed the foundation of electric motor technology, and it was largely due to his efforts that electricity became practical for use in technology.
3. I am most known for my contributions to the understanding of electrochemistry.
4. My two laws are related with that the mass of a substance deposited is proportional to the amount of electricity transferred.
5. Some of my science books are: Chemical manipulation, Experimental research in electricity and Experimental research in physics & chemistry.

Michael Faraday

GREAT SCIENTISTS

1. I was born in Stagira (384 BC) and I died in Euboea (322 BC), Greece.
2. I had a beard, short hair, and there aren't many photos of me, mostly statues.
3. I was one of the most important Philosophers with Plato.
4. I suggested that the reason for anything coming about can be attributed to four different types of active causal factors: Material cause, formal cause, efficient cause and final cause.
5. I gave more importance to the continuous changing in nature in front of the conservancy. Transformations from one sort of matter into another take place in a cycle in which only one quality changes in base to the four basic elements fire, earth, water and air.

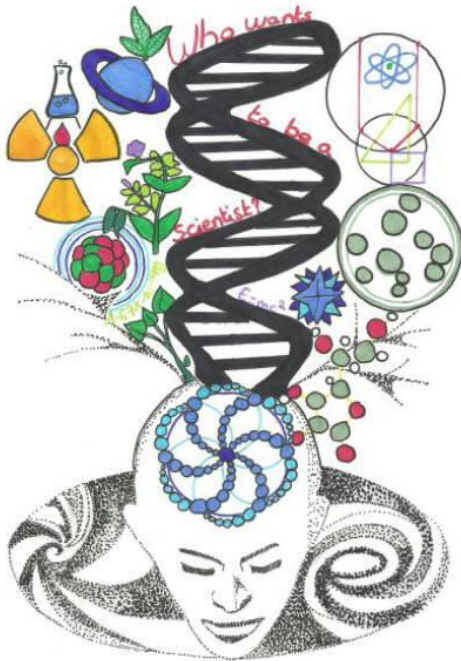
Aristotle

GREAT SCIENTISTS

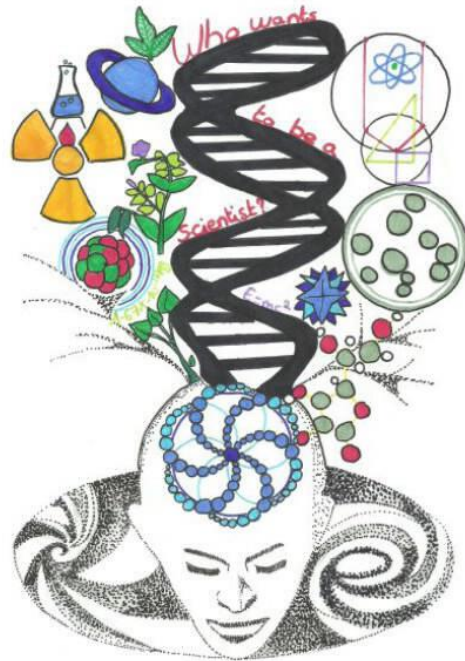
1. I was born in 1856 in Smiljan, Austro-Hungarian Empire and I died in 1943, New York (USA)
2. I studied physics, mechanical engineering and electrical engineering.
3. I received the award of gold Elliot Cresson (1894) for the alternating electric currents of high frequency and the award of gold John Scott (1934) for the invention of the magnetic rotating field and for the induction motor.
4. I invented the wireless transfer of electric power, the alternating current, the direct energy weapons, the hatches or logical doors, the radio, the fluorescent lamp....
5. The airport of Belgrade takes my name

Nicola Tesla

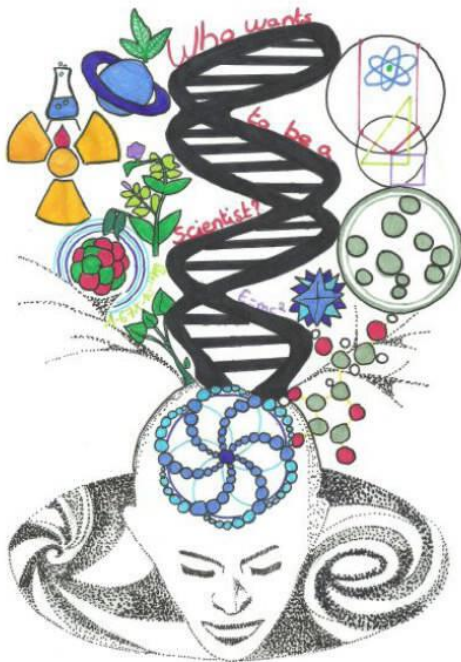
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



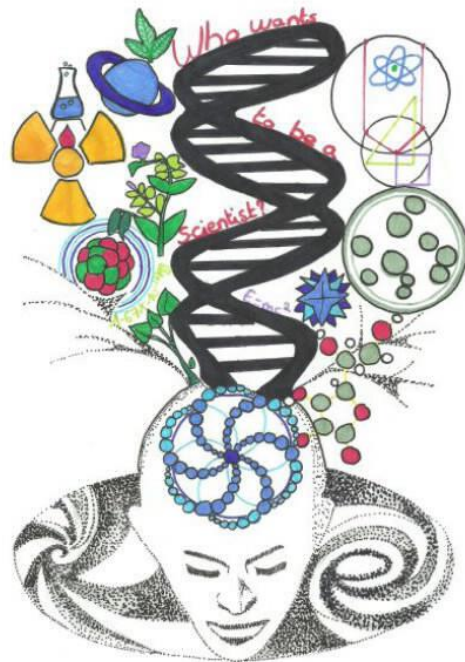
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1. I am a scientific born in the 1856 in England, Manchester. I died in Cambridge, England in 1940.
2. I invented the spectrometer.
3. One of my best students was Rutherford
4. I won the Nobel Prize of Physic in 1906, because I discovered the electron.
5. I considered that atom was composed of electrons. The negative electrons occupied a region of space that itself was a uniform positive charge.

Thomson

GREAT SCIENTISTS

1. I was born in c. 287 BC in Greece.
2. I was an Ancient Greek mathematician, physicist, engineer, inventor and astronomer.
3. I am especially important for my discovery of the relation between the surface and volume of a sphere and its circumscribing cylinder.
4. I invented a method for determining the volume of an object with an irregular shape.
5. The exclamation 'Eureka!' (I found it) is famously attributed to me .I was stepped into a bath and noticed that the water level rose whereupon I understood that the volume of water displaced must be equal to the volume of the part of my body I had submerged.

Archimedes

GREAT SCIENTISTS

1. Was born on April 15, 1452, in Vinci (Italy).
2. I was curious person so I studied the laws of science and nature.
3. I worked as a painter, sculptor, architect, inventor and military engineer. But I am most famous for my work as an artist.
4. I was a leading artist and intellectual of the Italian Renaissance
5. My famous paint is The Mona Lisa (Gioconda).

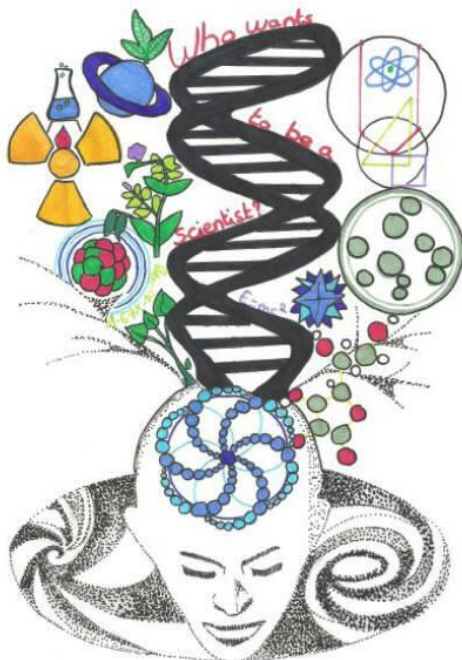
Leonardo Da Vinci

GREAT SCIENTISTS

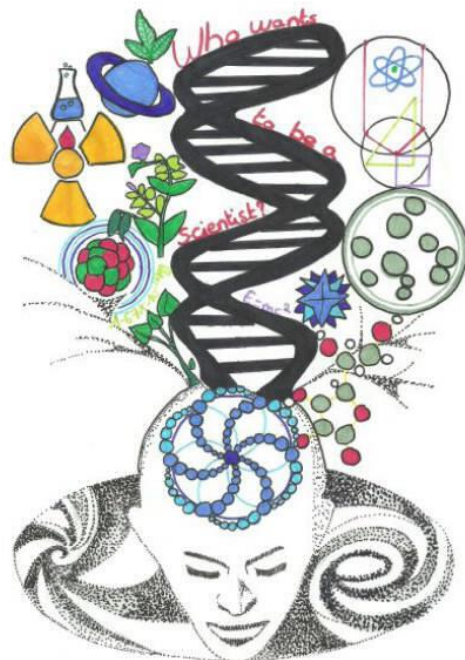
I was born in Italy in 1901, and died in Chicago in 1953. I have been called the "architect of the nuclear age", and I created the world's first nuclear reactor. I was one of the few physicists to excel both theoretically and experimentally. My first major contribution was to statistical mechanics. Some of the most important laws in particle physics has named after me. After bombarding thorium and uranium with slow neutrons, I concluded that I had created new elements; although I was awarded the Nobel Prize for this discovery, the new elements were subsequently revealed to be fission products.

Enrico Fermi

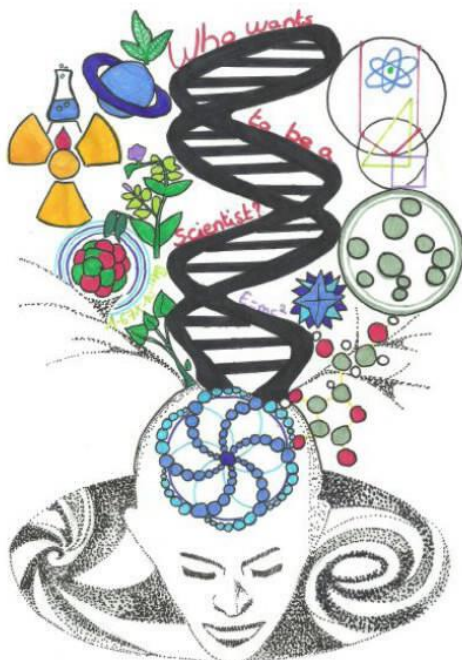
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



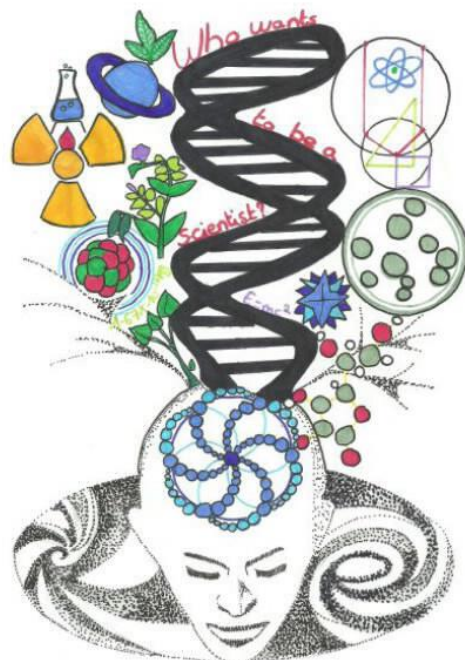
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

I was born in Warsaw (Poland), on 7 November 1867, and I'm a Polish physicist and chemist.

I conducted pioneering research on radioactivity, and then I developed the theory of radioactivity.

I discovered two chemical elements: Polonium and Radium.

I won the Nobel Prize in Physics in 1903, and the Nobel Prize in Chemistry in 1911.

I died in a sanatorium in France in 1934, due to aplastic anemia brought on by exposure to radiation.

Marie Curie

GREAT SCIENTISTS

I was born in Copenhagen, Denmark, on 7 October 1885 and I died on 18 November 1962 at the age of 77.

I received the Nobel Prize in Physics in 1922 for my contribution to understanding atomic structure and quantum theory.

I proposed that energy levels of electrons are discrete and that the electrons revolve in stable orbits around the atomic nucleus but can jump from one energy level (or orbit) to another.

My three papers, which later became famous as "the trilogy", were published in Philosophical Magazine.

I founded the Institute of Theoretical Physics at the University of Copenhagen.

Niels Bohr

GREAT SCIENTISTS

I was born in the city of Weil in Germany in 1571, soon became a student of theology and mathematics at the University of Tübingen. I died in 1630.

I realized that the planets move like the tip of a pencil, that is, revolve in elliptical orbits around the sun, placed in one focus of the ellipse.

I was also in charge of geometry, music and theology and shortly before my death I composed a Somnium, dedicated to a science fiction journey between the inhabitants and the phenomena of the lunar world.

I was the first astronomer of the 16th century to realize that the orbits of the planets are not circular, but elliptical.

The script most innovative I wrote in Prague was the Astronomiae pars optica, dedicated to geometric optics and telescopes.

Kepler

GREAT SCIENTISTS

I was an English naturalist and geologist born in England in 1809.

I've travelled around the world on my ship, the "Beagle", to do natural research.

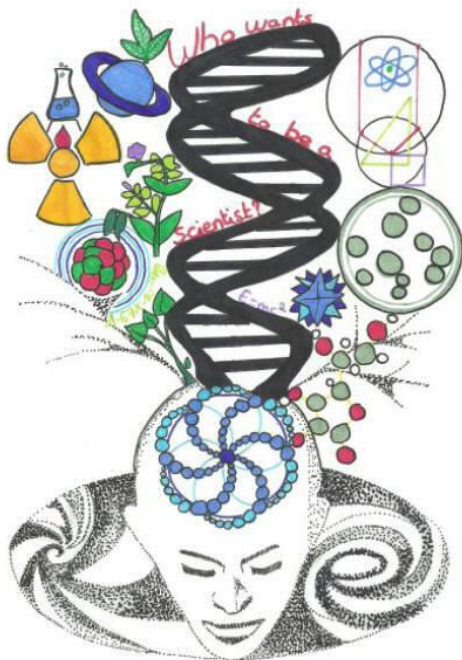
I've contributed to the evolutionary theory with my own scientific theory that I called natural selection.

I've studied the Galapagos giant tortoise during my second expedition with Beagle.

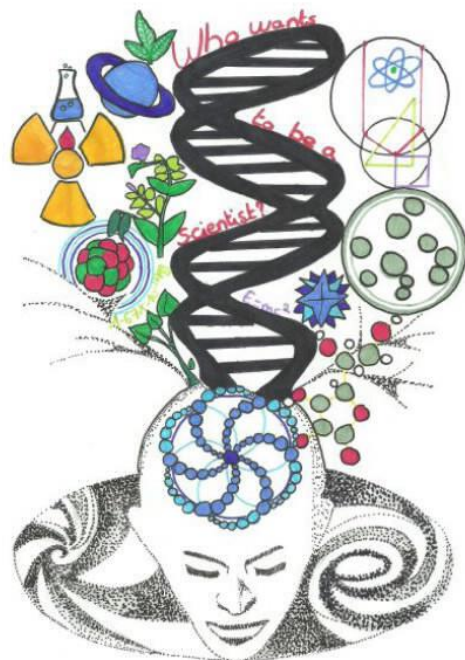
I died on 19 April 1882, my funeral was attended by thousands of people, including scientists and philosophers.

Charles Darwin

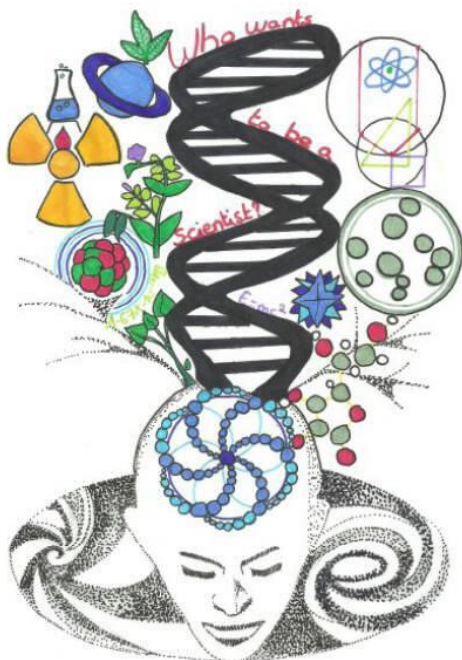
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



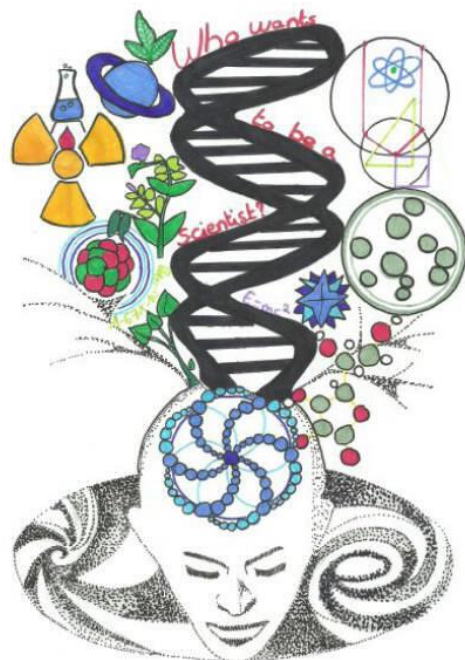
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1. He is regarded as the father of modern philosophy for defining a starting point for existence, "I think; therefore I am."
2. He was born on March 31, 1596, in La Haye, France.
3. He was extensively educated, first at a Jesuit college at age 8, then earning a law degree at 22.
4. He believed that all truths were ultimately linked.
5. He sought to uncover the meaning of the natural world with a rational approach, through science and mathematics.

René Descartes

GREAT SCIENTISTS

1. Born in Ulm, Württemberg, Germany in 1879.
2. In 1921, he won the Nobel Prize for physics for his explanation of the photoelectric effect.
3. He immigrated to the U.S after being targeted by the Nazis.
4. He is generally considered the most influential physicist of the 20th century.
5. He died on April 18, 1955, in Princeton, New Jersey.

Albert Einstein

GREAT SCIENTISTS

1. He was born in the Elswick district of Newcastle upon Tyne, England.
2. He is a British theoretical physicist, emeritus professor at the University of Edinburgh.
3. In the 1960s, he proposed that broken symmetry in electroweak theory could explain the origin of mass of elementary particles in general and of the W and Z bosons in particular.
4. He has been honoured with a number of awards in recognition of his work, including the 1981 Hughes Medal from the Royal Society.
5. On October 8th, 2013, he won the Nobel Prize in Physics.

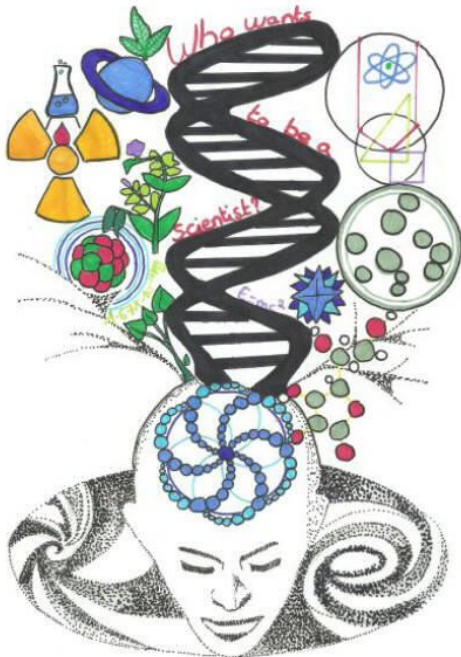
Peter Higgs

GREAT SCIENTISTS

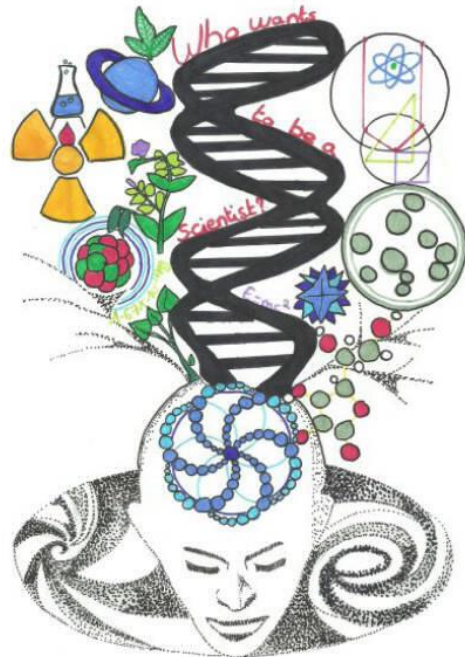
1. He was born in Turin, Italy, on August 9th, 1776.
2. He is best known for his hypothesis that equal volumes of different gases contain an equal number of molecules.
3. His hypothesis was rejected by other scientists. It only gained acceptance after his death.
4. In 1796, when he was only 20, he was awarded a doctorate in canon law and began to practice as an ecclesiastical lawyer
5. He gradually lost interest in legal matters. He found science was much more intellectually stimulating.

Lorenzo Avogadro

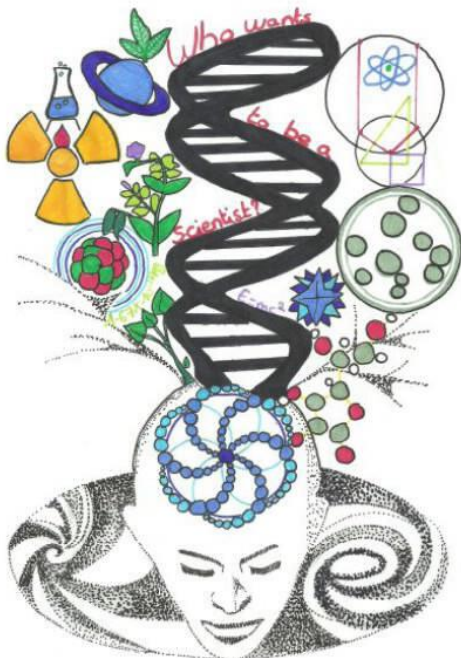
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



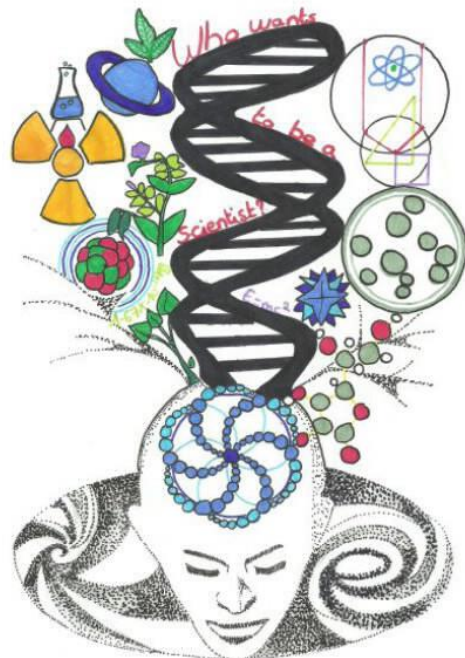
WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



GREAT SCIENTISTS

1.He was born into a well-to-do family in the city of Lyon, France, on January 20, 1775.

2.When he was five years old, his family moved to a country estate near the village of Poleymieux about six miles (10 km) from Lyon.

3. At age 13, he began a serious study of mathematics using books available in his father's library.

4. He made the revolutionary discovery that a wire carrying electric current can attract or repel another wire next to it that's also carrying electric current.

5.He also proposed the existence of a particle we now recognize as the electron.

André Ampère

GREAT SCIENTISTS

1.He was born in Kiel, Germany, on April 23, 1858.

2.His father was Professor of Constitutional Law in the University of Kiel, and later in Göttingen.

3. He studied at the Universities of Munich and Berlin, where his teachers included Kirchhoff and Helmholtz,

4.Is work on the quantum theory, as it came to be known, was published in the *Annalen der Physik*.

5. He won the Nobel Prize in Physics 1918.

Max Planck

GREAT SCIENTISTS

1.He was one of the great astronomers of the 16th century.

2.He was born on 19 February 1473 in the Polish town of Torun.

3.In 1491 Copernicus went to the University of Cracow.

4.His theory was published in 1543. The book was called On the Revolutions of the Heavenly Bodies. It was dedicated to Pope Paul III.

5. He died on May 24th, 1543.

Nicolaus Copernicus

GREAT SCIENTISTS

1.Born on June 13, 1831, in Edinburgh, Scotland.

2. He studied at the University of Cambridge.

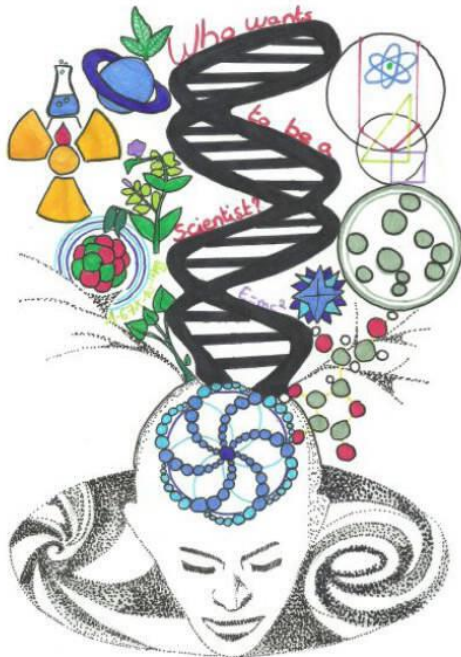
3.In 1873 he published the book *A Treatise on Electricity and Magnetism*, which further expounded on his research.

4.Other scientific contributions included producing the first color photograph, taken in 1861, and creating structural engineering calculations for bridge maintenance.

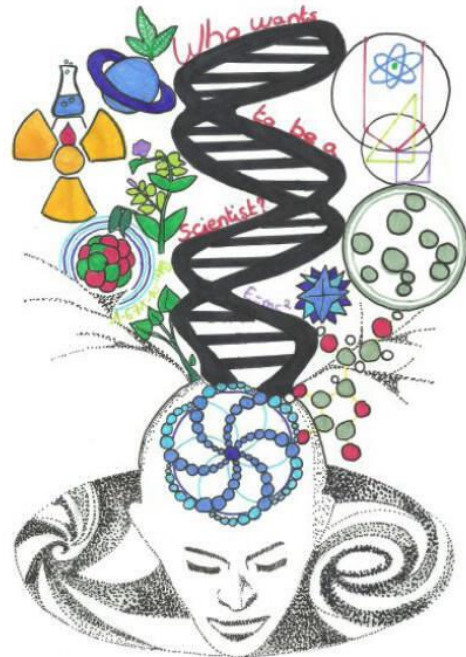
5. He died in England on November 5, 1879.

James Maxwell

WHO WANTS TO BE A SCIENTIST
GREAT SCIENTISTS



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GREAT SCIENTISTS



GREAT SCIENTISTS

1.He is best known for his work as a naturalist, developing a theory of evolution to explain biological change.

2.He was born in Shrewsbury, England, on February 12, 1809.

3.In 1831, he embarked on a five-year survey voyage around the world on the HMS *Beagle*.

4.His studies of specimens around the globe led him to formulate his theory of evolution and his views on the process of natural selection.

5. In 1859, he published *On the Origin of Species*. He died on April 19, 1882, in London.

Charles Darwin

GREAT SCIENTISTS

1.He was born on April 25th, 1900 in Vienna.

2.He participated in the creation of quantum mechanics.

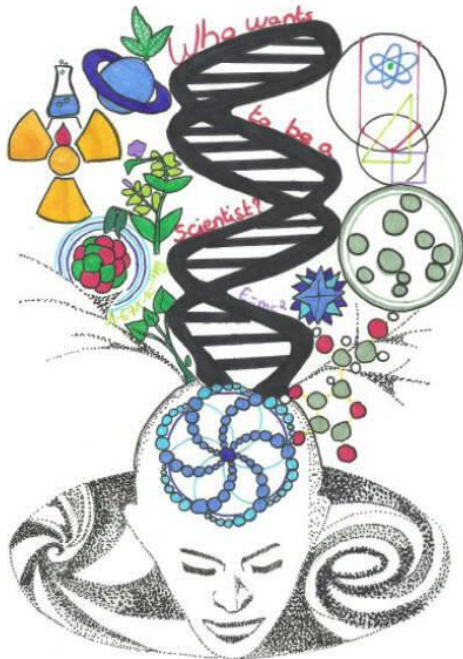
3.He obtained his doctor's degree in 1921 and spent a year at the University of Göttingen as assistant to Max Born and a further year with Niels Bohr at Copenhagen.

4.The outbreak of World War II and the possible threat of Nazi persecution led him to the U.S., but he returned to Europe in 1946.

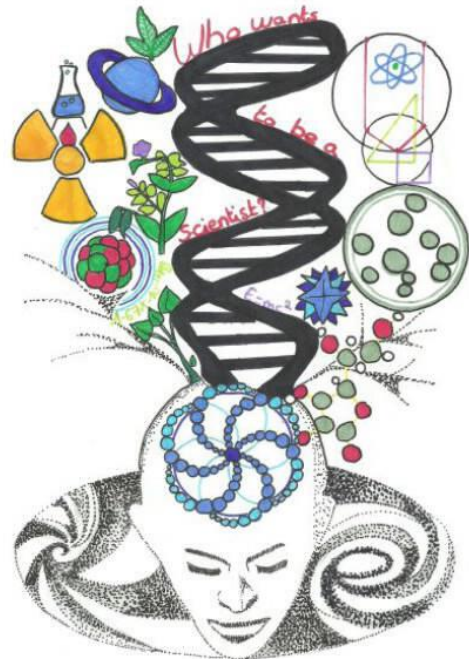
5. He won the Nobel Prize in Physics 1945

Wolfgang Pauli

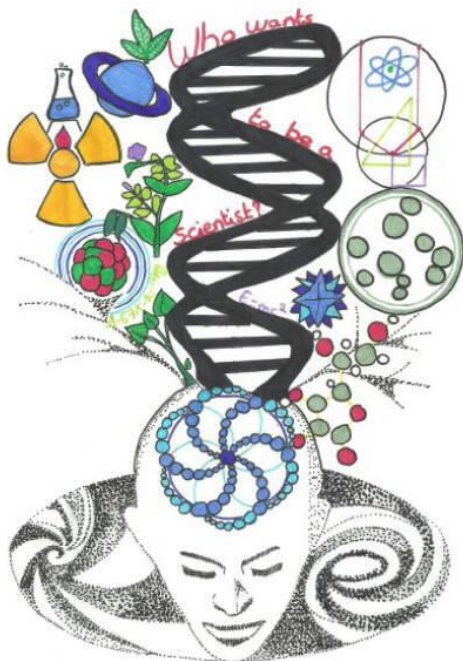
WHO WANTS TO BE A SCIENTIST
REAL SCIENTISTS' JOBS



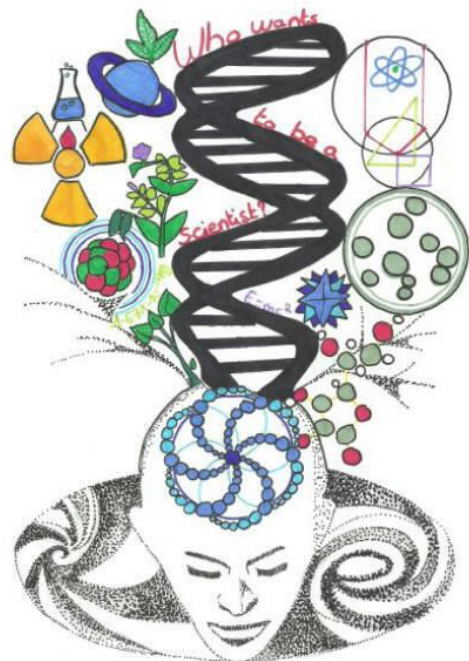
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REAL SCIENTISTS' JOBS



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REAL SCIENTISTS' JOBS



WHO WANTS TO BE A SCIENTIST
REAL SCIENTISTS' JOBS



REAL SCIENTISTS' JOBS

My team and I try to make sure that nanoparticles are safe in our body

We realise experiments to reach this goal. At first, we acclimate the nanoparticles, then, we have to discover where they go in our body, and finally, we look at their cell conversation. My job is very scientific and it is necessary to be interested in the subject to do it.

Moreover, as only a few people are doing this job, all the experiments we do are things people have never seen before.

- 1) Nanoparticle safety biologist
- 2) Nanoparticle security scientist
- 3) Nanoparticle security biologist
- 4) Nanoparticle safety scientist

Nanoparticle safety scientist

REAL SCIENTISTS' JOBS

My job is based on studying insects. I learn how cockroaches have managed to survive for more than 250 million years.

Also, I have many important tasks such as the study of the classification, life cycle, distribution, physiology, behavior, ecology and population dynamics of insects. In this job you can work with beneficial insects like honeybees, silkworms, ladybird beetles and parasitic wasps. Who am I?

- 1 - Aquatic biologist
- 2 - Entomologist
- 3 - Ethnobotanist
- 4 - Medical modeler

Entomologist

REAL SCIENTISTS' JOBS

I work with national labs and I help people in the community who still don't have electricity. For example, I work on houses that create their own electricity. I work with different energies like the sun or the wind.

Who am I?

1. Wind project manager
2. Project manager nuclear dismantling
3. Agent of development of the renewable energies
4. Renewable energy scientist

Renewable energy scientist

REAL SCIENTISTS' JOBS

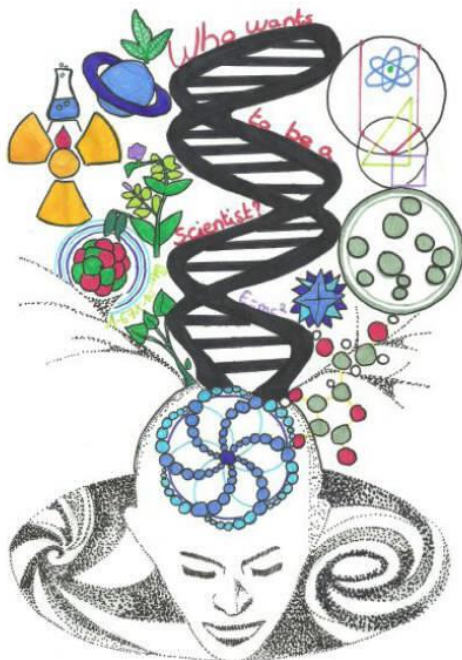
My job is to make a means of transportation using solar energy and make it as fast as possible. For that, I need something called photovoltaic cells. Without that, this transport can't move. The cells catch the sun rays and convert them in electricity. When I was at school, the teachers proposed to make a new project: the Borealis 2. The project consisted in making a solar race car. I loved making it and now that's my job.

Who am I?

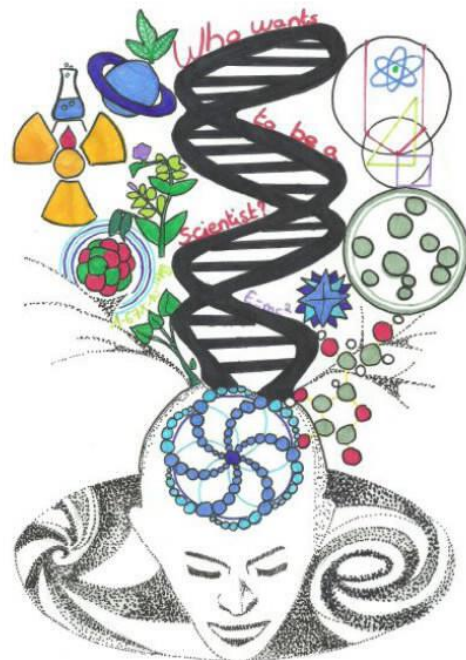
1. Game Designer
2. Solar race car engineer
3. Cow vet
4. criminalist

Solar race car engineer

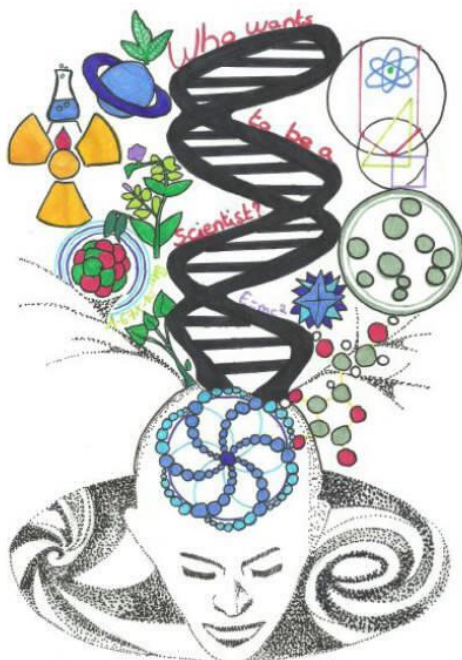
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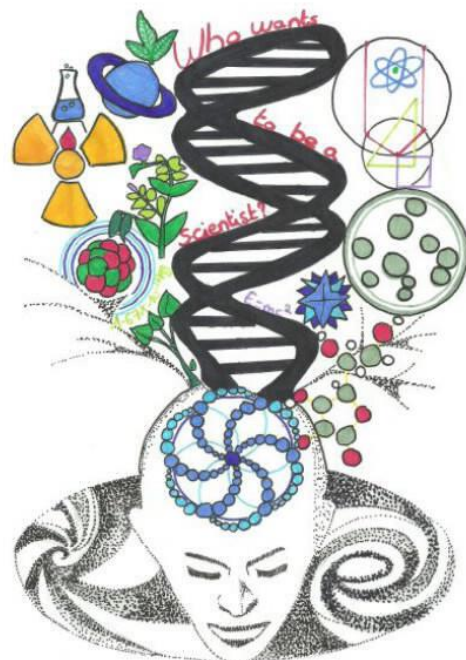
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REAL SCIENTISTS' JOBS

I work at the MIT (Massachusetts Institute of Technology) and I'm a researcher. I study the sound waves and I try to control them. I invented a machine which guides sound waves.

Who am I?

1. DJ
2. Audio engineer
3. Mixer
4. Musician

Audio engineer

REAL SCIENTISTS' JOBS

I work for Para-performance. My job is to design objects to help humans when they fly. I invented the Skytrac. Skytrac is a board with little wings. With the Skytrac, jumpers can control their trajectory with the displacement of their body when they are in the sky.

1. Pilot
2. Aeronautical engineer
3. Astronaut
4. Sky scientist

Aeronautical engineer

REAL SCIENTISTS' JOBS

I create helmets. To do that, I make some sketches, I model the helmets on a computer and I choose the helmet color. I study how the helmets survive a crash, how it withstands snow, the sun, etc....

Who am I?

1. designer
2. helmet
3. neurologist
4. metaphisycosmonigologist

Designer

REAL SCIENTISTS' JOBS

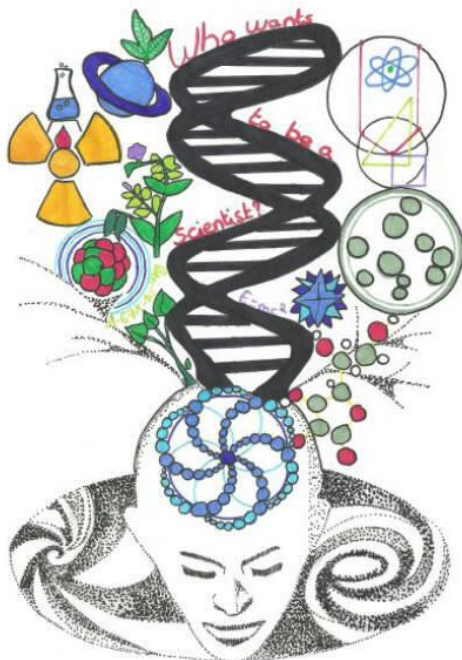
To do my job it is necessary to be interested in natural catastrophes and in construction. In my job, I test structures which I create to verify my ideas. One of my projects is to make buildings more resistant by using several materials.

Who am I?

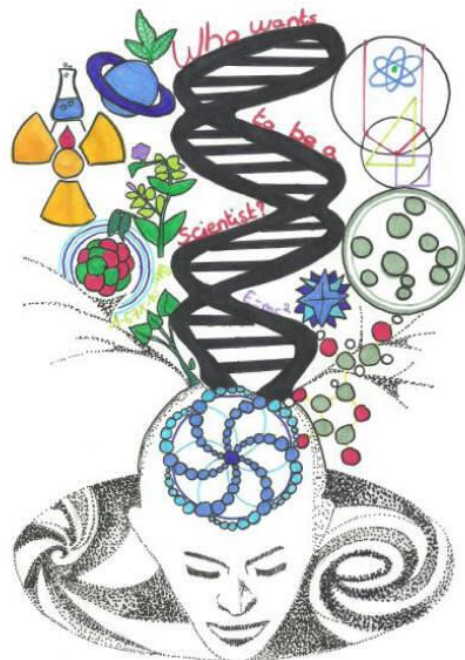
1. Cow vet
2. Biologist
3. Earthquake scientist
4. Sky scientist

Earthquake scientist

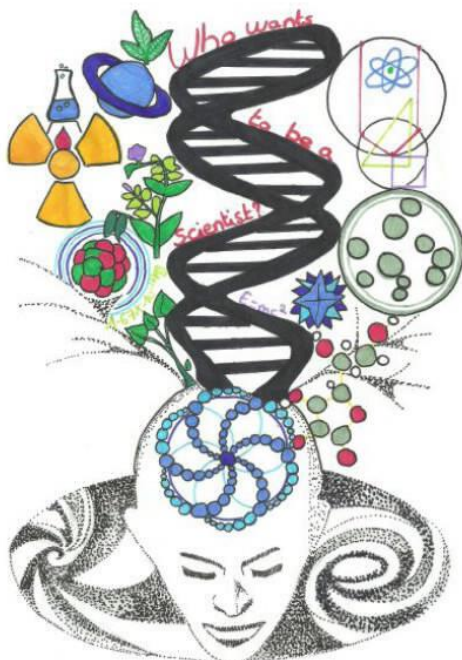
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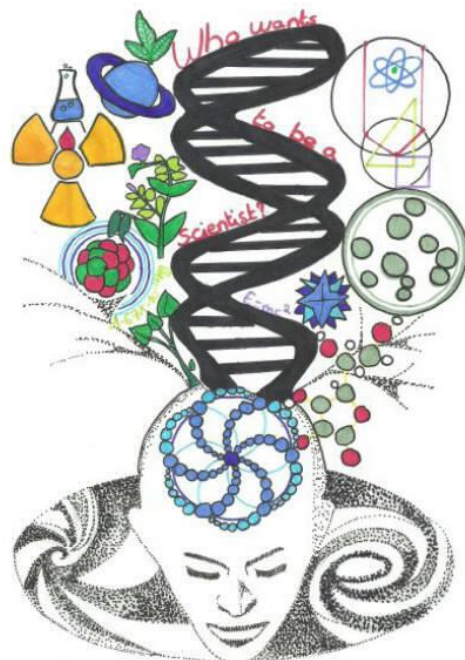
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REAL SCIENTISTS' JOBS

I study mussels in university. Mussels have sticky amazing and very interesting properties. They can stick themselves almost anything: Rocks, water, and even on each other. These creatures are very simple to work on. I make many experiences in my laboratory to create glue substance, I try to mimic what the nature has created. I produce solutions where the glue is imitated thanks to mussels. My job involves concretely to reproduce glue of mussels thanks to chemistry.

Who am I?

1. Mussel-farmer
2. Glue-ologist
3. Wildlife research
4. Veterinary

Glue-ologist

REAL SCIENTISTS' JOBS

I'm responsible for helping people taking care of the health of animals. Cows are remarkable creatures. They've been part of human culture for thousands of years. There are cows everywhere except Antarctica. My job is to examine their eyes, their ears and their skin. Who am I?

1. Surgeon
2. Cow vet
3. Seller of animals
4. Neurologist

Cow vet

REAL SCIENTISTS' JOBS

I work with the Gemini telescope, a powerful piece of scientific equipment. If you want to practice my job, you have to be passionate about astronomy. Every day I see the stars and the galaxies for my job. And to conclude I often work at night. Who am I?

1. Galactic Astronomer
2. Space Research Scientist
3. NASA JPL Researcher
4. Solar Vehicle Engineer

Galactic Astronomer

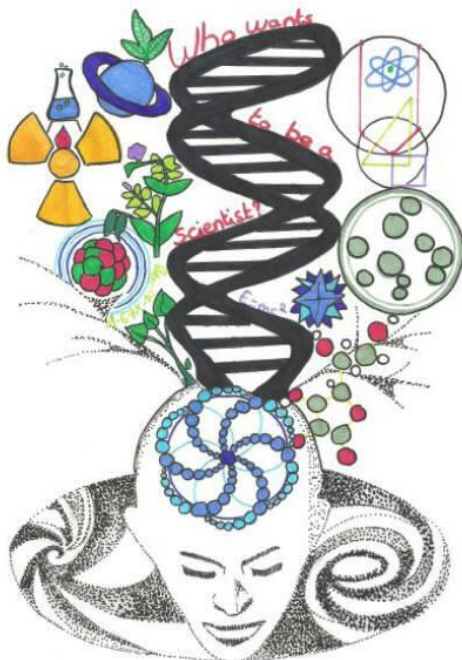
REAL SCIENTISTS' JOBS

I study living organisms. In my job there are several research programs so with several questions like: the behavior of animals, the communication between animals or their natural environment. I work with a team which helps me a lot. So who am I?

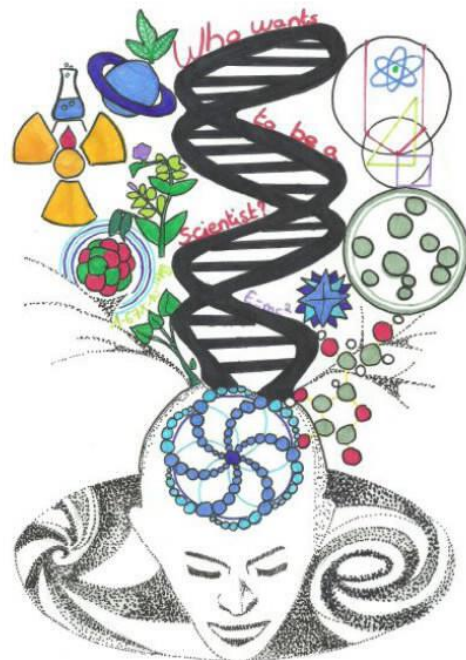
1. biologist
2. neurobiologist
3. primate scientist
4. mud scientist

Biologist

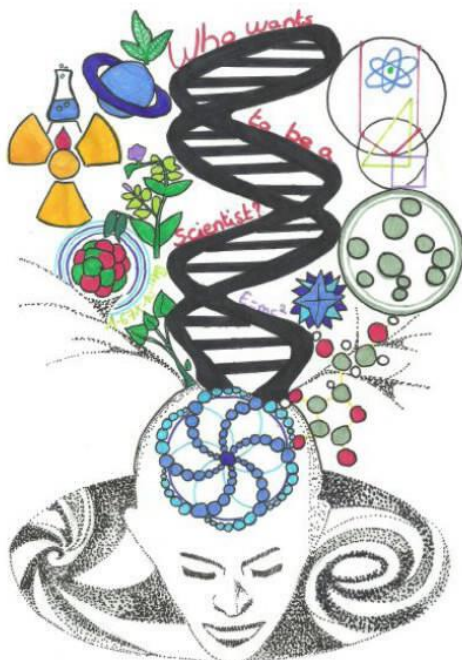
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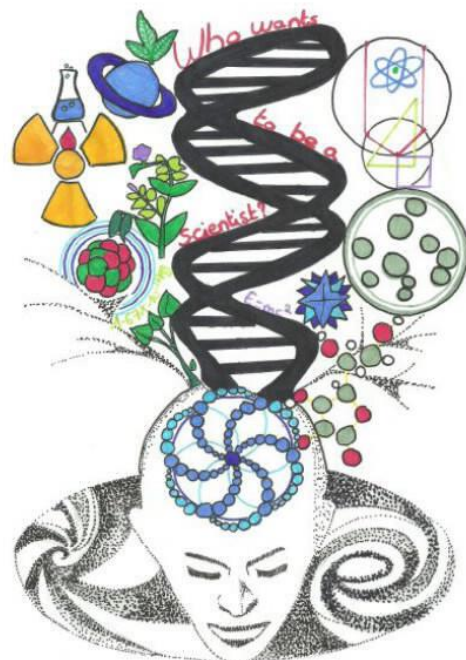
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REAL SCIENTISTS' JOBS

My job consists in amusing children. Every boy has already played this type of game. Every day I work with professionals to have the most precise game as possible.

What's my job?

1. Neurobiologist
2. Cow vet
3. Game Designer
4. Space Research Scientist

Game designer

REAL SCIENTISTS' JOBS

I study human's behavior and adaptation in space with no gravity during long space flights.

I study muscles, bones and the human brain.

I use many machines and experiments (air plane 0 G, virtual reality simulator ...) to better adapt astronauts to their environment.

Who am I?

1. Space research scientist
2. Astronaut
3. Aeronautical engineer
4. Medium

Space research scientist

REAL SCIENTISTS' JOBS

My job is concerned with the replacement of damaged and generate joints with prosthetic device.

I am specialized in the treatment of fractures.

My job is to help and take care of sportsmen

1. astrologist
2. astronaut
3. orthopedic surgeon
4. cow vet

Orthopedic surgeon

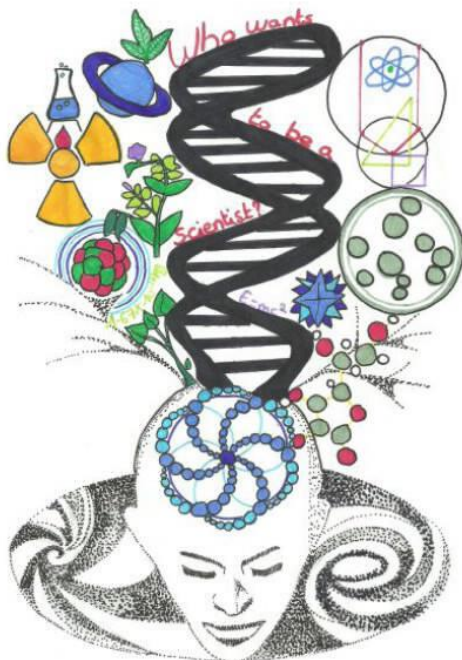
REAL SCIENTISTS' JOBS

I carry out research for Green Giant vegetables, I extract out chemical substances which are in plants because they're essential for our body. My specific focus is to look how and why vegetables contain molecules that can help to protect us against several forms of chronic diseases.

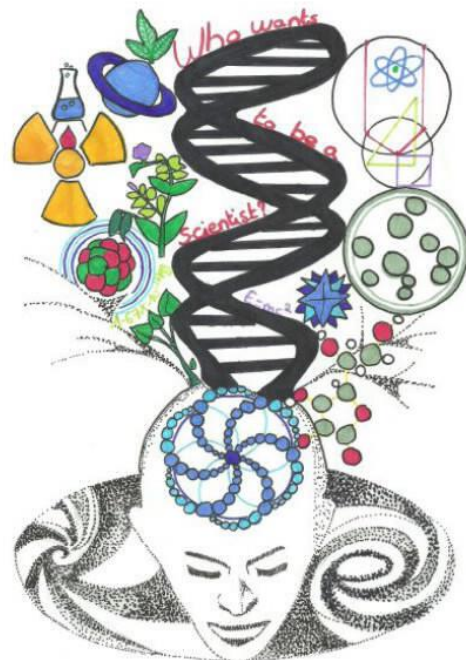
1. Physicist
2. Vegetabilist
3. Food scientist
4. Oncologist

Food scientist

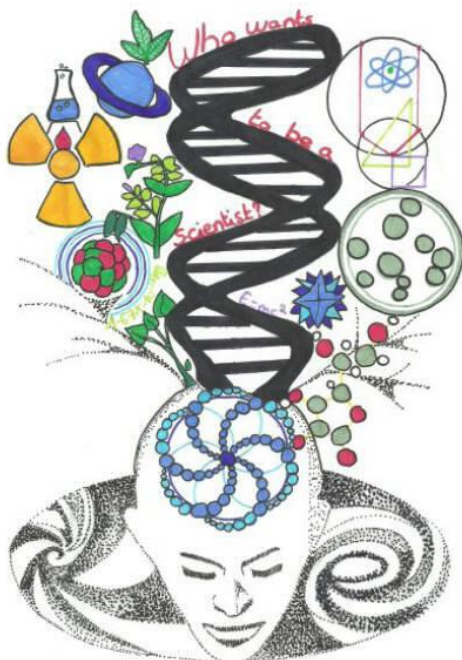
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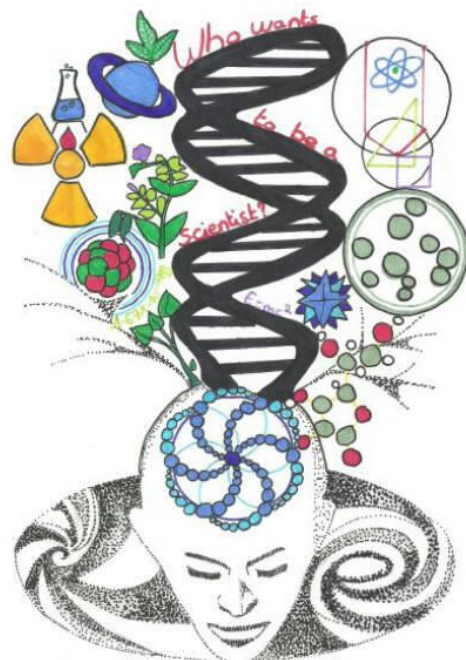
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WHO WANTS TO BE A SCIENTIST
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REAL SCIENTISTS' JOBS

I study various birds such as parrots, canaries and other song birds. Songbirds have fascinating behaviours. My research tells me how bird brains work and that let me learn their complex behaviours. It's like a language.

First I record their melodies and then in my lab I try to reproduce their sounds with my computer. I study what part of brain animals use to communicate with each other.

I need to be inventive, creative and I try to understand how nature works and discovering things which had never discovered before.
Who am I?

- 1) Biologist
- 2) Bird vet
- 3) Neurobiologist
- 4) Bird singer

Neurobiologist

REAL SCIENTISTS' JOBS

My job is to go look for fossils. We look for pieces of fossils like small bones to find bigger ones. A bone is very fragile so to get it out of the ground, we use a process called a field jacket. We can then bring it back to the museum for cleaning. We study the past to learn about the present or the future.

Who am I?

1. Archeologist
2. Paleontologist
3. Historian
4. Treasure hunter

Paleontologist

REAL SCIENTISTS' JOBS

In my job, I often work with the police and the FBI.

My job consists in finding clues in little objects left behind by a criminal. I can use machines which can reveal some chemical substances in objects.

1. Criminalist
2. Cow Vet
3. Entomologist
4. Designer

Criminalist

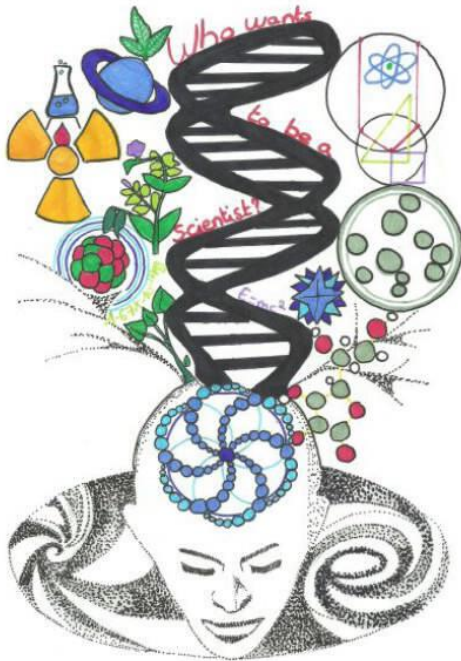
REAL SCIENTISTS' JOBS

I make technological device to treat the human body. I design tiny, nano-sized capsules to transport medicine in the body to the exact spot it is needed. I work in a laboratory with my students.

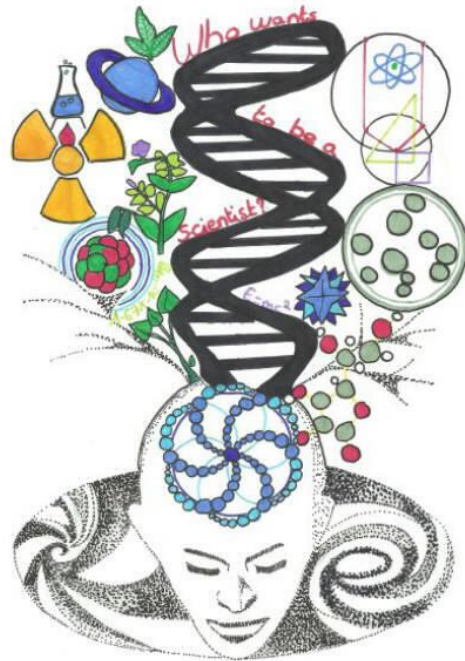
1. biomedical designer
2. biomedical engineer
3. medical modeler
4. physician

Biomedical engineer

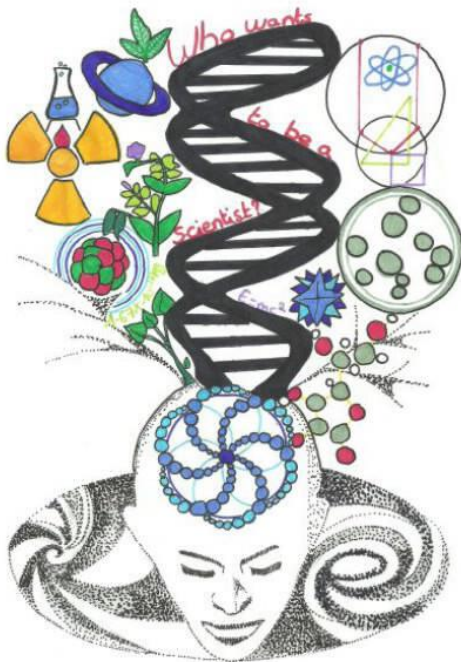
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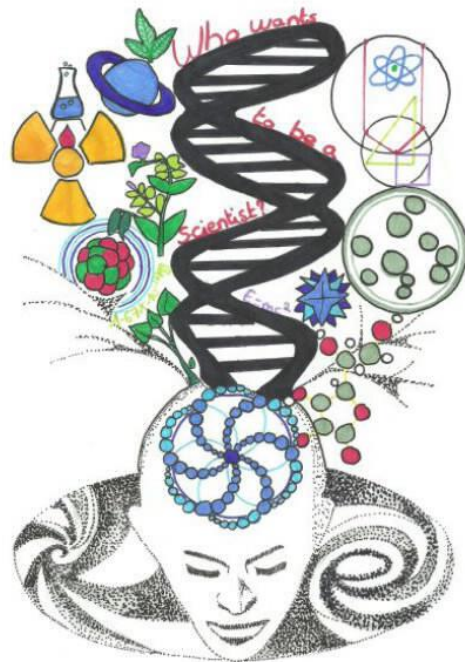
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REAL SCIENTISTS' JOBS

I make a sketch of the bicycle helmets and then I make the bicycle helmets moulds and for prove his resistance I test how well their helmets survive a crash, if they stay put on a kid's head, and how they stand up to sun and snow.

- a) Motorcycle engineer
- b) Design tester
- c) Hurricane huntress
- d) Electrical engineer

Design tester

REAL SCIENTISTS' JOBS

I use a virtual bat, which is a technology that mimics real bat sounds and calls. This tool lets her track the Mexican Free-Tailed Bat, and discover how these fuzzy fliers can help limit the insect population and ultimately assist south Texas farmers.

- a) Biologist and Dog Handler
- b) Biologist
- c) Entomologist
- d) Robotic Life Scientist

Biologist

Biologist

REAL SCIENTISTS' JOBS

My main job is here working with information that we have collected about hurricanes. We basically study how is a hurricane started. We are trying how predict them.

- a) Food Scientist
- b) Hurricane Researcher
- c) Hurricane Huntress
- d) Web developer

Hurricane Huntress

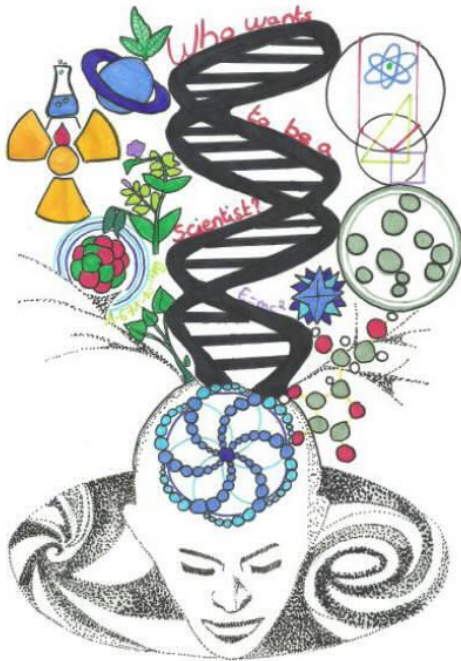
REAL SCIENTISTS' JOBS

When I was child I was very afraid of the ocean but when I grow up I realized I did not have to be afraid of the ocean. Since high school I wanted to be a science. I love the animals. Now I work in a aquarium in Minnesota and I study the KG octopus at Underwater Adventures in the Mall of America.

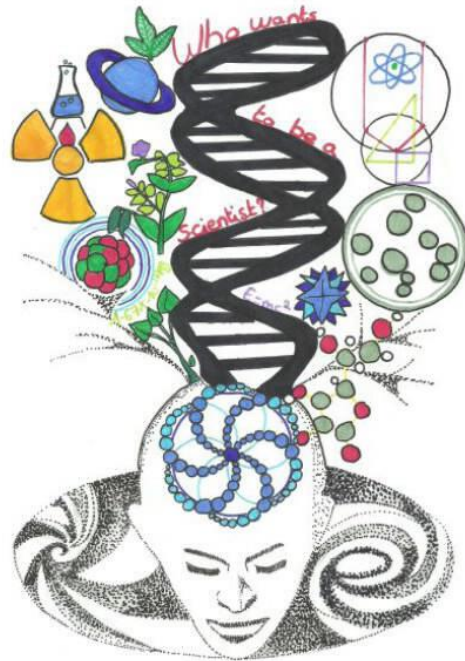
- a) Marine Biologist
- b) Ocean Scientist
- c) Aquatic Biologist
- d) Whale Scientist

Marine Biologist

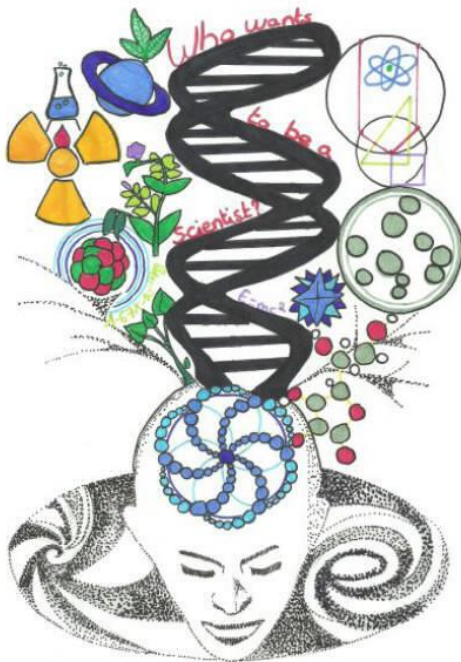
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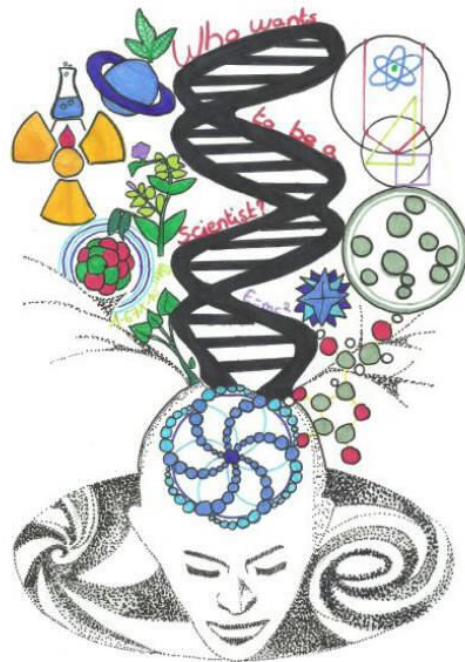
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WHO WANTS TO BE A SCIENTIST
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REAL SCIENTISTS' JOBS

I work with different types of dogs. I train them, in different ways (depending on their breed) and help people when they're in danger. I like my job because I'm able to save lives.

- a) Dog handler
- b) Wildlife Biologist
- c) Criminologist
- d) Cow vet

Dog handler

REAL SCIENTISTS' JOBS

I work with dogs and analyze animal poos. In the video, my partner, my dog and I look for bear poos to see if these animals live around there. To train these dogs, I put some poo in a box so the dog can get used to the smell and then track it.

- a) Dog handler
- b) Wildlife Biologist
- c) Criminologist
- d) Cow vet

Wildlife biologist

REAL SCIENTISTS' JOBS

I take care of the environment, I create things using parts from plants and trees. Recently, I designed and made a "green" skateboard using soybeans and extracting the proteins. It is sold by Comet Skateboards. The skateboard is like the others, work just as well as regular ones, but the 'green' skateboard is biodegradable and is good because it helps to keep the environment in a good condition.

- a) Motorcycle Engineer
- b) Eco-friendly materials scientist
- c) Aquatic Biologist
- d) Wind Research Assistant

Eco-friendly materials scientist

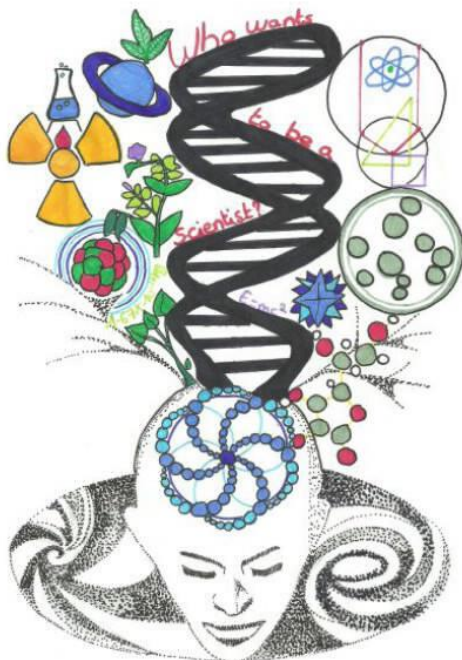
REAL SCIENTISTS' JOBS

I train my dog "Wicket" to find poop of black bear, grizzly bear, wolf, and mountain lion scat in the area surrounding Yellowstone Park. This research helps scientists analyze if carnivores are living in the area.

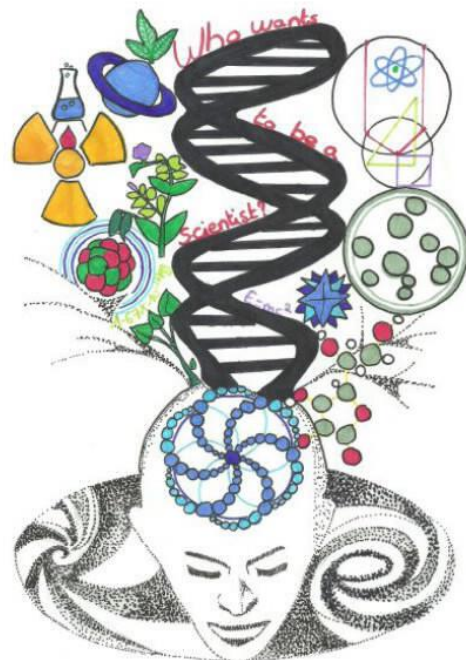
- a) Dog handler and biologist
- b) Eco-friendly materials scientist
- c) Wildlife biologist
- d) Space research scientist

Dog handler and biologist

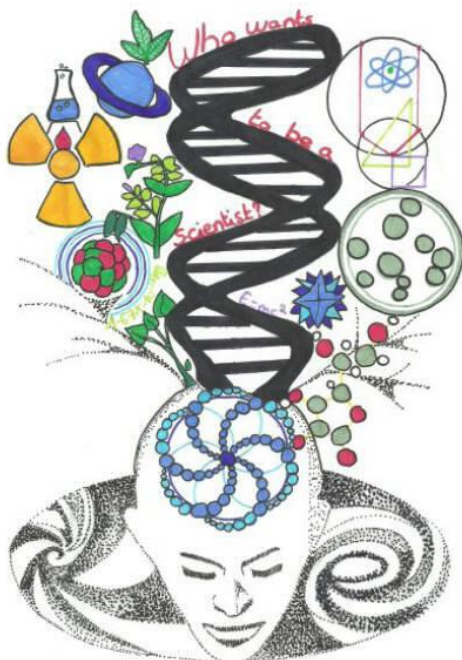
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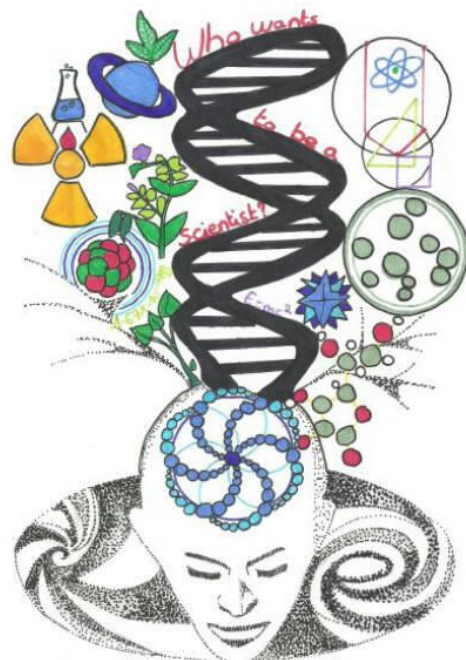
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REAL SCIENTISTS' JOBS

I design or development technology solutions to social, industrial and economic needs. I first identify and understand the most significant obstacles to do a good design. I use my knowledge in science, mathematics, physics and my experience to find the best solutions to the specific problems. I always test my designs before producing the product. Therefore I use prototypes, scale models, simulations, destructive tests and tests of strength. Trials check if the artifacts will work as planned.

- a) Designer
- b) Inventor
- c) Engineer
- d) Robotic Life scientist

Engineer

REAL SCIENTISTS' JOBS

I am a scientist that study what amount of water has a stone, what it can made and what are they made of. The best part of it is finding stones, I spend a lot of time in the outside like the beach, my family and friends help me with my job finding stones and after I study it. I think it is interesting know how the earth is formed. I love outdoor sports like skydive, bungee jumping and climbing.

- a) Mineralogist
- b) Volcanologist
- c) Dog handler
- d) Marine biologist

Mineralogist

REAL SCIENTISTS' JOBS

I dedicate myself to a field of engineering that deals with the study and application of electricity, electronics, and electromagnetism. At this moment my team is using artificial intelligence to make robots "smarter".

1. Robotic Soccer Scientist
2. Research Scientist
3. Bioengineer
4. Eletrical Engineer

Eletrical Engineer

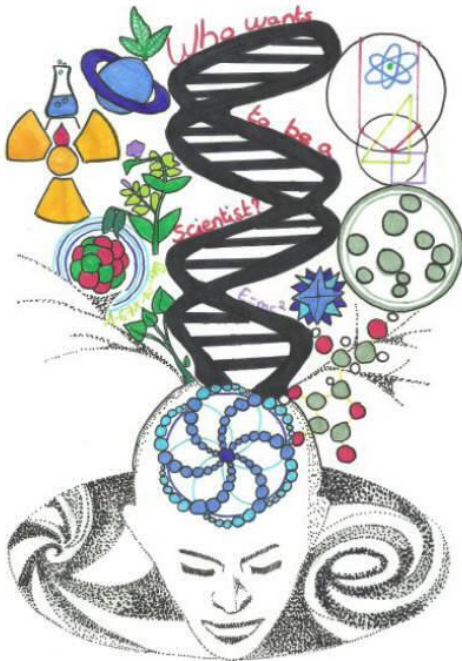
REAL SCIENTISTS' JOBS

I'm an artificial intelligence researcher that programs small robot dogs to increase their learning abilities. It's a great job!

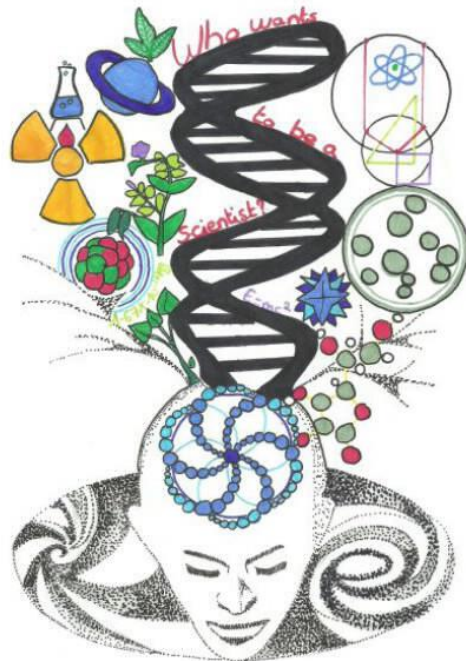
1. Robotic Soccer Scientist
2. Research Scientist
3. Bioengineer
4. Medical Modeler

Robotic Soccer Scientist

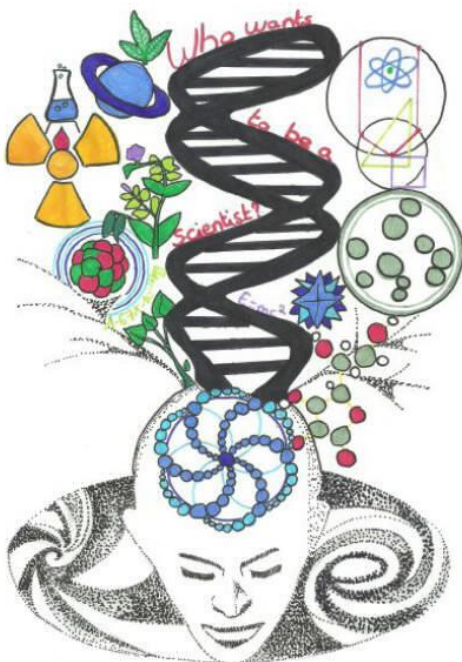
WHO WANTS TO BE A SCIENTIST
REAL SCIENTISTS' JOBS



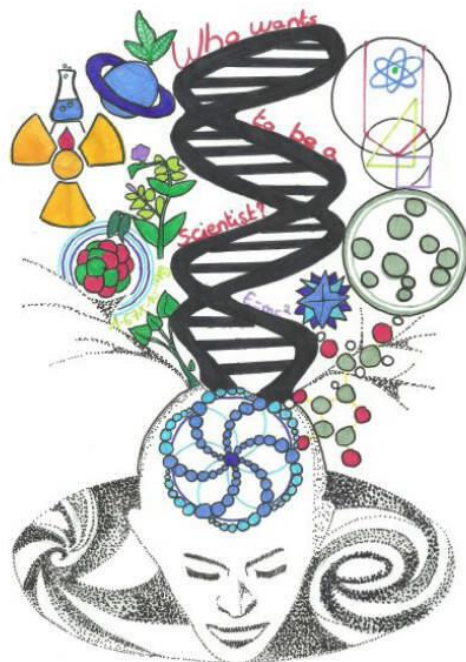
WHO WANTS TO BE A SCIENTIST
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REAL SCIENTISTS' JOBS

I exam how extreme environments, affect astronauts' bodies in space. Then I develop clothing that keeps space explorers comfortable as they travel through new frontiers. I'm working with the International Space Station and Mars exploration team.

1. Robotic Life Scientist
2. Bioengineer
3. Space Suit Researcher
4. Volcano Scientist

Space Suit Researcher

REAL SCIENTISTS' JOBS

I love math classes. I enjoy mathematical challenges. Along with my math skills, I use the latest cool computer programs to dream up the safest, fastest, and best designs for powerful «two wheels» transportation.

1. Robotic Life Scientist
2. Motorcycle Engineer
3. Space Suit Researcher
4. Nanocar Engineer

Motorcycle Engineer

REAL SCIENTISTS' JOBS

My first work was called Kismet it had an incredible expressive face. Now I'm working on a project that is all about character and personality. Creating artificial feelings with technology is my work. I believe this will contribute to a better quality of life for everyone.

1. Robotic Life Scientist
2. Motorcycle Engineer
3. Space Suit Researcher
4. Nanocar Engineer

Robotic Life Scientist

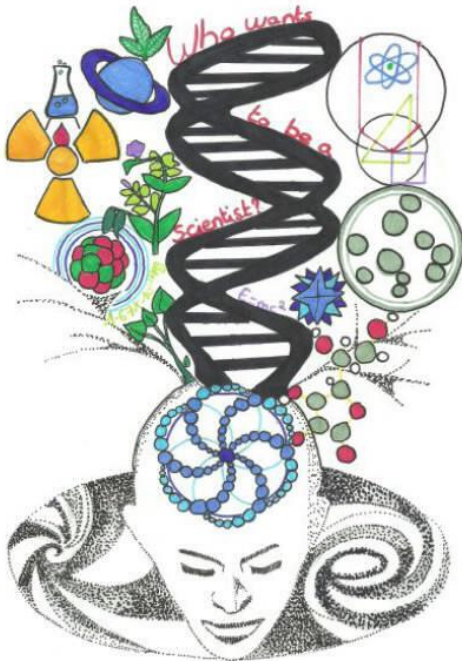
REAL SCIENTISTS' JOBS

I love the human body. I use different kinds of plastic to mold arms, legs, and other body parts. In my job I combine art and science and the result can help a lot of people. My work can be found in you biology class!!!

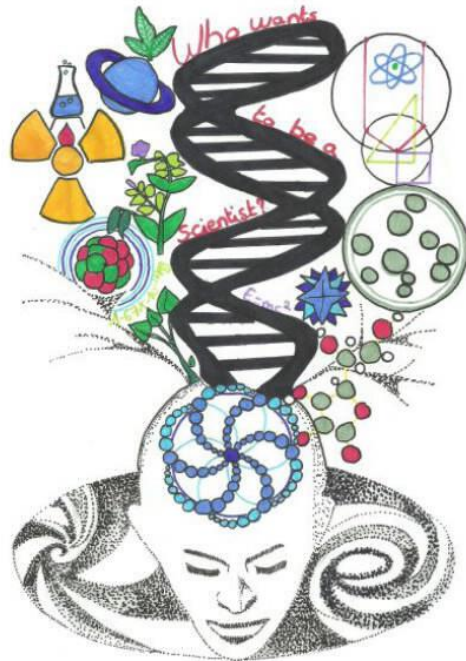
1. Robotic Life Scientist
2. Bioengineer
3. Medical Modeler
4. Doctor

Medical Modeler

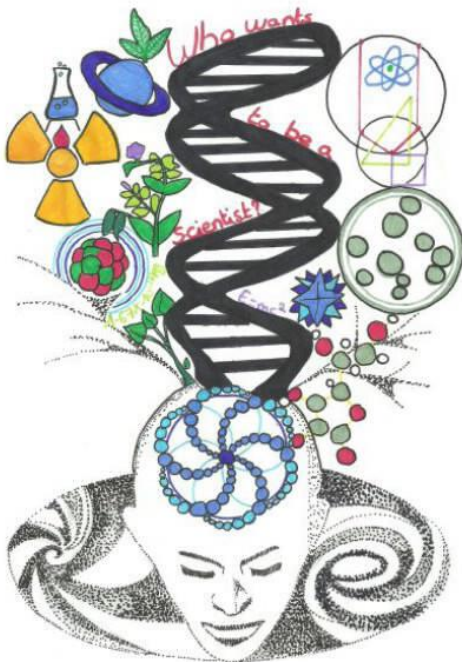
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REAL SCIENTISTS' JOBS



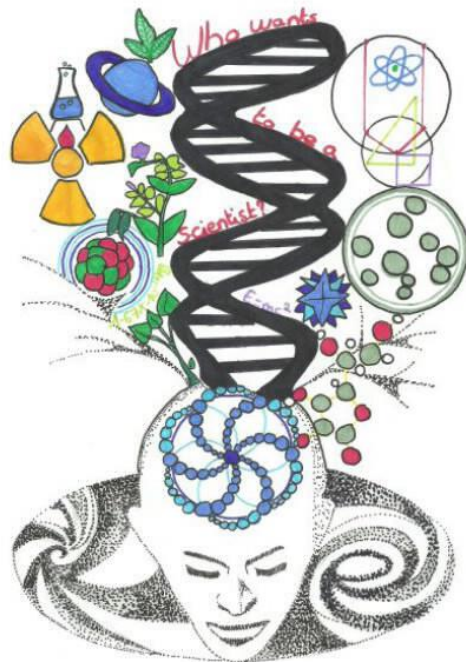
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REAL SCIENTISTS' JOBS

I love nature. I love the ocean. I rescue a lot of marine life that are caught in fishing lines or accidentally are hit by boats. I love an animal that is from the family of cetacean. They are protected by international law. This animals can be as large as 45 tons.

1. Whale Scientist
2. Dolphin Scientist
3. Ocean Researcher
4. Nanocar Engineer

Whale Scientist

REAL SCIENTISTS' JOBS

I studied how fish swim through the water. Because it's difficult to work with real fish, I work with a mechanical fish that moves through the water. I would like to find efficient new ways to get boats, ships and submarines moving in a sustainable way.

1. Whale Scientist
2. Dolphin Scientist
3. Ocean Scientist
4. Nanocar Engineer

Ocean Scientist

REAL SCIENTISTS' JOBS

I'm interested in weather phenomena. I'm specialized in the observation and physical understanding of weather phenomena. I have skills in math and physics to explain weather phenomena.

1. Meteorologist
2. Research Scientist
3. Ocean Researcher
4. Engineer

Meteorologist

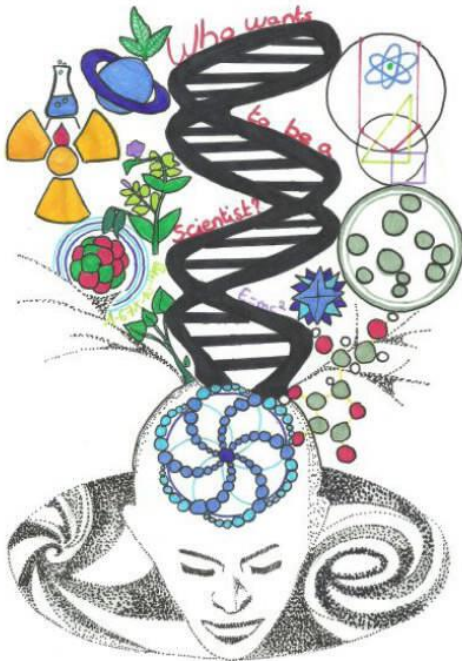
REAL SCIENTISTS' JOBS

I engineer the smallest "transportation" in the world. They are so small, about 20,000 of them could be parked side-by-side across the diameter of a single hair. It is a challenge to make this objects work!

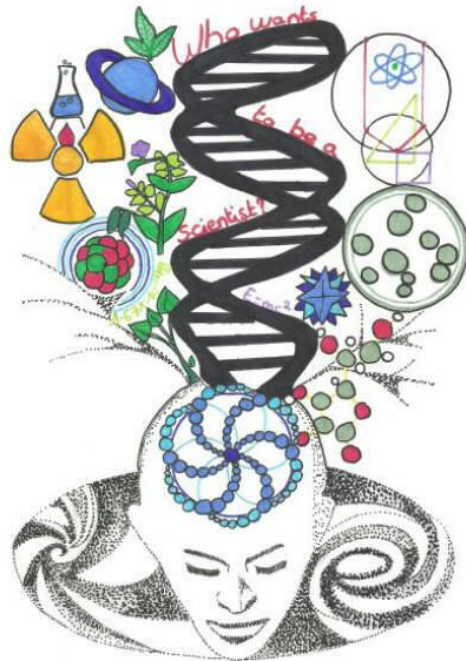
1. Meteorologist
2. NASA JPL Engineer
3. Research Scientist
4. Nanocar Engineer

Nanocar Engineer

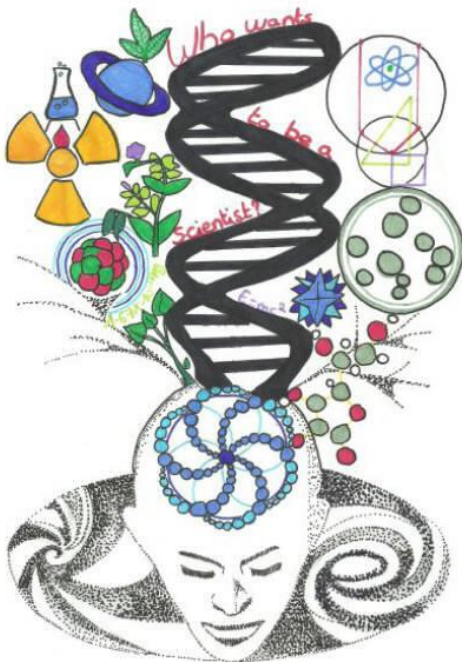
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REAL SCIENTISTS' JOBS



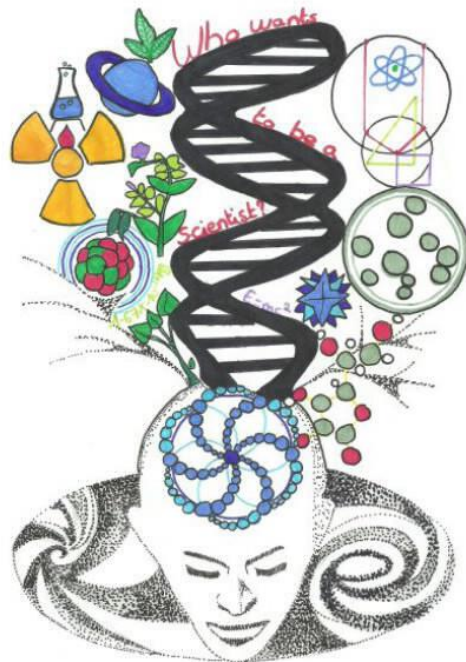
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WHO WANTS TO BE A SCIENTIST
REAL SCIENTISTS' JOBS



WHO WANTS TO BE A SCIENTIST
REAL SCIENTISTS' JOBS



REAL SCIENTISTS' JOBS

I love extreme weather phenomena. I have to collect information in a very dangerous place known as the "eye". My work is very important because it can save lives.

1. Meteorologist
2. Research Scientist
3. Hurricane Researcher
4. Medical Modeler

Hurricane Researcher

REAL SCIENTISTS' JOBS

I study the history of rocks. I'm interested in studies of the rupture in the crust of our planet. So we can know, for example, more about the magma chamber below the surface.

1. Meteorologist
2. Volcano Scientist
3. Hurricane Researcher
4. Medical Modeler

Volcano Scientist

REAL SCIENTISTS' JOBS

I'm an engineer who is building a robot that can melt through the thick ice of a frozen planet or moon. A cryobot.

1. Robotic Life engineer
2. Volcano Scientist
3. NASA JPL Researcher
4. Nanocar Engineer

NASA JPL Researcher

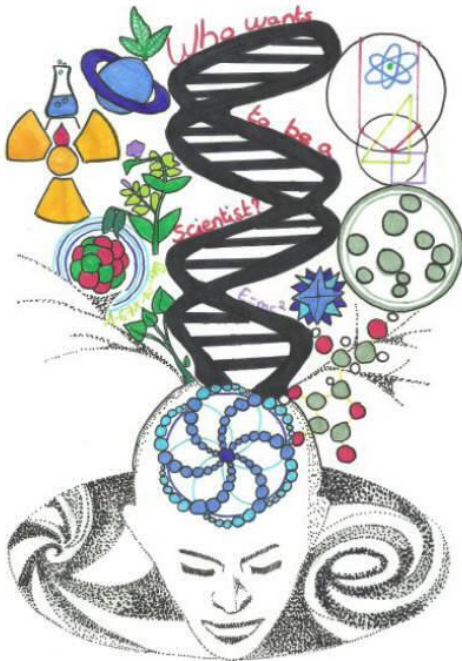
REAL SCIENTISTS' JOBS

I'm an aquarist and elasmobranch expert. I love this job because I get to scuba dive often and handle animals from a group of fish characterized by a cartilaginous skeleton.

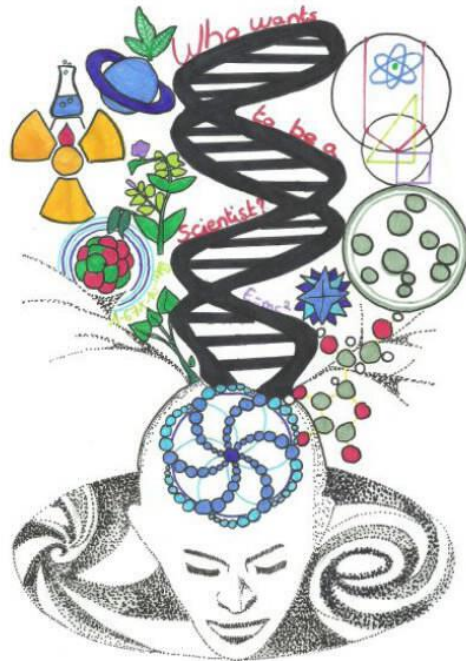
1. Whale Scientist
2. Dolphin Scientist
3. Ocean Researcher
4. Shark Scientist

Shark Scientist

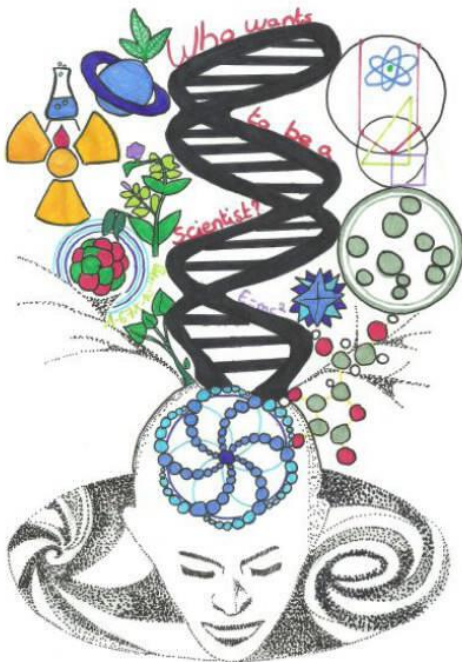
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REAL SCIENTISTS' JOBS

I do a lot of things. I designed a sign language translator glove that works by sensing the hand movements. I'm always thinking in new things to built using my skills in technology and science. What it will my next work?

1. Engineer
2. Inventor
3. Researcher
4. Doctor

Inventor

REAL SCIENTISTS' JOBS

I'm specialized in seating. I helped develop an office chair, using motion measurement devices to determine the most comfortable and supportive seating. This work is being used in automobiles and wheelchairs to improve the quality of life.

1. Meteorologist
2. Research Scientist
3. Bioengineer
4. Medical Modeler

Bioengineer

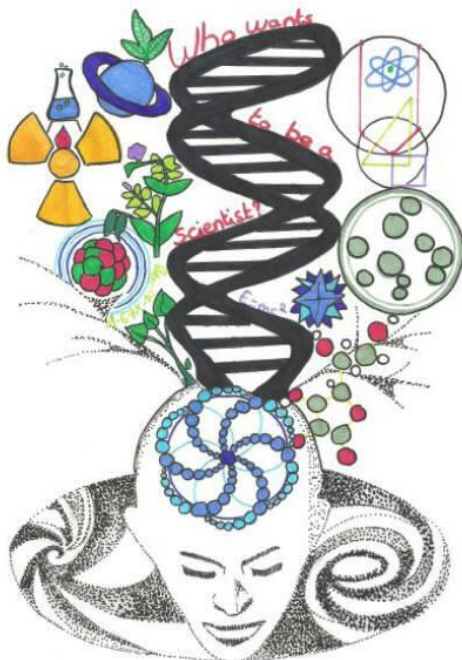
REAL SCIENTISTS' JOBS

I dedicate myself to several fields of research. At the moment I design mobile robots that function without the help of humans.

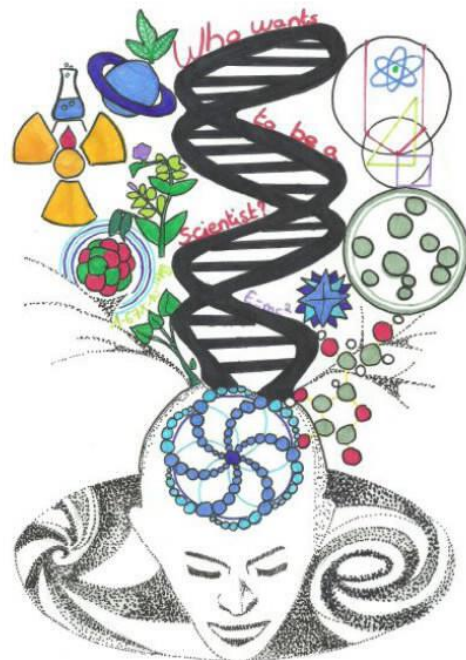
1. Meteorologist
2. Research Scientist
3. Doctor
4. Medical Modeler

Research Scientist

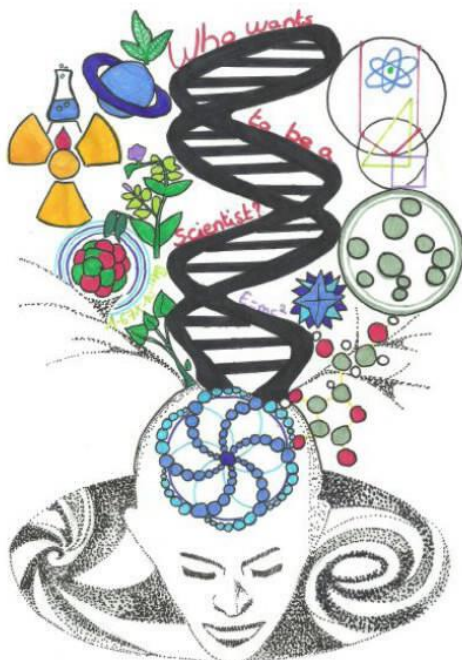
WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



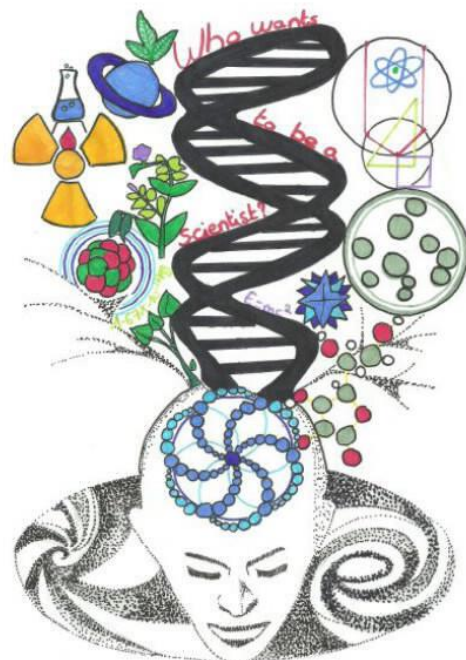
WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



PERIODIC ELEMENTS

I am a chemical element. My atomic number is 6. In 1865, Becquerel published my weight. I am present from the beginning of life on Earth. I appeared after star explosions before the creation of the solar system. You can find me in all living beings and I constitute the organic matter. My 14th isotope is used to know the date of the death of a living being and you can find me in coal.

What am I?

Carbon

PERIODIC ELEMENTS

Known since the Antiquity, that is only in 1977 that Antoine Laurent de Lavoisier, a French scientist, found that I was an element and not made of different atoms. I belong to the non-metal category and my atomic number is 16. Often linked with the Devil, I am yellow and one of the gases that I am a part of has the smell of old eggs. I form a part of the plaster, used to build houses. I am a part of the sulfuric acid too. I also play an important role in electrochemical piles, combined with the sodium. And last but not least, I can easily be found near volcanoes or hot springs.

What am I?

Sulphur

PERIODIC ELEMENTS

I am a chemical element, my atomic number is 29. I'm naturally present in the Earth's crust as a brown or orange metal, I am the oldest metal used by humans. I am in the same family as gold and silver. When I'm an ion dissolved in water, the solution is blue. I am necessary for life's development. I am used as a construction material, for alloys, sculptures, dishes or electric wires. You can find me in Chile, Zambia or Indonesia deposits.

What am I?

Copper

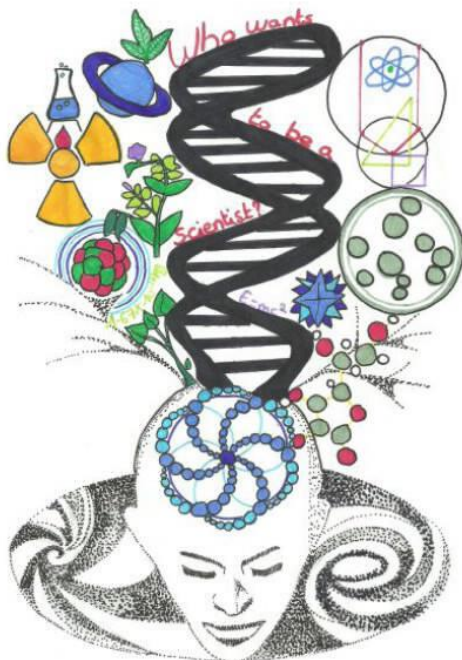
PERIODIC ELEMENTS

I am an element which has 11 protons and I was discovered in 1807 by Sir Humphry Davy. You can find me in salt in my ion form. When I am solid I am white and I am very reactive with the water, I can explode! But when I am gaseous I emit yellow light used in some tunnels. Your nerves and muscles need me. And last but not least, I am in the alkali family.

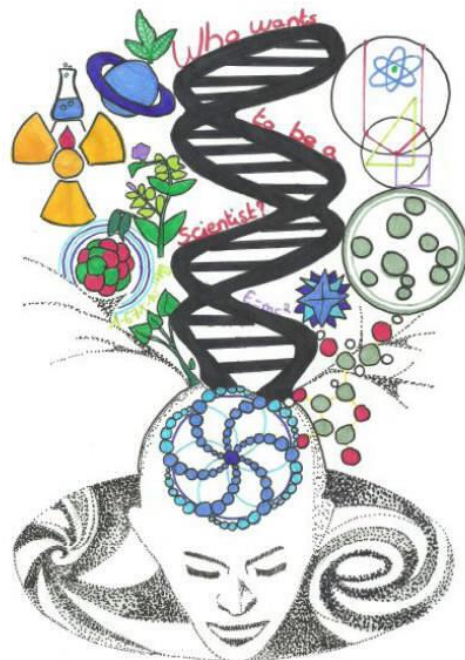
What am I?

Sodium

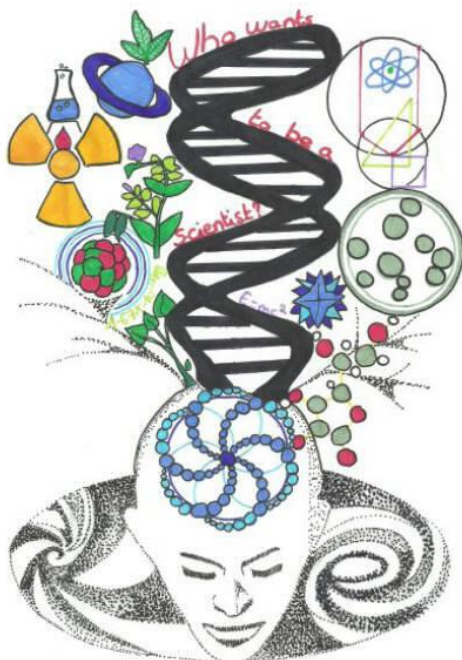
WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



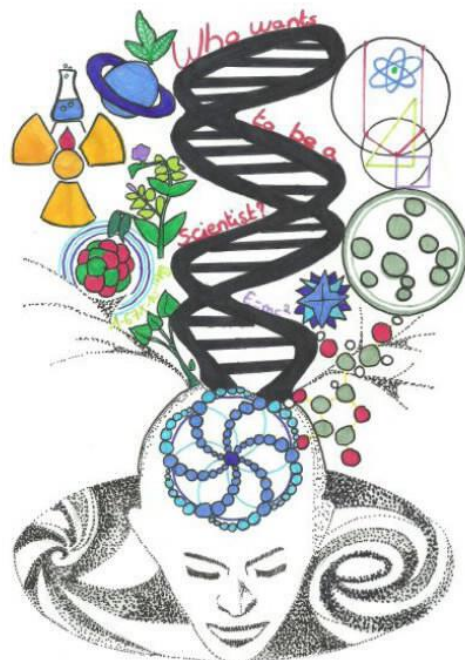
WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



PERIODIC ELEMENTS

I have many uses. I am used for water cleaning, disinfection, antiseptis and in swimming pools too. In World War I, I was a component of a gas which killed many soldiers. When I am combined with the sodium ion, I form the salt. In the Mendeleiev's periodic table, my atomic number is 17, I belong to the Halogen family. I was discovered by Carl Wilhelm Scheele in 1774.

What am I?

Chlorine

PERIODIC ELEMENTS

I am a silvery white metal. I am the only metallic element that is liquid at standard conditions for temperature and pressure. I have 80 protons, my density is 13.6 and I belong to group 12 of the periodic table. People have known me since Antiquity. Because of high density, Torricelli used me to create his barometer in 1643. Before, I was used in thermometers but I have been replaced by alcohol since my vapors are toxic. I am released by volcanic eruption. My symbol is Hg.

What am I?

Mercury

PERIODIC ELEMENTS

I'm a metal, my color is between yellow and orange. My atomic number is seventy-nine. James MARSHALL discovered me on January 24th in 1848 in California. I'm often on death masks in Egypt or I'm used to make jewels. I'm very expensive. I'm very sought after to make money. In nature, I am nugget-shaped or I can also be reduced in powder or speck by a mechanical erosion. You can find me in a lot of countries like Australia, South Africa or China. And last but not least, my symbol is Au.

Gold

PERIODIC ELEMENTS

My atomic number is 8 and I am a non-metal. I was discovered in 1777 by Antoine Lavoisier. By 1777, Lavoisier was ready to propose a new theory of combustion. You can find me everywhere on Earth, because I am in the air and in the water. I don't have any colour. Without me man can't live.

What am I?

Oxygen

A vibrant, hand-drawn illustration featuring a central black DNA double helix. Below the helix is a stylized white head with a blue and green molecular structure on top. Surrounding the head and helix are various scientific symbols: a radiation symbol (yellow and orange), a blue planet with a ring (Saturn), a blue and white cell, a green virus-like structure, and a petri dish with green colonies. The background is white with some faint, colorful scribbles. The text 'Who wants to be a Scientist?' is written in a playful, handwritten font across the top of the DNA helix.

A vibrant, hand-drawn illustration featuring a central black DNA double helix. Below the helix is a stylized white head with a blue and green molecular structure on top. Surrounding the head and helix are various scientific symbols: a radiation symbol (yellow and orange), a blue planet with a ring (top left), a blue and yellow atom (top right), a petri dish with green bacteria (middle right), a blue virus-like structure (middle right), a green and red molecular structure (bottom right), and a blue and green molecular structure (bottom left). The background is white with some faint, colorful scribbles. The text 'Who wants to be a Scientist?' is written in a playful, handwritten font across the top of the DNA helix.

A vibrant, hand-drawn illustration featuring a man's head in profile at the bottom, with a large, black DNA double helix rising from his forehead. The helix is surrounded by various scientific symbols: a radiation symbol (orange and yellow), a blue planet with a ring, a green plant, a blue and white beaker, a blue and white cell, a blue and white microscope, and a blue and white atom. The background is white with a black spiral pattern at the bottom. The text 'Who wants to be a Scientist?' is written in a stylized, colorful font across the top of the DNA helix.

PERIODIC ELEMENTS

I'm a noble gas. At room temperature I'm a gas, I am the chemical element of atomic number 18. I was discovered in the air (~1%) in 1884 by Lord Rayleigh and Sir William Ramsay. I am colorless. In the periodic table I'm situated below the neon. I have 18 protons. My symbol is Ar.

What am I?

Argon

PERIODIC ELEMENTS

My atomic number is 78 and I am a metal. I was discovered in 1735 by Antonio de Ulloa. I am not corrosive, I'm malleable, precious, rare and my colour is white-grey. I am used to make jewels and catalytic converters. I melt at 1768°C. My symbol in the Mendeleev classification is Pt. My density is 10.5.

What am I?

Platinum

PERIODIC ELEMENTS PERIODIC ELEMENTS

It is not clearly falls within any group of the periodic table, often it is being placed in group 1

His atomic number is 1 and it has only one electron and one proton

It is the most abundant chemical element in the universe

Hydrogen

PERIODIC ELEMENTS

It's a metal element with atomic mass 12.

It's an alkaline earth metal.

His electronic configuration is $1s^2 2s^2 2p^6 3s^2$.

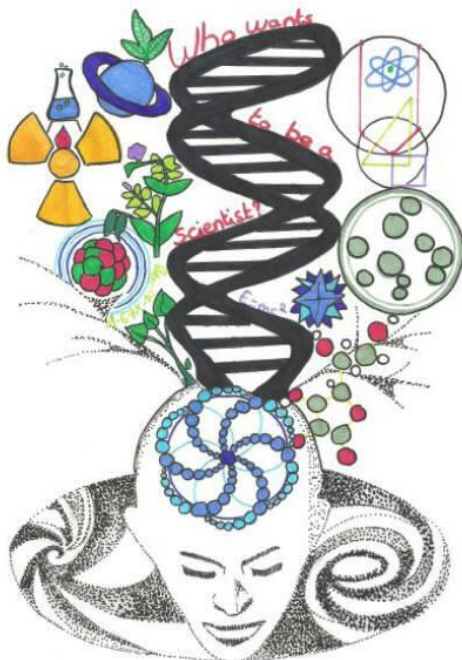
Its ion is essential for all living cells.

It is used as an alloying element and magnesium alloy use in aerospace is increasing due its properties. When burning in air, this element produces a brilliant-white light so it was used for subject illumination in the early days of photography.

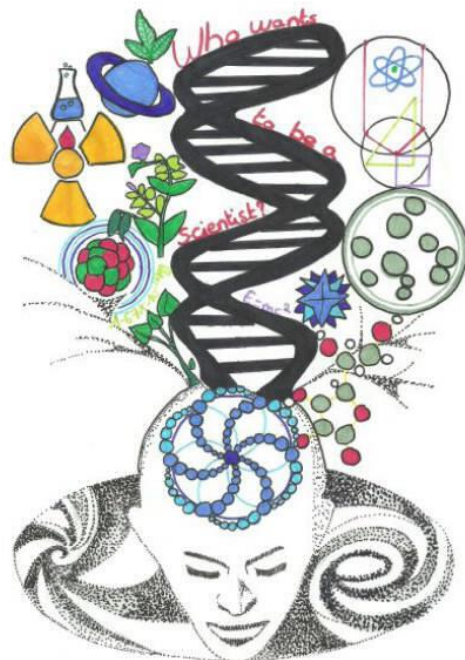
The metal itself was first produced by Sir Humphry Davy in England in 1808.

Magnesium

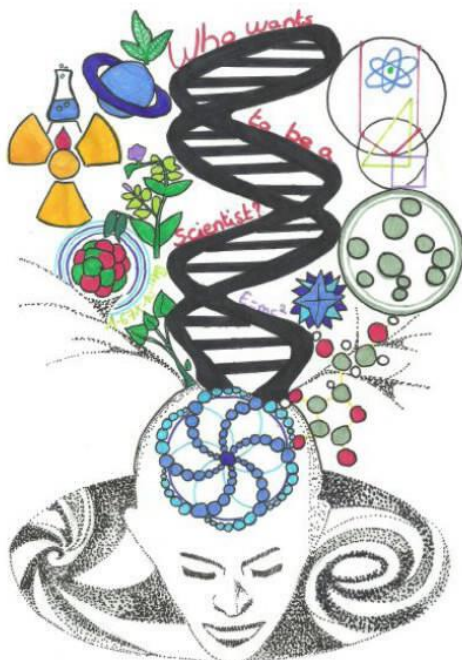
WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



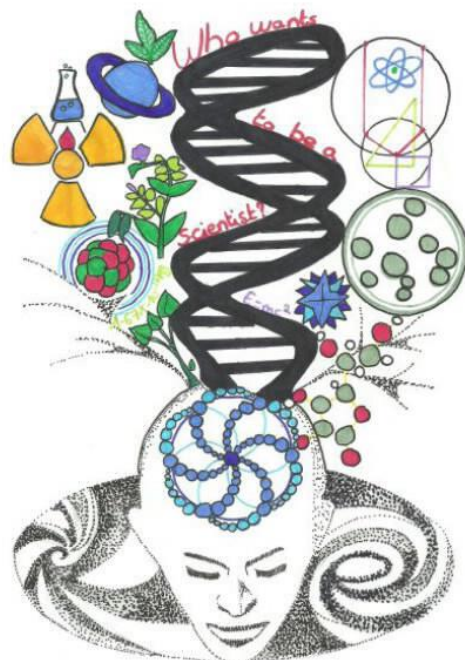
WHO WANTS TO BE A SCIENTIST
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WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



PERIODIC ELEMENTS

Its colour are black-brown, and it has 5 protons. It was isolated by Sir Humphry Davy and by Joseph Louis and Louis Jacques. In 1808 Davy discovered that electric current sent through a solution of borates produced a brown precipitate on one of the electrodes. It is one of the elements called metalloids or semimetals. It belongs to group 13 in the periodic table. It is used in fiberglass.

Boron

PERIODIC ELEMENTS

This element was discovered by greeks and romans. It has an atomic number of 30, and an atomic mass of 65. It is also in the block d (Transition metal). It's a metal and it's used in alloys, batteries and metallurgy. It is usually a gray-ish blue-ish colour. It is a solid substance at room temperature.

Zinc

PERIODIC ELEMENTS

It has a small trend to take part in chemical reactions. it's colorless, odorless and shows a chemical very low reactivity in normal conditions. The condition of it in this natural form is gaseous. It belongs to the group of noble gas. The atomic number of this element is 10. It was discovered by William Ramsay and Morris Travers in London, England, in the year 1898 by the installments distillation of the liquid air

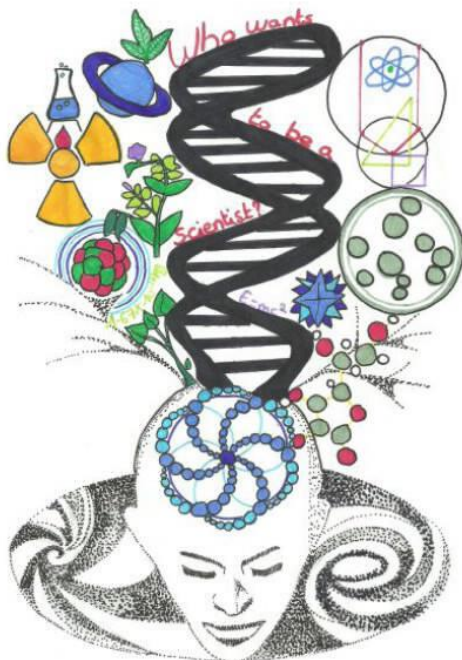
Neon

PERIODIC ELEMENTS

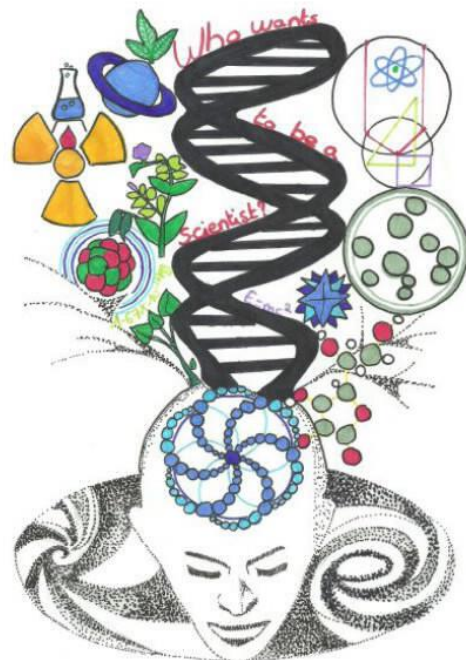
It has high malleability and ductility and also it has the highest know electrical and thermal conductivity. It is one of the seven metals known since antiquity. It has a shiny appearance, although it tarnishes easily. It is solid in room temperature. It is natural. It's grey. It belongs to block "d" in the periodic table. It was discovered by the Portuguese Juan Díaz de Solís in 1516. It belongs to the transition metal. It is used in jewelry.

Silver

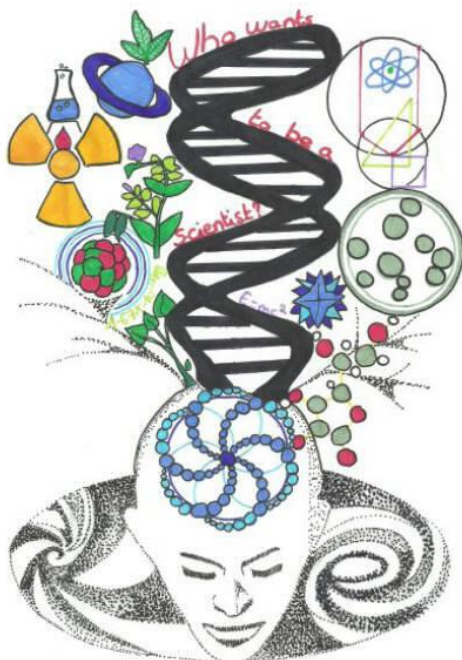
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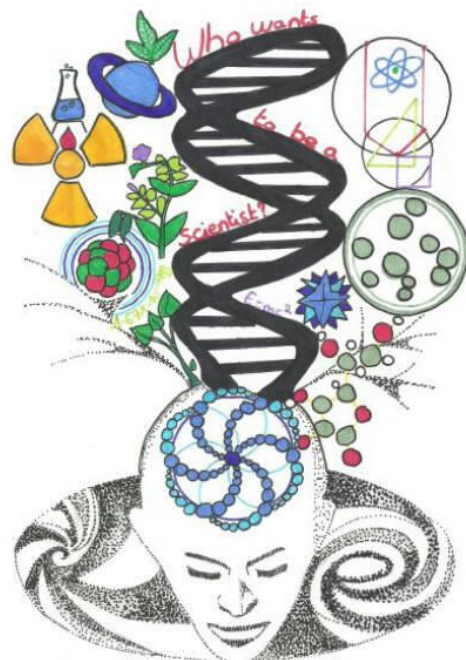
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PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
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WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



PERIODIC ELEMENTS

It is a chemical element of the periodic table, his atomic number is 14, is situated in the 14 group.

It represents more than a quarter of the earth's crust and is the second most abundant element behind the oxygen.

It transmits more than 95% of the wavelengths of infrared radiation.

His properties are between carbon and germanium.

His crystalline form is very hard and very soluble and has a metallic luster and grayish color.

Silicon

PERIODIC ELEMENTS

It is the lightest pnictogen and it belongs to group p, and at room temperature it is a gas. It's transparent and odorless. On Earth, the element forms about 78% of Earth's atmosphere. The element was discovered as a separable component of air, by Scottish physician Daniel Rutherford in 1772. It have 7 protons and his atomic weight is 14. It's a gas then is a nonmetal.

Nitrogen

PERIODIC ELEMENTS

It is a metal ferromagnetic, a transition metal and has a bluish-white color. Metallic cobalt is commonly composed of a mixture of two allotropic forms hexagonal and cubic face centered crystal structures being between the two transition temperature of 722K or 449°C.

Its a chemical element with atomic number 27 and symbol colocated in group 9 of the transition metals.

This has very similar characteristics to iron and nickel elements.

Cobalt

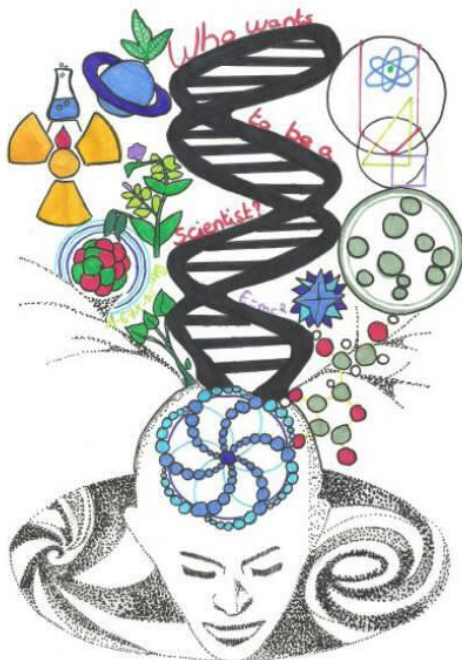
PERIODIC ELEMENTS

The element used in nuclear power stations to produce energy.

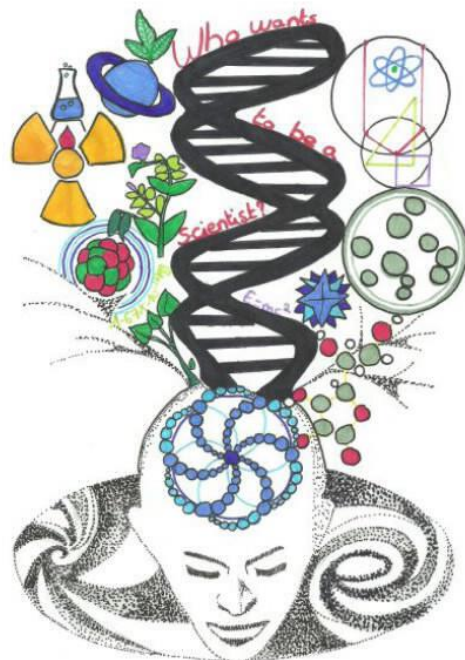
It has atomic number 92. It is a silvery-white metal in the actinide series. It has the second highest atomic weight in the primordially occurring elements. In nature is found in different isotopes, and decays slowly by emitting alpha particle. It was discovered by Martin Heinrich Klaproth in 1789.

URANIUM

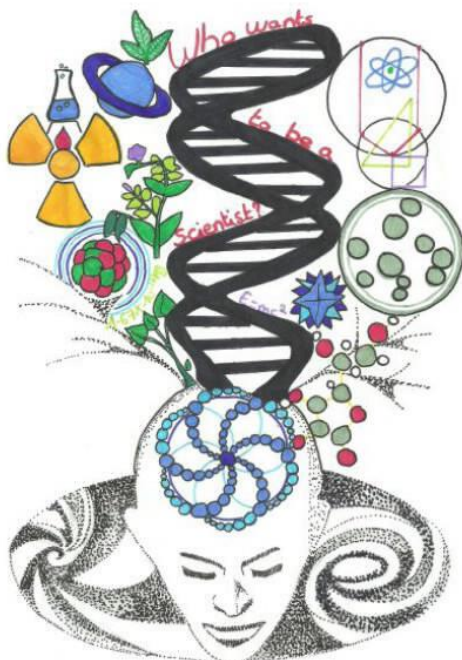
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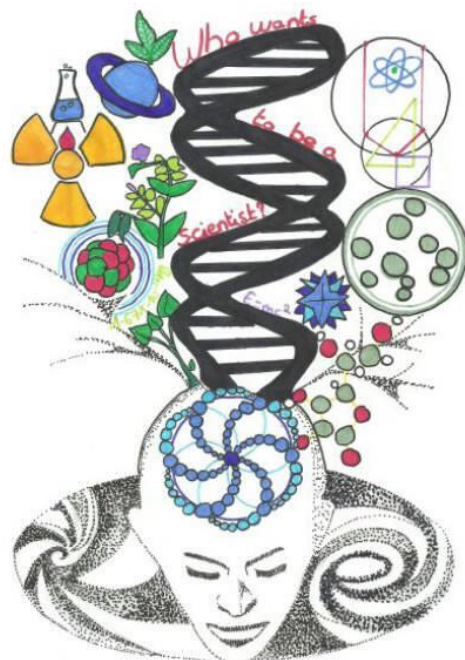
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WHO WANTS TO BE A SCIENTIST
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PERIODIC ELEMENTS

This element is present in milk.
It has atomic number 20, belongs to the group of alkaline earth metal soft metal.
It is the fifth element in order of abundance in the earth's crust
It reacts with water

CALCIUM

PERIODIC ELEMENTS

This element was discovered by the Swedish chemist Axel Fredrik Cronstedt. It is a hard, corrosion resistant metal. It is alloyed with other metals to improve their strength and resistance to corrosion.
At room temperature it is solid and it's white.
It's a natural element and its number of protons is 28.

NICKEL

PERIODIC ELEMENTS

It's a soft metal, dense, ductile and malleable. It's white but it becomes dark gray when it comes in contact with air. It's both artificial and natural. At room temperature it's solid. In its nucleus there are 82 protons. It was discovered by Egyptians in 1550 a.C..

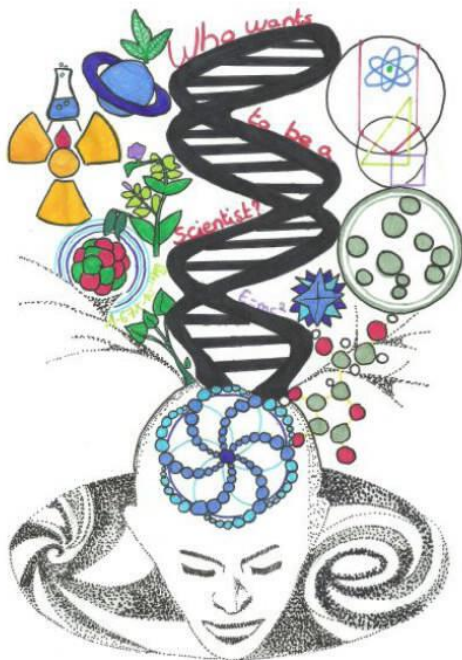
LEAD

PERIODIC ELEMENTS

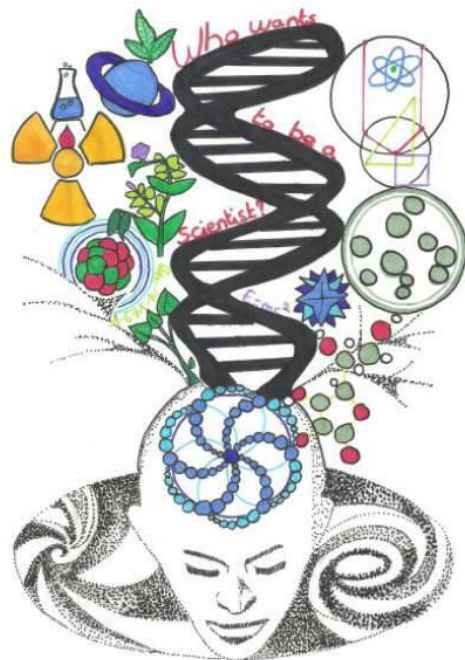
It is a hard metal, shiny, steel gray; it can be easily polished, very resistant to corrosion.
It is solid at room temperature.
It is natural and not artificial.
Atomic number 24.
It was discovered by Johann Lehmann in 1761

CHROMIUM

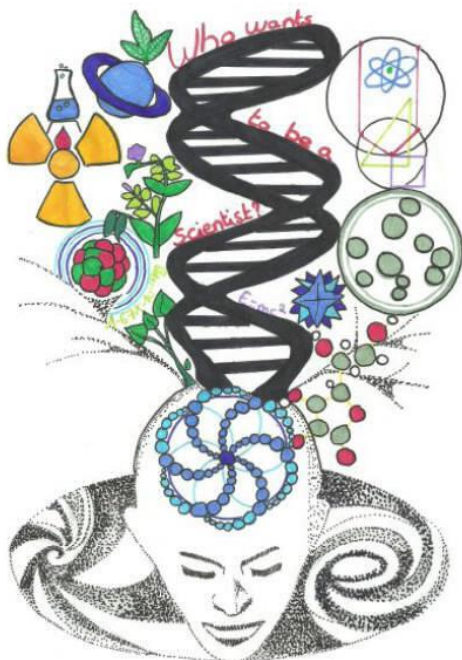
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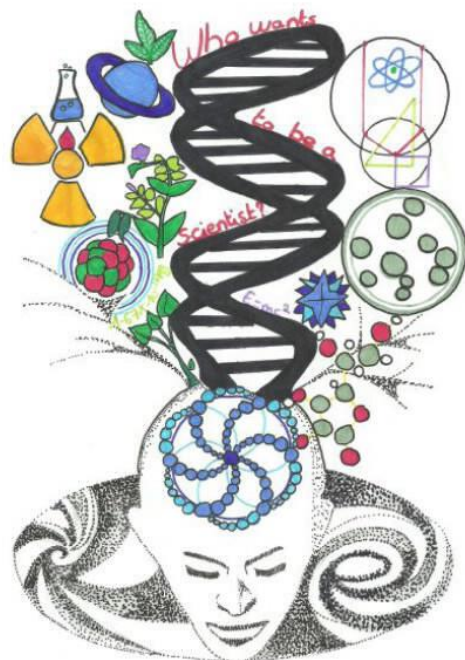
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WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



PERIODIC ELEMENTS

DESCRIPTION

It is present in most of the minerals. It was not until the late 1800s that the element was isolated.

It is a dopant in some types of glass in lasers and other optoelectronic devices.

It was isolated in 1901 and is named after the continent of Europe.

Europium

PERIODIC ELEMENTS

DESCRIPTION

The first evidence of it was observed on August 18, 1868 as a bright yellow line with a wavelength of 587.49 nanometers in the spectrum of the chromosphere of the Sun.

It is a colorless, odorless, tasteless, non-toxic, inert, monatomic gas, the first in the noble gas group in the periodic table. The boiling and melting points are the lowest among all the elements.

Helium

PERIODIC ELEMENTS

DESCRIPTION

Its production has greatly increased since the end of World War II.

Worldwide identified reserves in 2008 were estimated by the US Geological Survey (USGS) as 13 million tonnes.

It is widely distributed on Earth, it does not naturally occur in elemental form due to its high reactivity.

It is a soft, silver-white metal belonging to the alkali metal group of chemical elements.

Lithium

PERIODIC ELEMENTS

DESCRIPTION

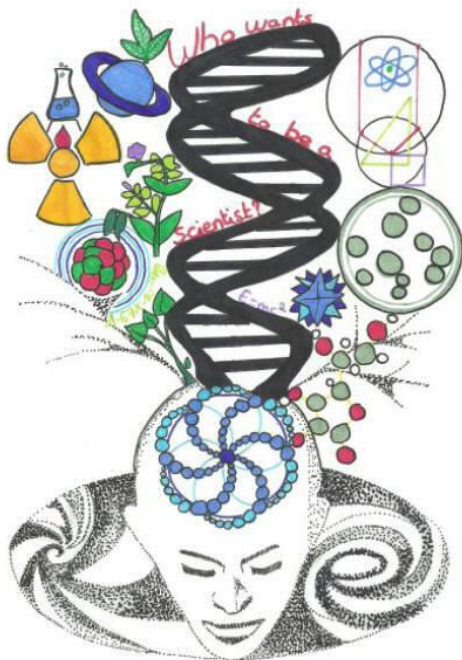
It is by mass the most common element on Earth, forming much of Earth's outer and inner core. It is the fourth most common element in the Earth's crust.

Like other group 8 elements, it exists in a wide range of oxidation states.

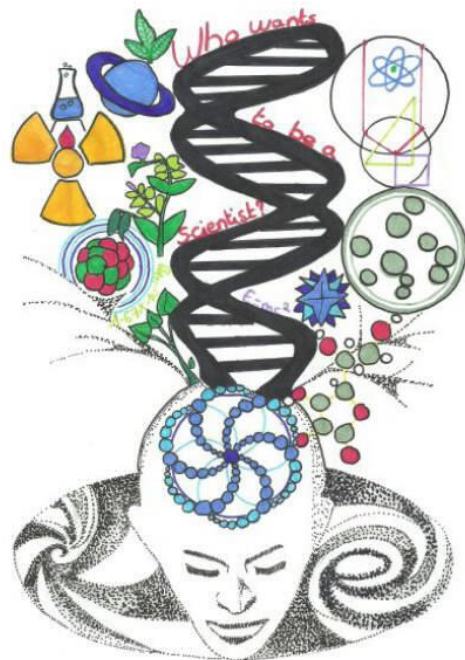
This element plays an important role in biology, forming complexes with molecular oxygen in hemoglobin and myoglobin.

Iron

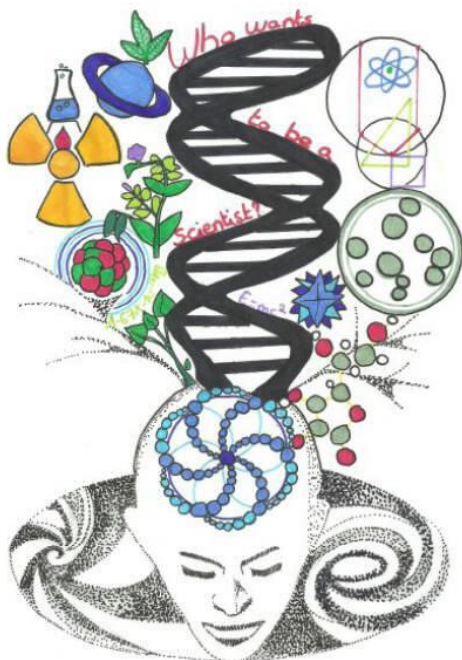
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PERIODIC ELEMENTS



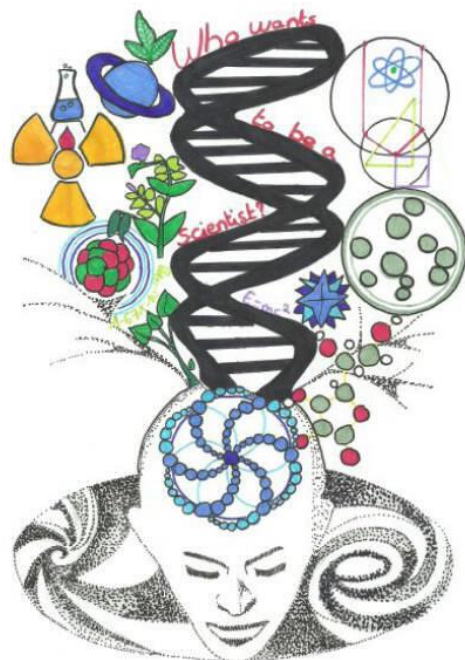
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PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



WHO WANTS TO BE A SCIENTIST
PERIODIC ELEMENTS



PERIODIC ELEMENTS

DESCRIPTION

It is remarkable for the metal's low density and its ability to resist corrosion through the phenomenon of passivation.

It is a relatively soft, durable, lightweight, ductile, and malleable metal with appearance ranging from silvery to dull gray, depending on the surface roughness.

Aluminium

PERIODIC ELEMENTS

DESCRIPTION

It was first isolated from potash, the ashes of plants, from which its name is derived

It's ions are necessary for the function of all living cells.

It is the second least dense metal after lithium.

Potassium

PERIODIC ELEMENTS

DESCRIPTION

It is not found free in nature, but it is widely distributed in many minerals.

In 2012, the USGS estimated 71 billion tons of world reserves.

It is a chemical element with symbol P.

Phosphorus

PERIODIC ELEMENTS

DESCRIPTION

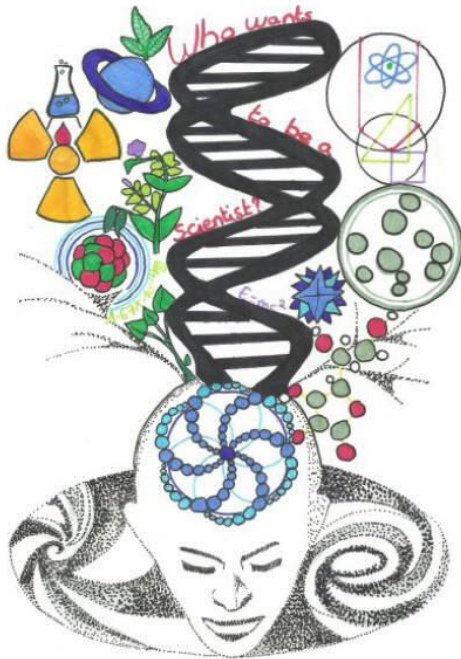
It is the lightest halogen and exists as a highly toxic pale yellow diatomic gas at standard conditions.

This element ranks 24th in universal abundance and 13th in terrestrial abundance.

It combines with metals, nonmetals, metalloids, and most noble gases.

Fluorine

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PERIODIC ELEMENTS



PERIODIC ELEMENTS

DESCRIPTION

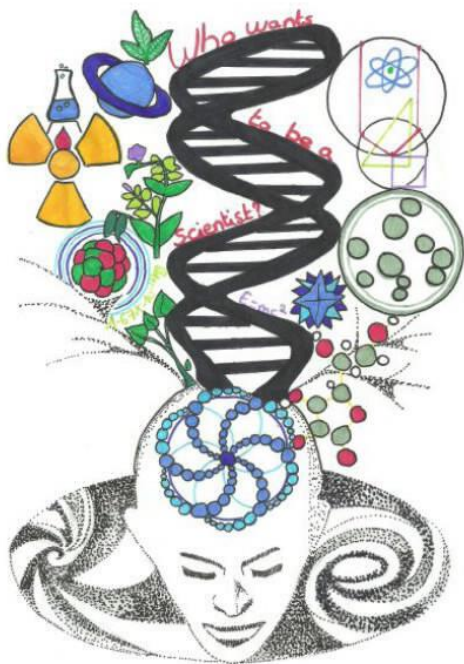
It is created through stellar nucleosynthesis and is a relatively rare element in the universe.

It is a divalent element which occurs naturally only in combination with other elements in minerals

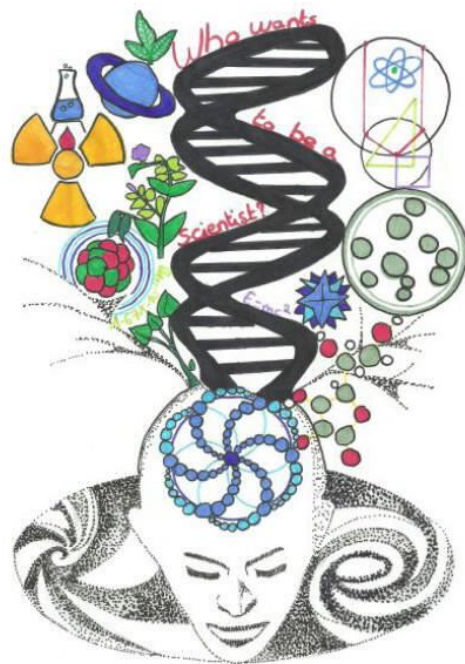
As a free element it is a steel-gray, strong, lightweight and brittle alkaline earth metal.

Beryllium

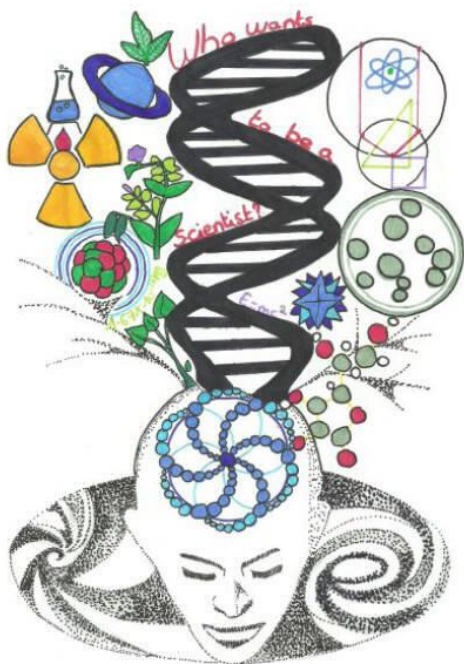
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PHYSICAL AND CHEMICAL QUANTITIES



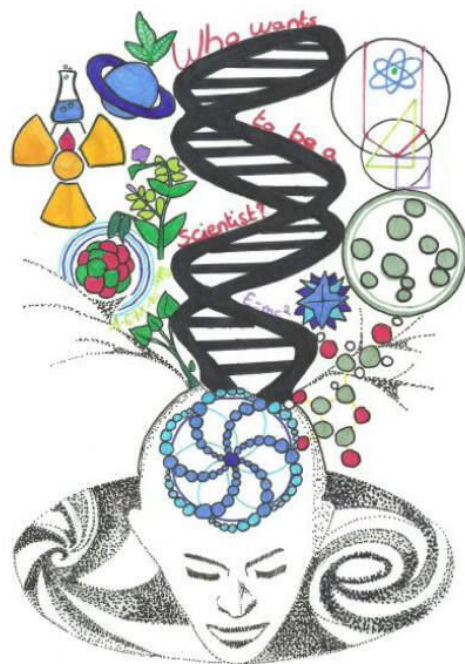
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PHYSICAL AND CHEMICAL QUANTITIES



WHO WANTS TO BE A SCIENTIST
PHYSICAL AND CHEMICAL QUANTITIES



WHO WANTS TO BE A SCIENTIST
PHYSICAL AND CHEMICAL QUANTITIES



PHYSICAL AND CHEMICAL QUANTITIES

1. I can be measured by a metre, a ruler, a micrometer...

2. My SI unit is the metre. It was officially adopted as an international measurement unit in 1875, and it is one of the oldest units of measurement.

3. My symbol is L but it can be D as well.

What am I?

The length

PHYSICAL AND CHEMICAL QUANTITIES

1. No instrument to measure me exists because I am dependent on the chemical species that are studied.

2. My unit is the mole, written mol.

3. I am used in different formulas, in which my symbol is ***n***. I am linked with the Avogadro's constant, which is $N_A = 6.02 \times 10^{23} \text{ mol}^{-1}$, thanks to the formula $n = N/N_A$ with *N* the number of particles and N_A the Avogadro's constant. This constant can be considered as the number of particles that make up a mole.

What am I?

The number of moles

PHYSICAL AND CHEMICAL QUANTITIES

1. I can be measured by different instruments like an anemometer when I am related to the wind, radars when related to cars or cars meters.

2. My unit is the m/s (meter per second) but in everyday life, everyone talks about km/h (kilometer per hour).

3. I'm equal to d/t (distance traveled divided by time).

What am I?

The speed (or the velocity)

PHYSICAL AND CHEMICAL QUANTITIES

1. I am linked with a periodic phenomenon. I am the number of occurrences of the repeating event per second.

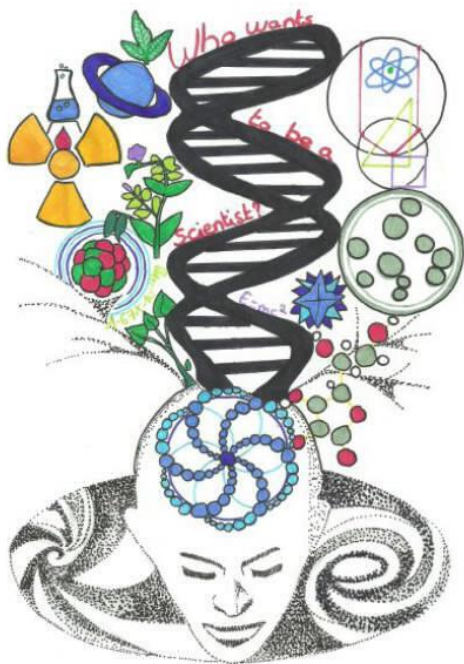
2. There is an instrument which can measure me directly but for the electric signals, the oscilloscope is often used to measure the time period first. Then you can give my value with the following formula: $1/T$ where *T* is the time period in seconds

3. My unit in the international system is the Hertz.

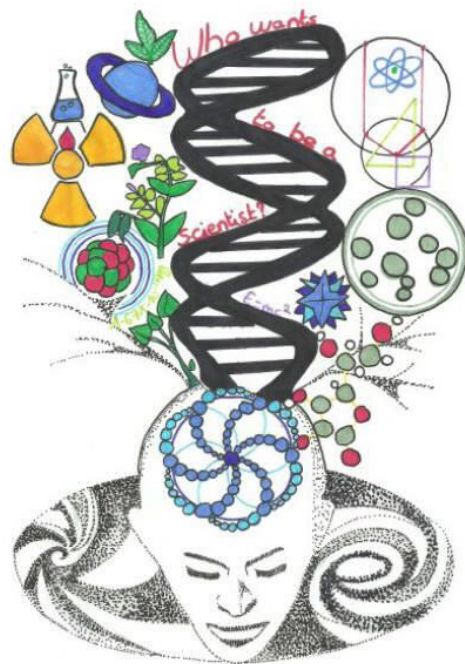
What am I?

The frequency

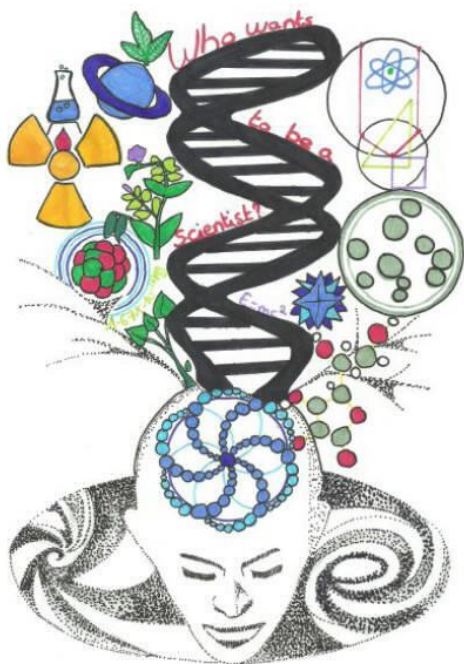
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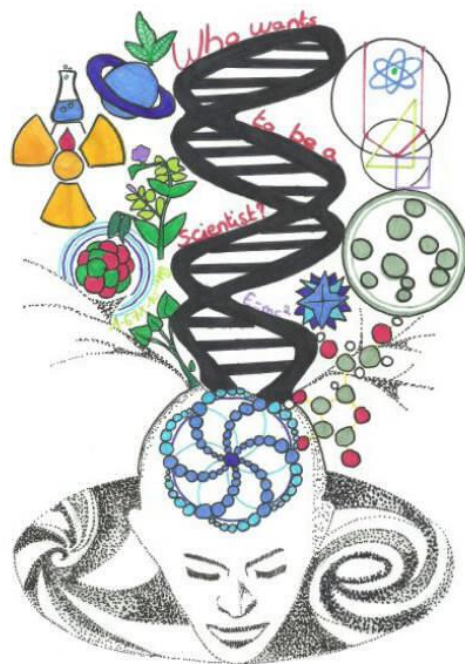
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PHYSICAL AND CHEMICAL QUANTITIES



WHO WANTS TO BE A SCIENTIST
PHYSICAL AND CHEMICAL QUANTITIES



WHO WANTS TO BE A SCIENTIST
PHYSICAL AND CHEMICAL QUANTITIES



PHYSICAL AND CHEMICAL QUANTITIES

1. I was discovered by Isaac Newton in 1726 with an apple. I am linked with gravity.
2. My value is equal to m times g where m represents the mass of body in kilogram and g represents the gravity intensity in newton per kilogram.
3. My International unit is the Newton. My symbol is P .

What quantity am I?

The weight

PHYSICAL AND CHEMICAL QUANTITIES

1. I am measured by a thermometer.
2. I am linked to the velocity of particles.
3. My SI unit is the Kelvin, denoted K . The most common ones are Celsius, denoted $^{\circ}C$, and Fahrenheit, denoted $^{\circ}F$. The zero point of celsius is $0^{\circ}C$ and is defined by the freezing point of water. On the Fahrenheit scale, water freezes at $32^{\circ}F$. Absolute zero is when I'm the coldest and it is denoted as $0 K$ on the Kelvin scale, $-273.15^{\circ}C$ on the Celsius scale, and $-459.67^{\circ}F$ on the Fahrenheit scale.

What am I?

The temperature

PHYSICAL AND CHEMICAL QUANTITIES

1. I am a flow of electric charges. In electric circuits these charges are often carried by moving electrons in a wire.
2. My value is equal to Q/t , where Q is the electric charge transferred to the surface of the wire and t is the time.
3. The SI unit for measuring me is Ampere. I can be measured using an Ammeter.

What am I?

The electric current

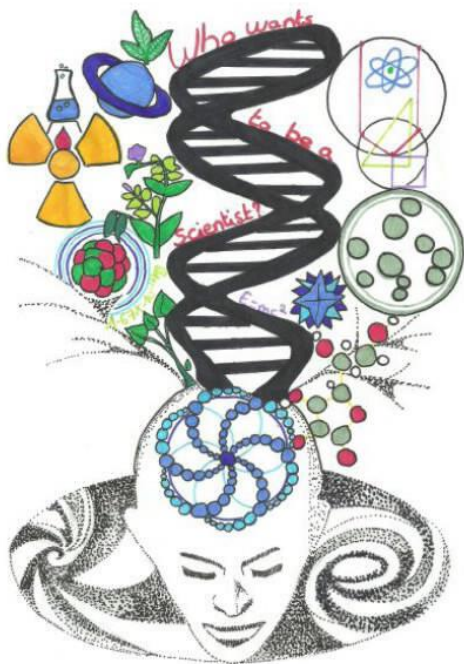
PHYSICAL AND CHEMICAL QUANTITIES

1. I am related to a non-polarized dipole. I can be measured by an ohmmeter.
2. To determine my value, one can use the Ohm's law named after the German physicist Georg Ohm. This law states that my value is equal to U/I where U is the voltage and I is the current across a conductor.
3. Last but not least, my unit is the Ohm.

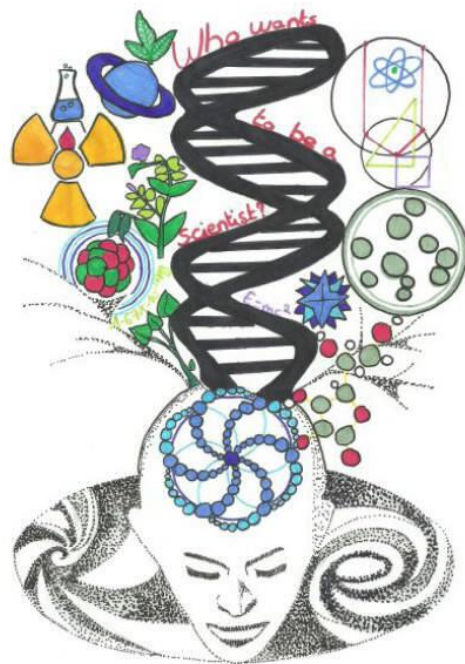
What am I?

The resistance

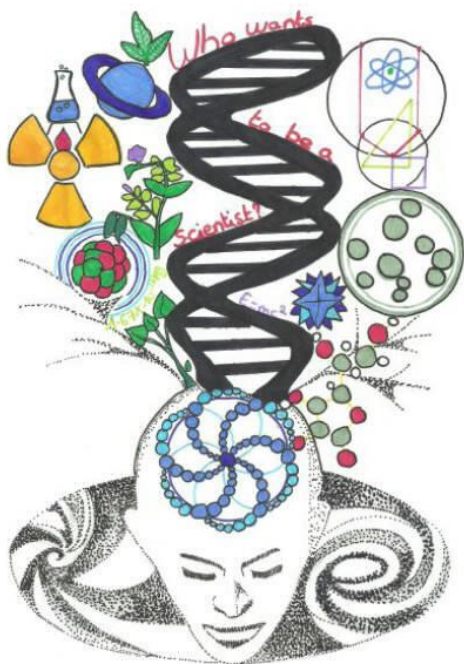
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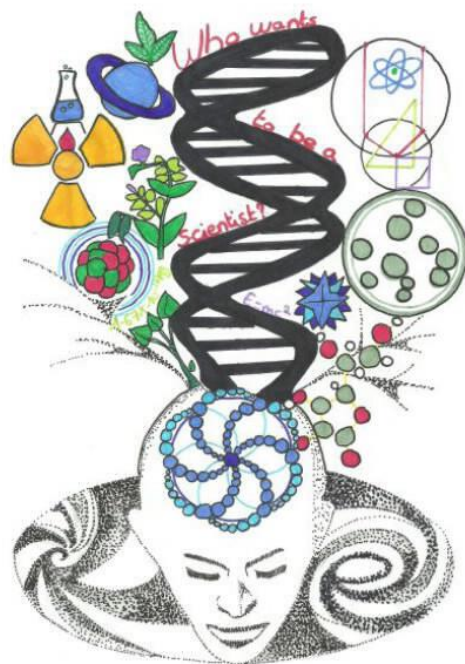
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PHYSICAL AND CHEMICAL QUANTITIES



WHO WANTS TO BE A SCIENTIST
PHYSICAL AND CHEMICAL QUANTITIES



WHO WANTS TO BE A SCIENTIST
PHYSICAL AND CHEMICAL QUANTITIES



PHYSICAL AND CHEMICAL QUANTITIES

1. I'm a geometric quantity. I express the extent of a two-dimensional figure or shape on a surface. In some cases a planimetre is used to measure me.
2. In physics I connect the pressure and the pressing force with the formula: $P=F/A$ (P is the pressure, F is the force and A it's me).
3. In the international system of units, my standard unit is the square metre (written m^2).

What am I?

The area (or surface area)

PHYSICAL AND CHEMICAL QUANTITIES

1. I can't be measured by an instrument.
2. Generally, I am expressed in mol/L (mole per liter).
3. I am the quantity of matter of a chemical species: gas, fluid or solid dissolved in a liter of solution only. I am equal to n/V when n (the quantity of matter) is in mol and V (the volume of a solution) is in Liter.

What am I?

The molar concentration

PHYSICAL AND CHEMICAL QUANTITIES

1. It is any interaction that will change the motion of an object.
2. It can also be described by intuitive concepts such as push or pull.
3. Its SI unit is Newton.

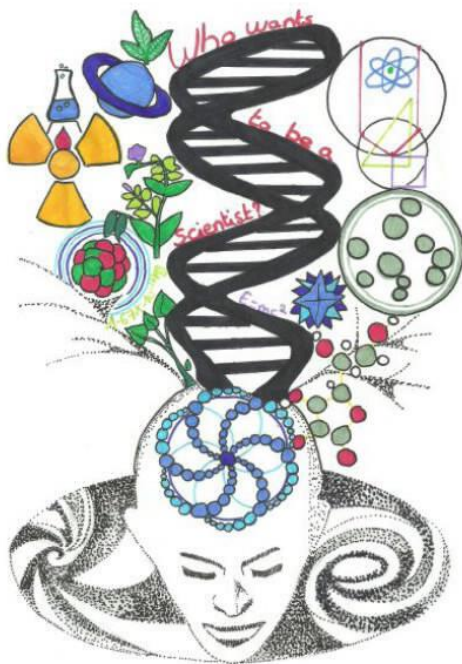
FORCE

PHYSICAL AND CHEMICAL QUANTITIES

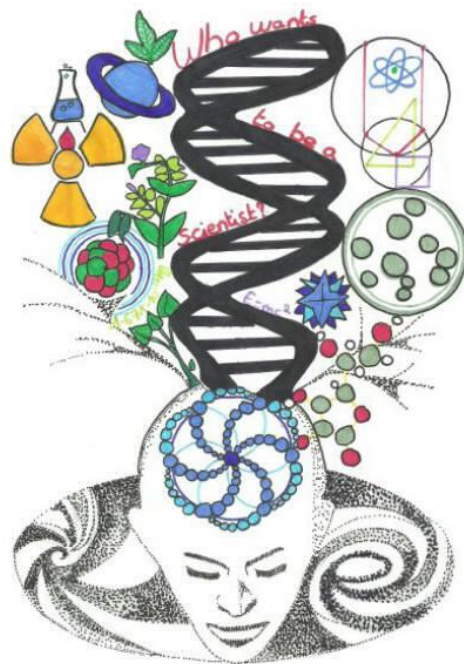
1. It's the difference in electric potential energy between two points per unit electric charge.
2. It can be measured by a voltmeter.
3. Its international unit is volts.

Voltage

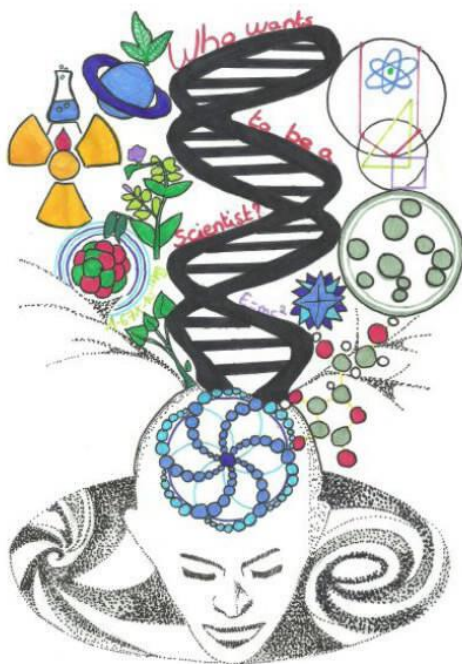
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PHYSICAL AND CHEMICAL QUANTITIES



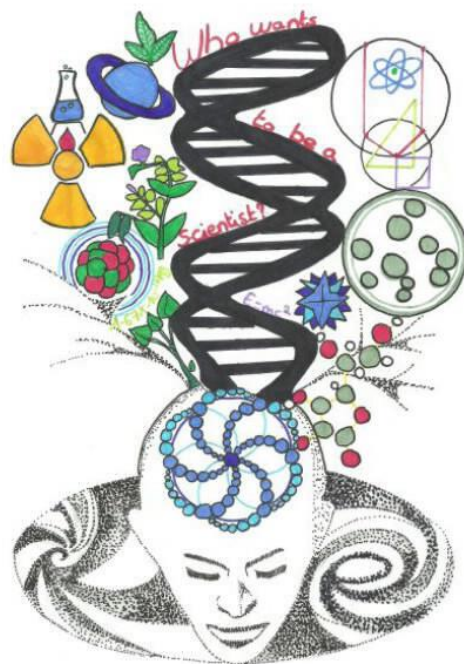
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PHYSICAL AND CHEMICAL QUANTITIES



PHYSICAL AND CHEMICAL QUANTITIES

1. In the International System of Units the unit of it names coulomb.
2. It's defined as the quantity of load that happens for the transverse section of an electrical driver in a second.

Electrical Charge

PHYSICAL AND CHEMICAL QUANTITIES

1. It is a base magnitude, so you can measure it directly with a scale.
2. This physical quantity is measured in kg.

Mass

PHYSICAL AND CHEMICAL QUANTITIES

1. It's the magnetic effect of electric currents and magnetic materials.
2. It's measured in teslas.
3. One of the first persons that study this was Oersted in 1820.

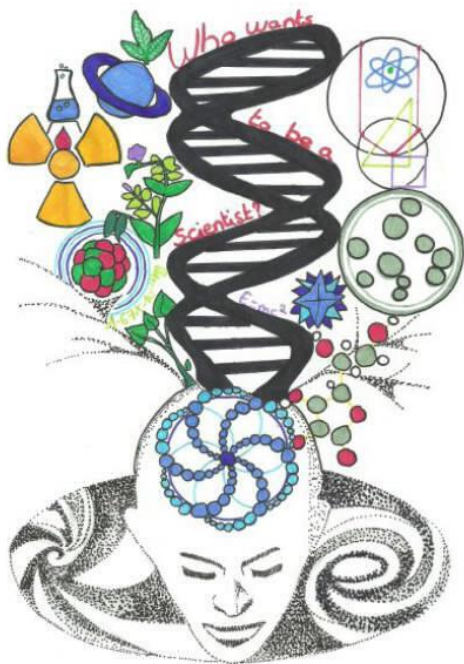
Magnetic field

PHYSICAL AND CHEMICAL QUANTITIES

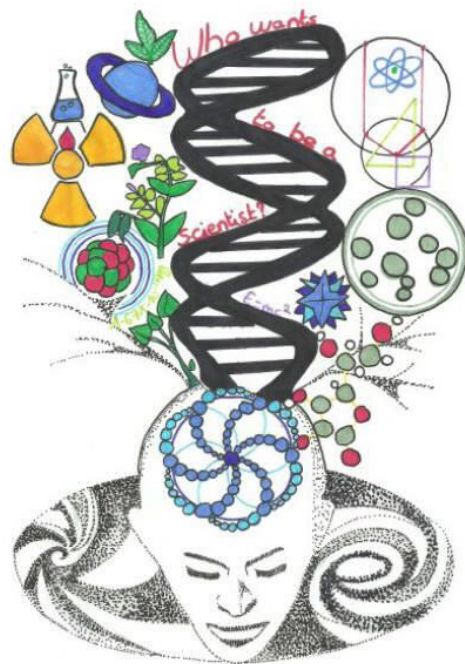
1. They are caused by electric charges. The charge alters that space, causing any other charged object that enters the space to be affected by this.
2. It is defined as a force per charge.
3. Its SI units are newtons per coulomb.

Electric field

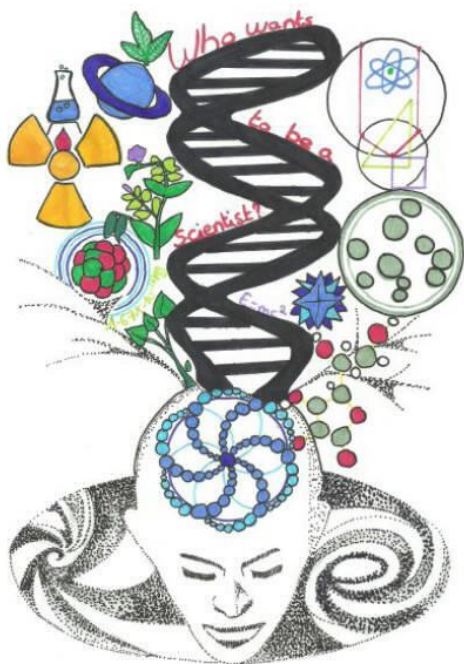
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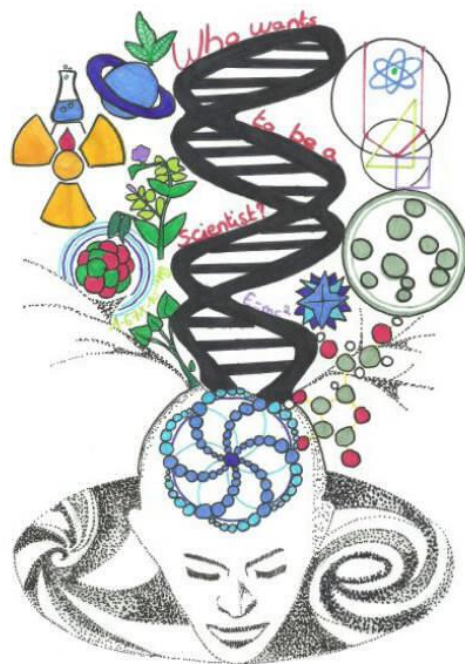
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PHYSICAL AND CHEMICAL QUANTITIES



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PHYSICAL AND CHEMICAL QUANTITIES



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PHYSICAL AND CHEMICAL QUANTITIES



PHYSICAL AND CHEMICAL QUANTITIES

- 1.It never stops.
- 2.It's a physical magnitude with which we measure the duration or separation of events.
- 3.The international System unit is seconds.

Time

PHYSICAL AND CHEMICAL QUANTITIES

- 1.It is the amount of the space an object occupies.
2. The unit at the international system is cubic meter.
- 3.It is a derived magnitude.

Volume

PHYSICAL AND CHEMICAL QUANTITIES

1. In physics is defined as length of time during which a series of events or an action takes place or is completed.
2. In chemistry, it is the name given to a horizontal row of the periodic table.
3. Another acceptance, it is defined as length of time that is very important in the history of the world, a nation, etc.

Period

PHYSICAL AND CHEMICAL QUANTITIES

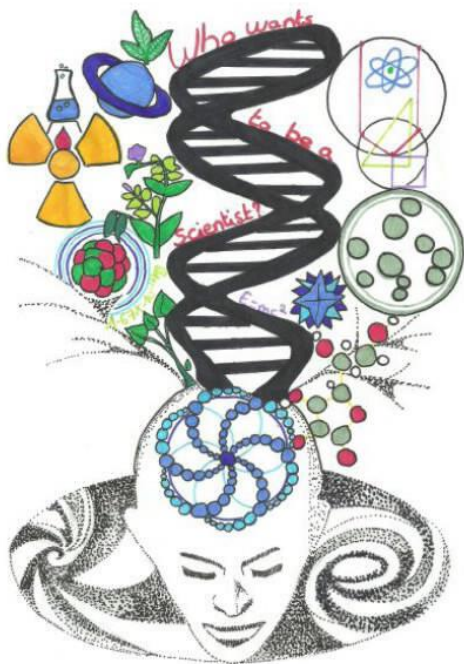
Its value depends on mass and velocity of a moving body.

Its variation is related with the application of a force, and its conservation is implied by Newton's law.

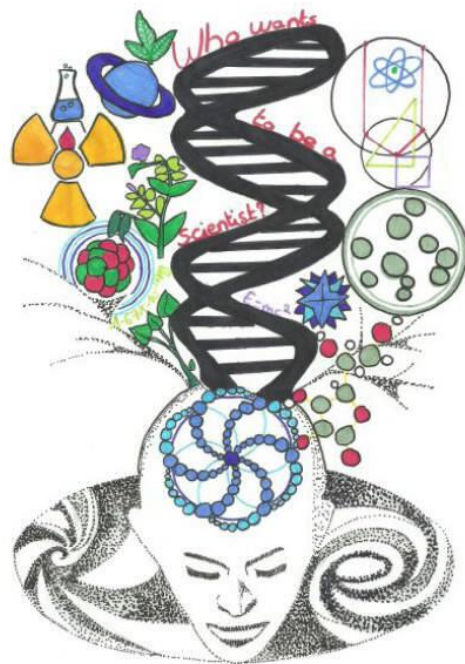
Its unit in international system is Newton x second

Momentum

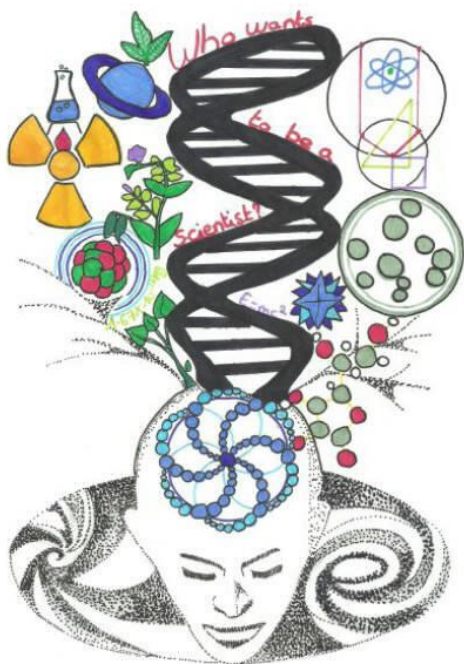
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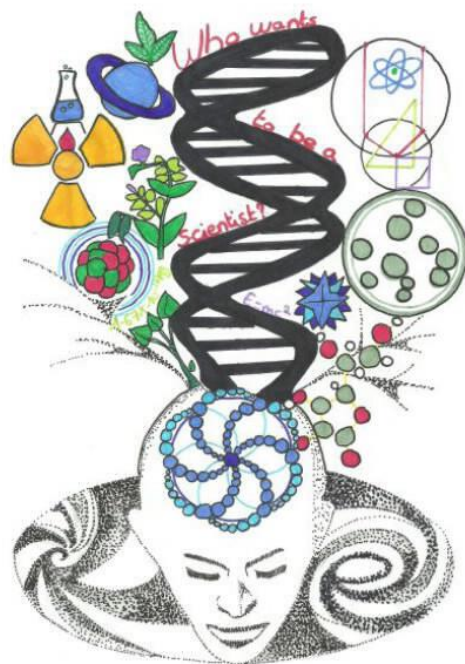
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PHYSICAL AND CHEMICAL QUANTITIES

It is a tendency to change something's state of rotation

In the SI system, its unit is newton x meter

It is in rotational mechanics what force is in linear mechanics.

Torque

PHYSICAL AND CHEMICAL QUANTITIES

It is referred to the ratio work over time

In the SI system, its unit is the joule per second, known as Watt (J/s)

The most common symbol is "W"

Power

PHYSICAL AND CHEMICAL QUANTITIES

It's measured by a Geiger counter

Its unit in international system is Siever (Sv).

It is the radiation that carries enough energy to free electrons from atoms or molecules, thereby ionizing them.

ionizing radiation dose

PHYSICAL AND CHEMICAL QUANTITIES

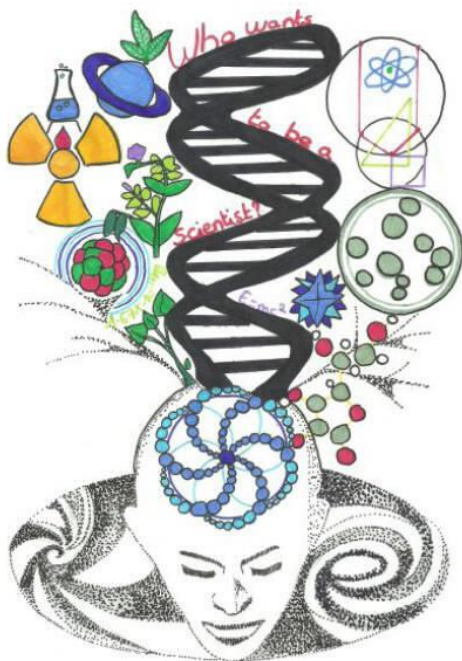
It depends on the shape and size of its elements and on the permittivity of the dielectric.

Its unit in international system is the Farad.

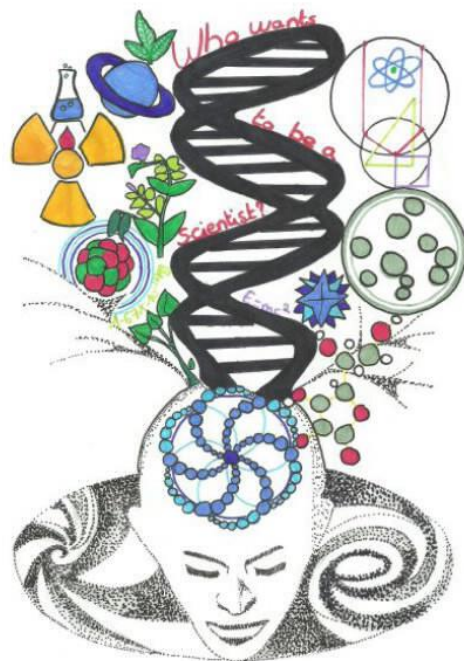
It is defined as the ratio between the electric charge and its electric potential.

Capacitance of the capacitor

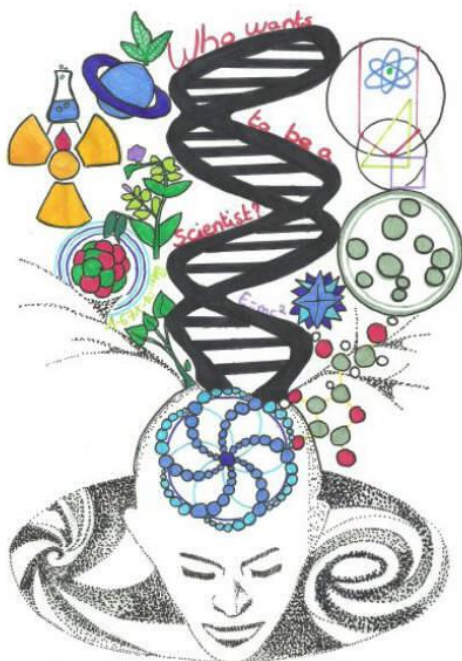
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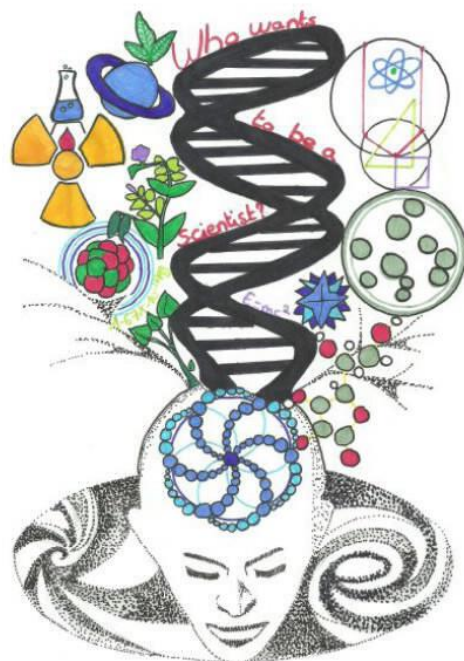
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PHYSICAL AND CHEMICAL QUANTITIES



PHYSICAL AND CHEMICAL QUANTITIES

A measure of a system's ability to do work.

Like work itself, it is measured in joules.

It is conveniently classified into two forms.

Energy

PHYSICAL AND CHEMICAL QUANTITIES

The number of atoms of radioactive substance that disintegrate per unit time.

Symbol A.

Activity A (Bq)

PHYSICAL AND CHEMICAL QUANTITIES

Logarithmic scale for expressing the acidity or alkalinity of a solution.

Stands for "potential of hydrogen".

This scale was introduced by S.P. Sørensen in 1909.

pH

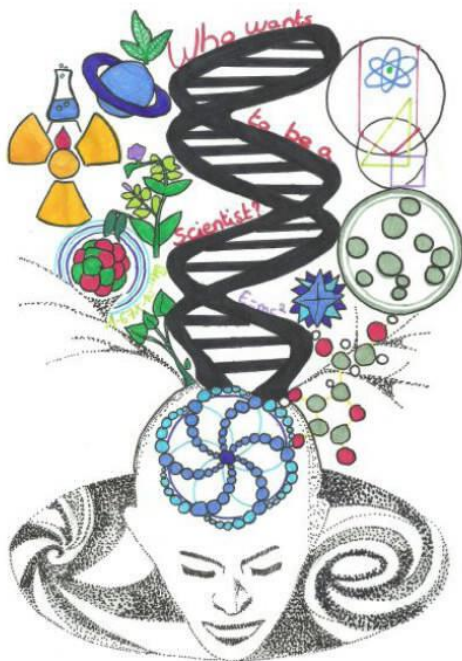
PHYSICAL AND CHEMICAL QUANTITIES

Periodic disturbance in a medium or space.

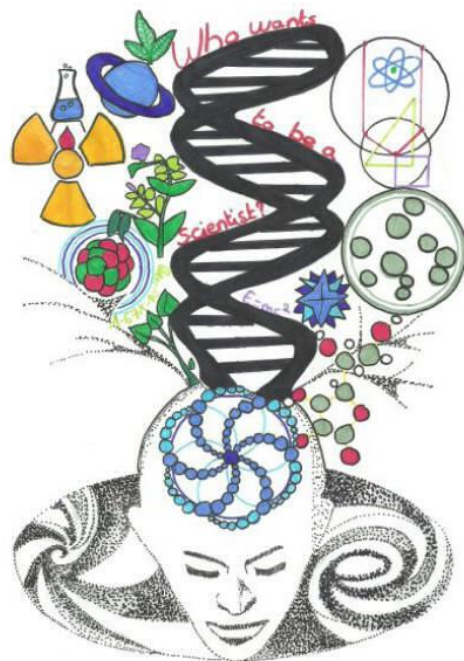
The symbol is λ , and its SI unit is meters.

Wavelength

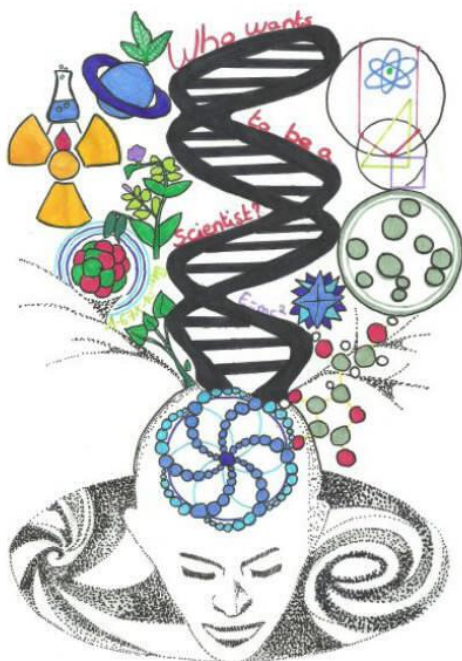
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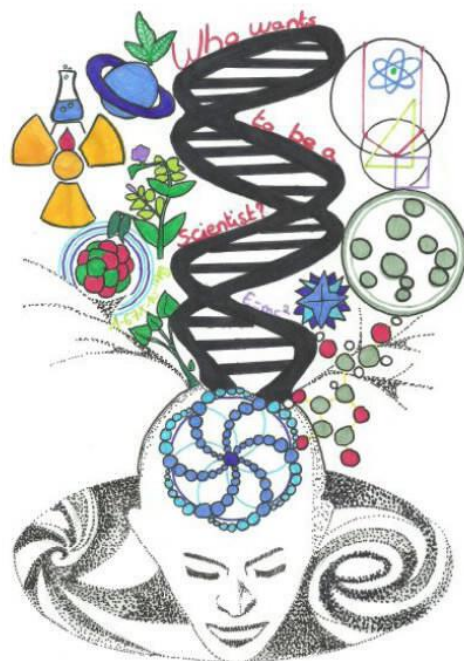
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PHYSICAL AND CHEMICAL QUANTITIES

The mass of a substance per unit of volume. In SI units it is measured in kg/m^3 .

It varies with the type of material and also varies with temperature and pressure

Density

PHYSICAL AND CHEMICAL QUANTITIES

The reciprocal of electrical resistance in a direct-current circuit. The ratio of the resistance to the square of the impedance in an alternating-current circuit. The SI unit is the siemens, formerly called the ohm.

Conductance

PHYSICAL AND CHEMICAL QUANTITIES

Symbol α .

The ratio of the radiant or luminous flux absorbed by a body to the flux falling on it.

Absorptance

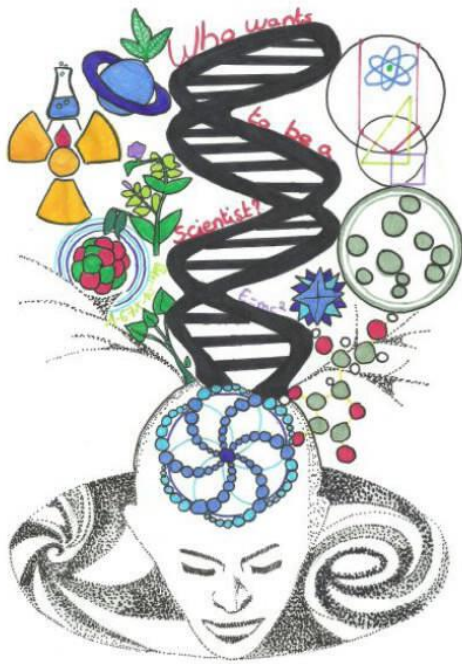
PHYSICAL AND CHEMICAL QUANTITIES

The SI unit for acceleration is metre per second squared (m s^{-2}).

In physics, is the rate of change of velocity of an object

Acceleration

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PHYSICAL AND CHEMICAL QUANTITIES



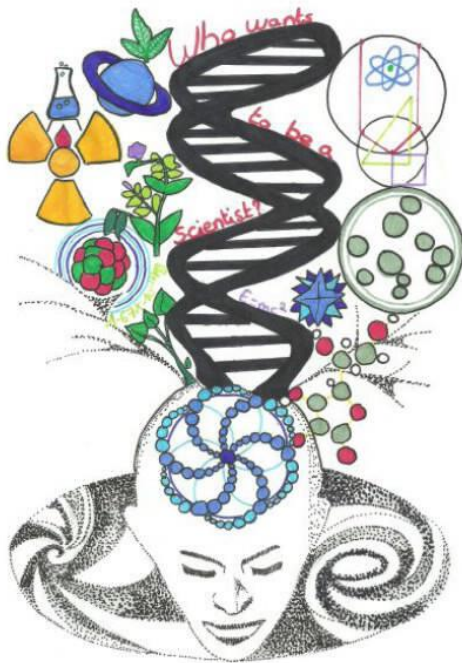
PHYSICAL AND CHEMICAL QUANTITIES

It is the force applied perpendicular to the surface of an object per unit area over which that force is distributed.

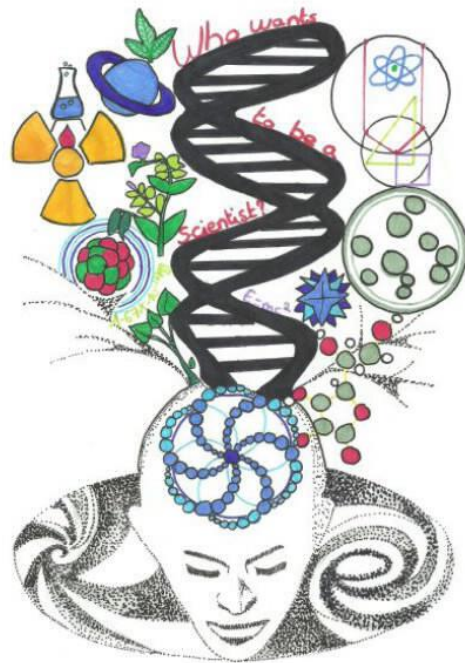
Various units are used to express. The SI unit is pascal (Pa).

Pressure

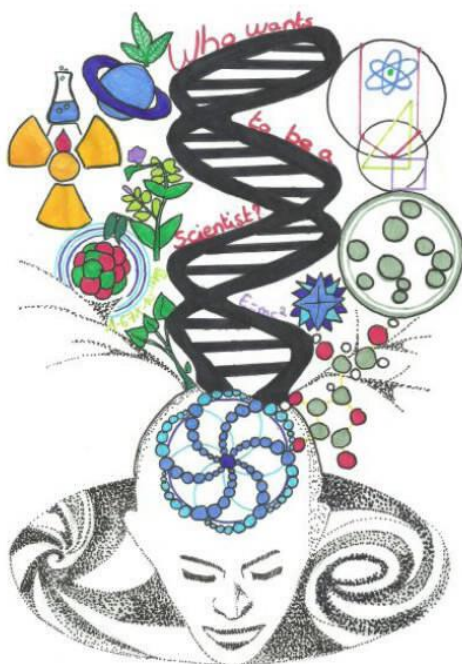
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SCIENTIFIC OBJECTS



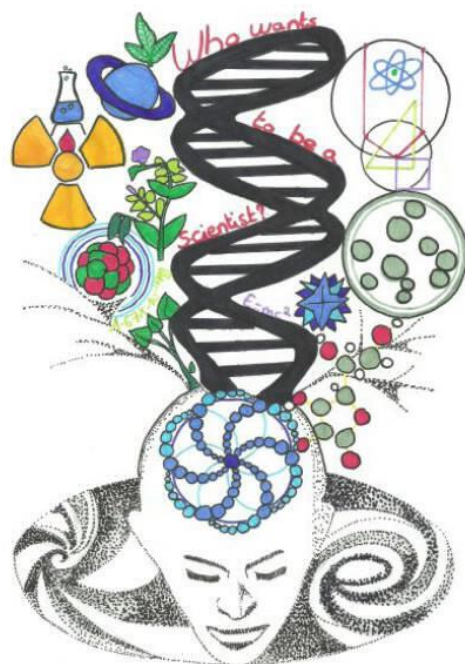
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SCIENTIFIC OBJECTS



WHO WANTS TO BE A SCIENTIST
SCIENTIFIC OBJECTS



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SCIENTIFIC OBJECTS



SCIENTIFIC OBJECTS

I am studied by all the pupils who learn Physics. I am very useful in many jobs and subjects like radio or medicine. I can be seen in a signal's recording and I exist under different forms such as periodic ones but overall, I am either electromagnetic (such as light) or acoustic. I am almost everywhere but many people neither know nor see me.

What am I?

The wave

SCIENTIFIC OBJECTS

I am an electrochemical cell (or enclosed and protected material) that can be charged electrically to provide a static potential for power or released electrical change when needed. My creator Volta was born in Italy and created me in 1800's.

I have a lot of forms and colors. Before I was big and I became smaller and smaller. I am in children toys around the world but also in those of the biggest people.

What am I?

The battery

SCIENTIFIC OBJECTS

I am an object surrounded by a magnetic field. I possess the property, either natural or induced, of attracting ferromagnetic materials such as iron. I am made up of a north pole and a south pole that attract each other. I am used to make compasses, and in medical devices such as magnetic resonance imaging.

What am I?

The magnet

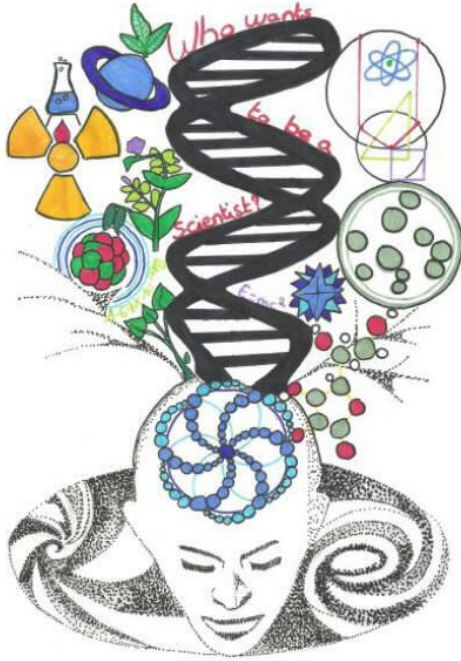
SCIENTIFIC OBJECTS

In -460 Democrite discovered me and thought that I was the smallest possible bit of matter. Thomson created the plum pudding model in 1897, Rutherford created the planetary model of myself in 1911 and Schrodinger created the quantum model in 1926. I'm composed of particles called nucleons and electrons. I'm everywhere.

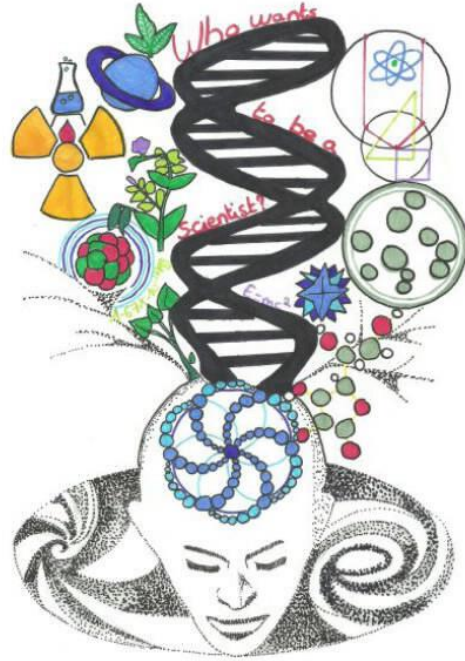
What am I ?

The atom

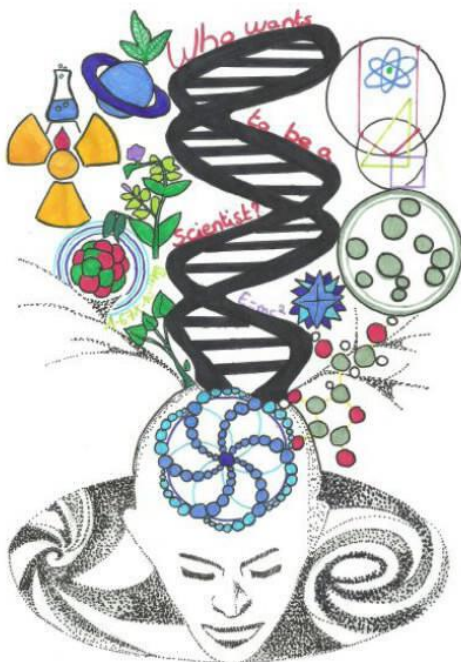
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SCIENTIFIC OBJECTS



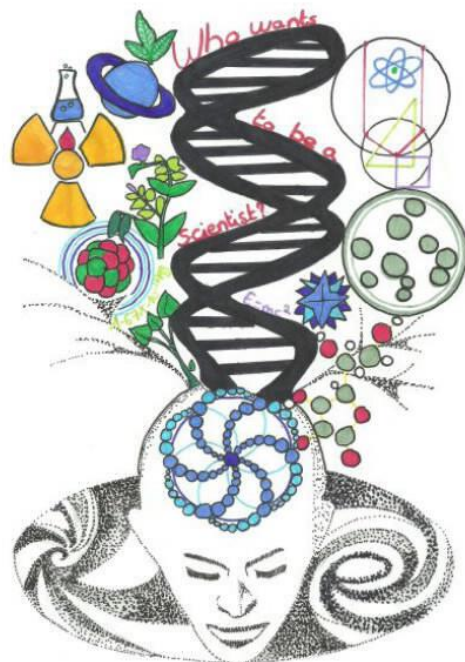
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SCIENTIFIC OBJECTS

I was created in 1954.

I am black and I can be rectangular, square-shaped. I'm composed of silicon. Humans put me in countries where it's really sunny, or on houses' roofs, planes or satellites.

I can be very small or huge.
My job is to convert solar energy into electricity or thermal energy.

What am I?

The solar panel

SCIENTIFIC OBJECTS

I am a subatomic particle. I was discovered by Joseph John Thompson and his workmates in 1896. They tried to separate the negative electrical charges using magnetism. I live in the atom with the protons and neutrons. In an atom, I am always as many as the protons.

My symbol is e-.

What am I?

The electron

SCIENTIFIC OBJECTS

I am a big object built by engineers which has been placed into orbit around the Earth. I've got a lot of applications. I'm used for the weather, the television, Earth observations and many other uses. The first one which was sent to space was named Sputnik by the Soviet Union in 1957.

What am I?

The satellite

SCIENTIFIC OBJECTS

I have a very little size which is around 10^{-15} m.

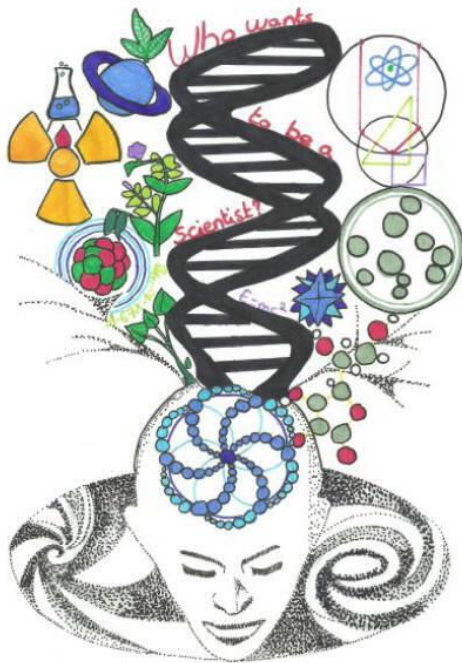
I was discovered by Ernest Rutherford in 1911, in the famous experiment called "the gold leaf experiment".

I have protons and neutrons.
I have a positive electric charge.

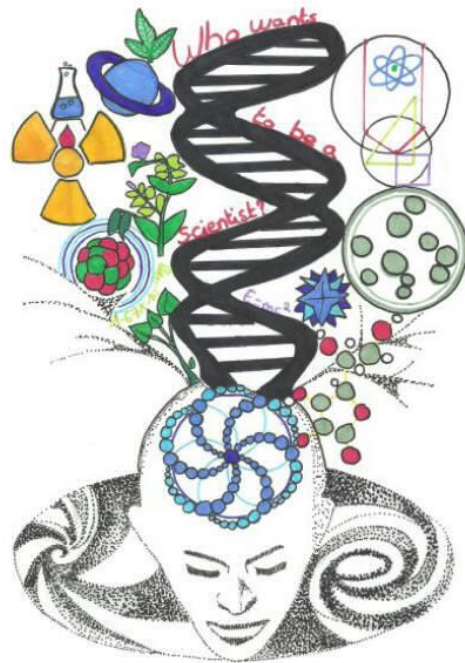
What am I?

The nucleus

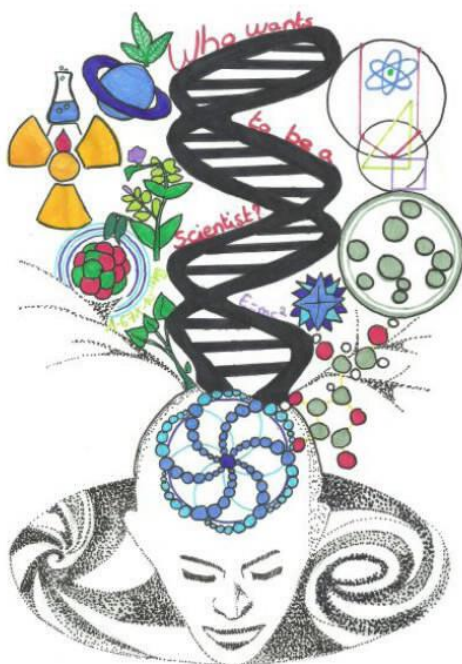
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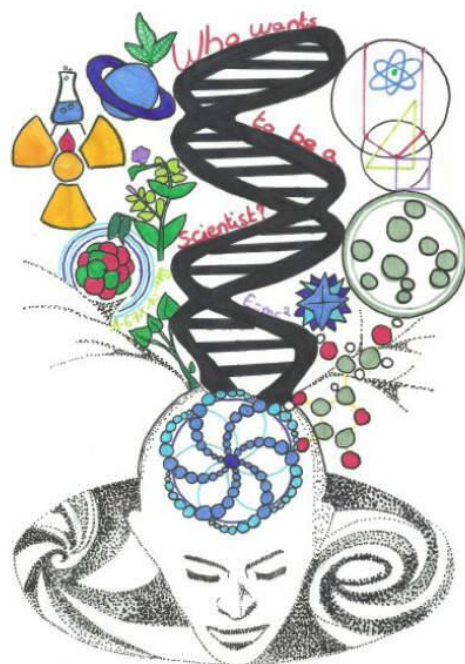
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SCIENTIFIC OBJECTS



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SCIENTIFIC OBJECTS

I am an optical instrument invented in 1839 and made of a lens and a shutter. I have the same function as the human eye. I create visual memories by capturing what I see. During a period I was argentic, I needed films to make negatives. From 1980 I became digital, I use an sensitive sensor. I am integrated into telephones and computers. I can make videos. I can be small or big.

What am I ?

The camera

SCIENTIFIC OBJECTS

In the first place, I am a vehicle. I am a very big and fast object.
I am used to traveling in space. My pilot is an astronaut, generally, his destination is the moon.
My passengers can also go to the international space station. In 1969, I transported the first humans to the moon.

What am I ?

The spacecraft

SCIENTIFIC OBJECTS

It is a subatomic particle found in the nucleus of every atom. It has positive charge. The number of these particles define each element.

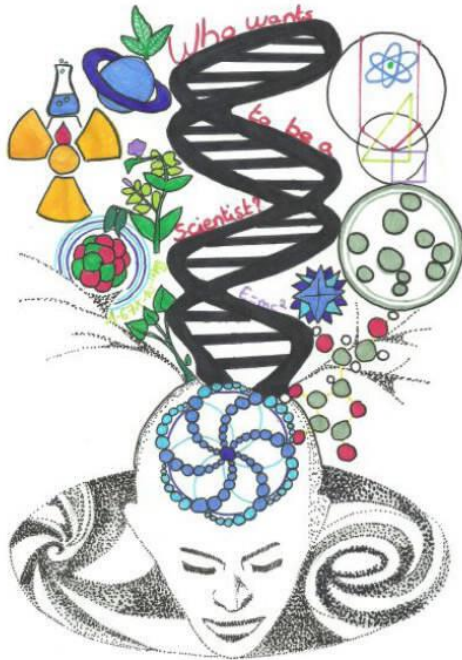
Proton

SCIENTIFIC OBJECTS

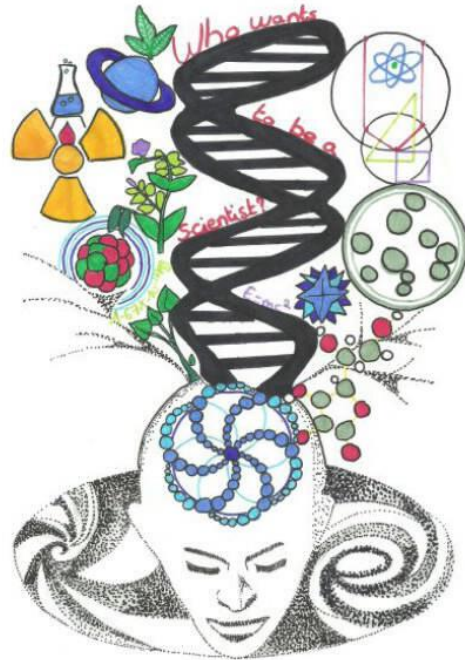
It is a device that converts [kinetic energy](#) from the wind power. It produces green energy. It is situated generally in places where the wind blow strongly. It is manufactured in a wide range of vertical and horizontal axis types.

Wind Turbine

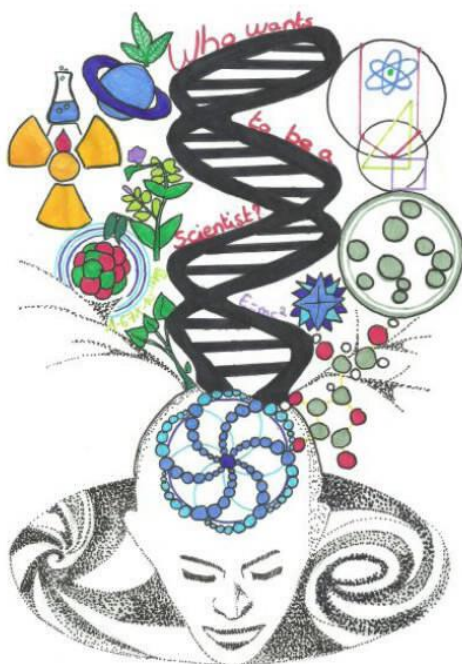
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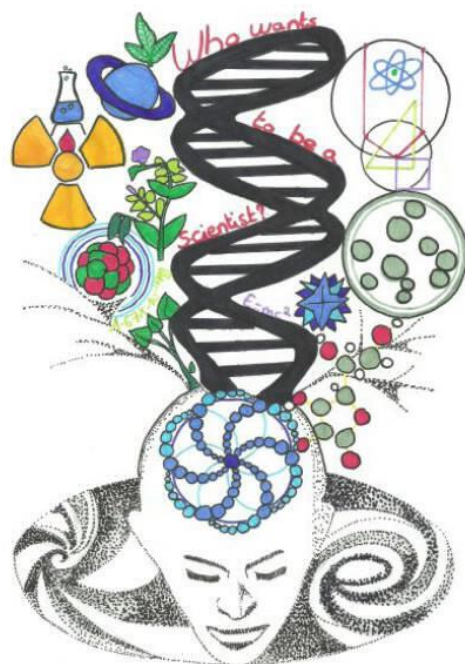
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SCIENTIFIC OBJECTS

It is a transparent optical element with flat, polished surfaces that refract light. It is used. It is used to make optical instruments.

Prism

SCIENTIFIC OBJECTS

It's an industrial facility to produce electric power. It contains generators that convert mechanical power into electrical power. This procedure of relative motion creates an electrical current.

Power station

SCIENTIFIC OBJECTS

It's an electrically neutral group of two or more atoms held together by chemical bonds. As components of matter, it's the smallest physical unit of a material.

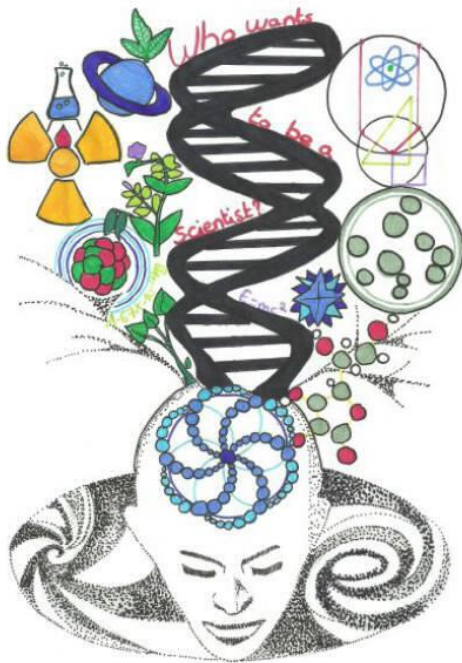
Molecule

SCIENTIFIC OBJECTS

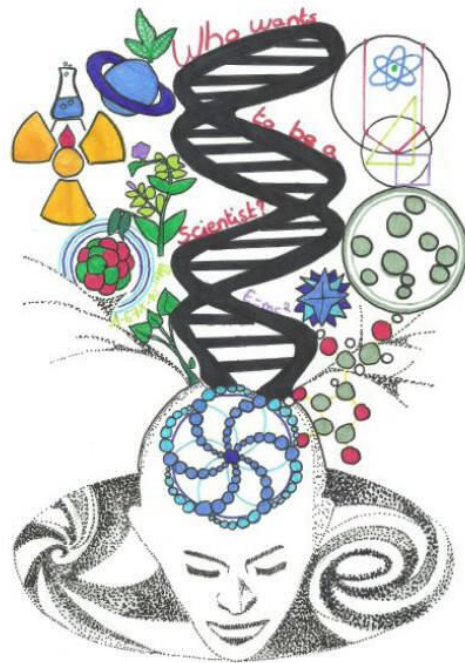
It is a subatomic particle without clear, present load in the atomic core of practically all the atoms, except the proton. Though it is said that it has load, actually it's composed by three fundamental loaded particles so called quarks, whose added loads are zero.

Neutron

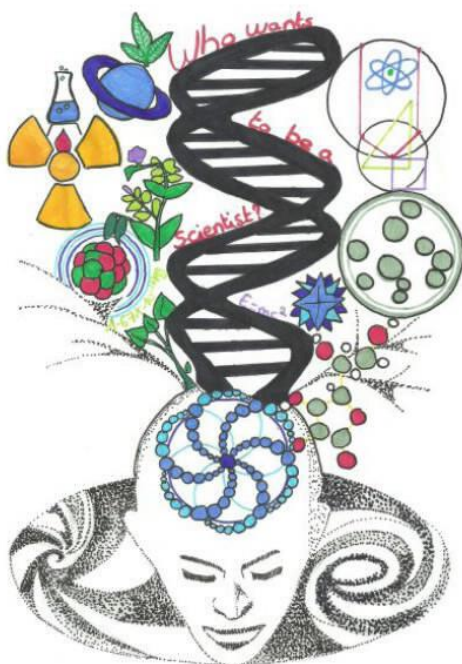
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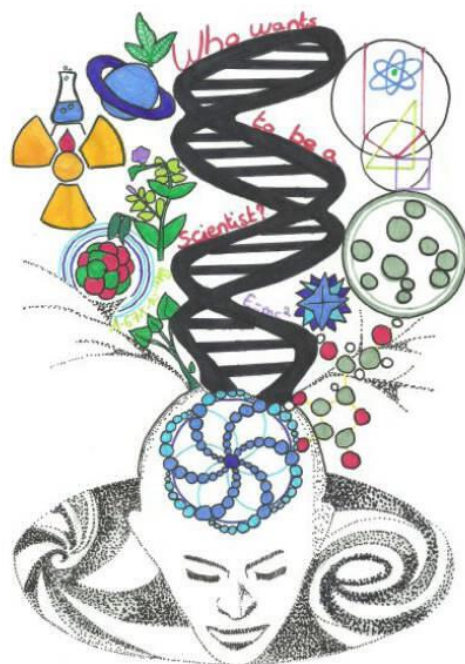
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SCIENTIFIC OBJECTS

It's a optical device that affects the focus of a light beam through refraction. It is made from transparent materials such as glass. It can focus light to form an image which refracts light without focusing.

This object is used to zoom an image on the microscopes and binocular loupes.

Lens

SCIENTIFIC OBJECTS

It is a macromolecule composed by one or more chemical units that are repeated along a chain. They can be inorganic such as glass, or also can be organic such as adhesives.

According to the origin, they can be natural if they are present in nature, for example: DNA and proteins or they can be synthetic when they are produced industrially by manipulating the monomers.

Polymer

SCIENTIFIC OBJECTS

It is an atom or a molecule in which the total number of electrons is not equal to the total number of protons giving the atom or molecule a net positive or negative electrical charge.

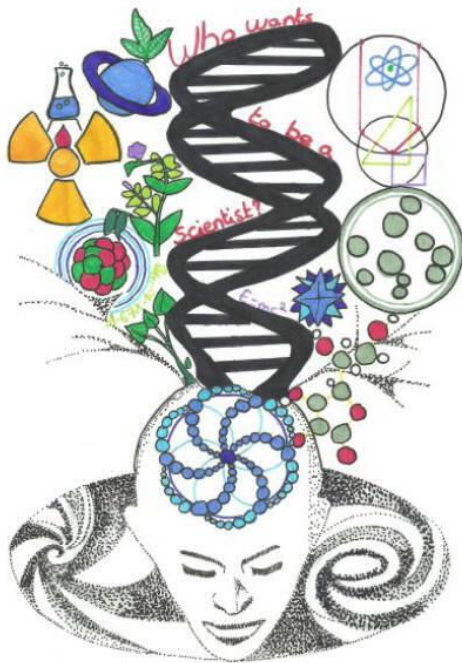
Ion

SCIENTIFIC OBJECTS

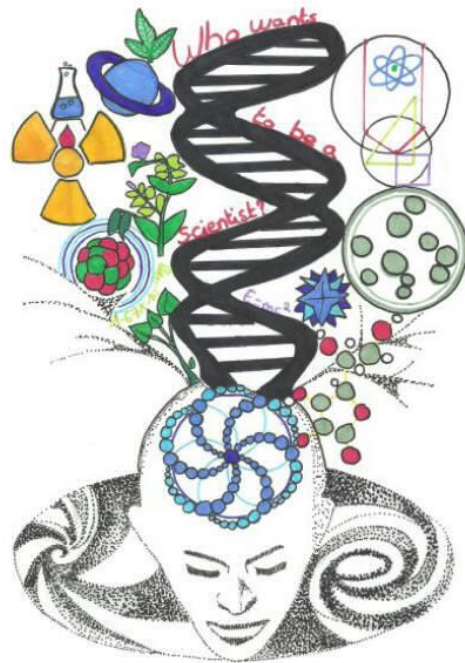
It was patented by Hans Lippershey and improved by Galileo in the 17th century. The most known version is based on the refraction of light through lenses, but parabolic mirrors are frequently used, thanks to the Newton idea. Today, this object works also using generic electromagnetic waves.

Telescope

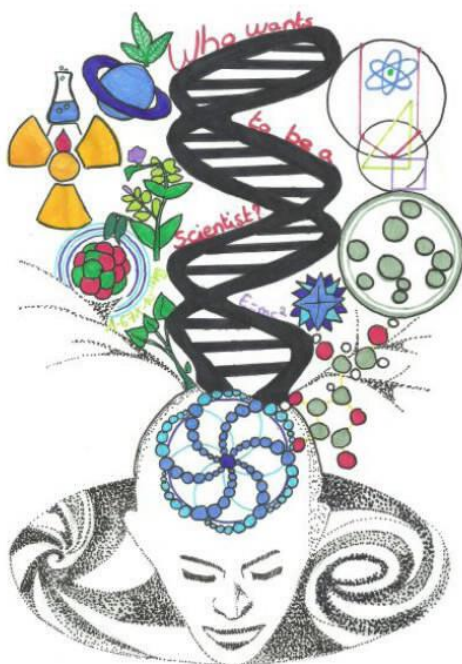
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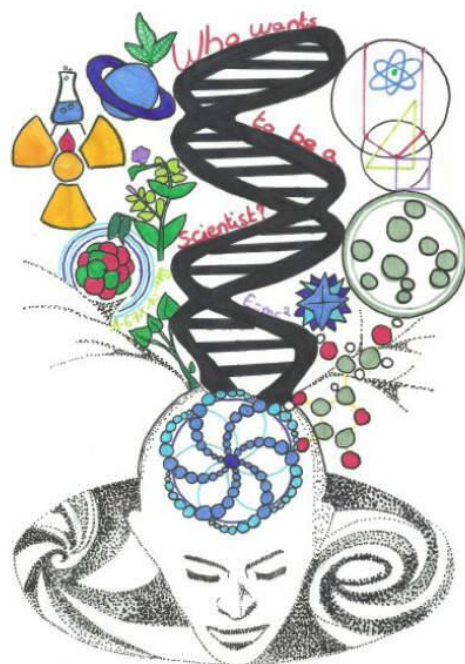
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SCIENTIFIC OBJECTS

It is a very small particle of light.
It is associated with each electromagnetic radiation, and it is denoted by the Greek letter γ . It has zero mass and no electric charge transports

Photon

SCIENTIFIC OBJECTS

A laboratory instrument commonly used to display the waveform of electronic signals. It is a device that displays any function of two variables referable to electric voltages. The oldest form of this device, still used in some labs today, is known as the cathode-ray tube

Oscilloscope

SCIENTIFIC OBJECTS

This object is a space-based navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth.
The system provides critical capabilities to military, civil, and commercial users around the world. Usually we use it as a navigator.

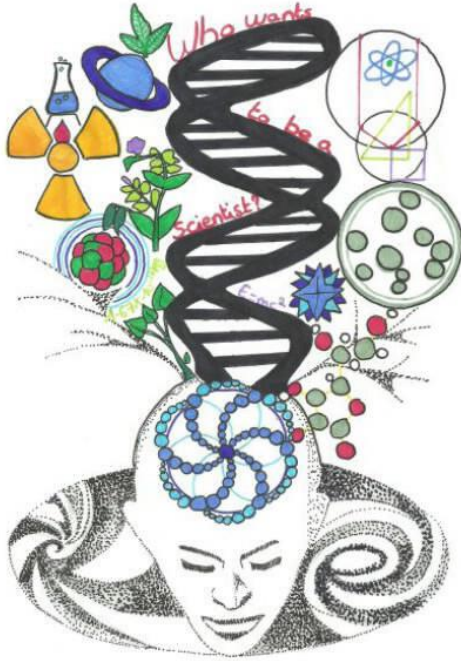
GPS

SCIENTIFIC OBJECTS

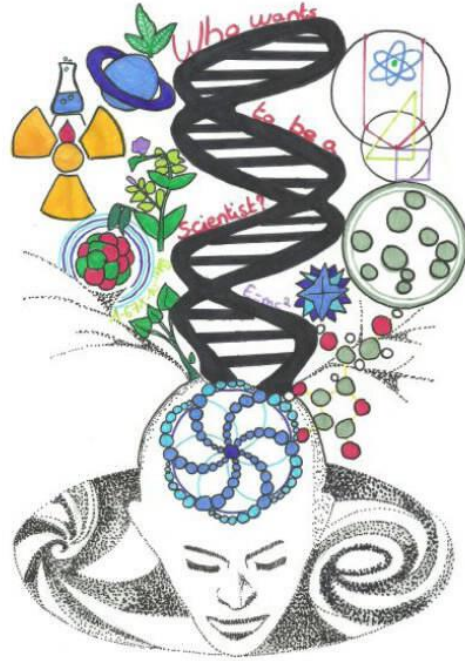
It's a device linked with the emission of light with a very narrow spectrum. It can be used to join, disjoin, cut, thanks to the big amount of energy concentrated in a tight spot. It is based on a kind of radiation.

LASER

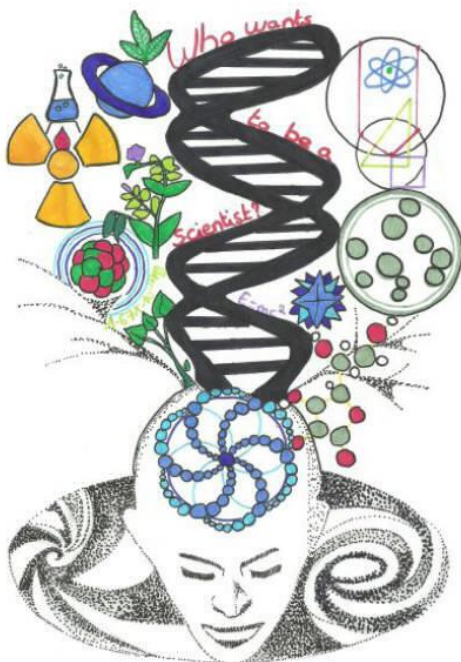
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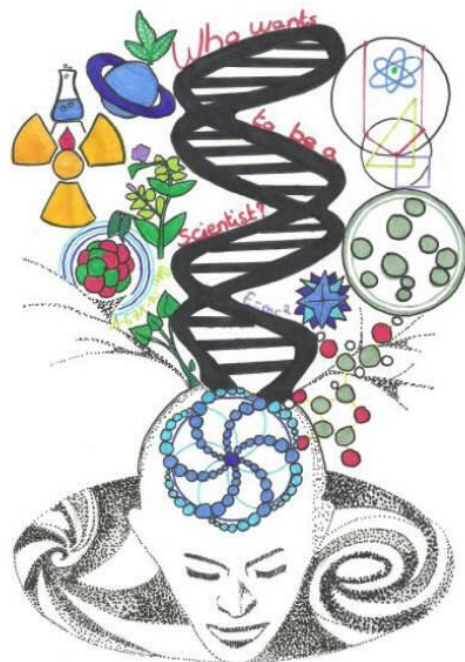
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SCIENTIFIC OBJECTS

DESCRIPTION

It's name is an acronym for sound navigation and ranging. The principle involves bouncing acoustic waves off of objects, and determining their distances by measuring the time for the echoes to return. It is commonly used on board ships and boats to measure the depths of bodies of water. It can also be used to locate underwater objects such as fish, submarines.

SONAR

SCIENTIFIC OBJECTS

DESCRIPTION

It refers to the medium and the technology associated with the transmission of information as light impulses along a glass or plastic wire or fiber. It carries much more information than conventional copper wire and is far less subject to electromagnetic interference.

Optical Fiber

SCIENTIFIC OBJECTS

DESCRIPTION

It is an instrument used to see objects that are too small for the naked eye. The science of investigating small objects uses such an instrument.

Evidence points to the first one to appear in the Netherlands by the 1620s.

Microscope

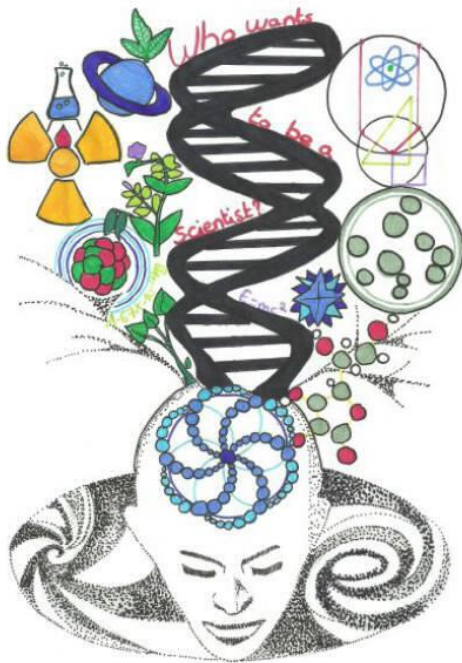
SCIENTIFIC OBJECTS

DESCRIPTION

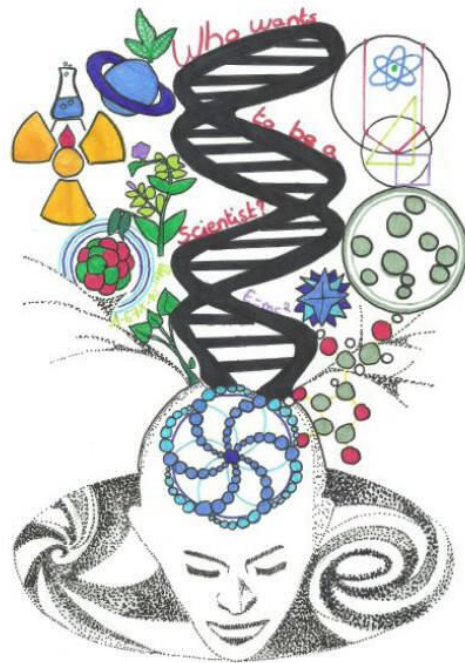
It is made of a single layer of carbon atoms that are bonded together in a repeating pattern of hexagons. This material is one million times thinner than paper; so thin that it is actually considered two dimensional.

Graphene

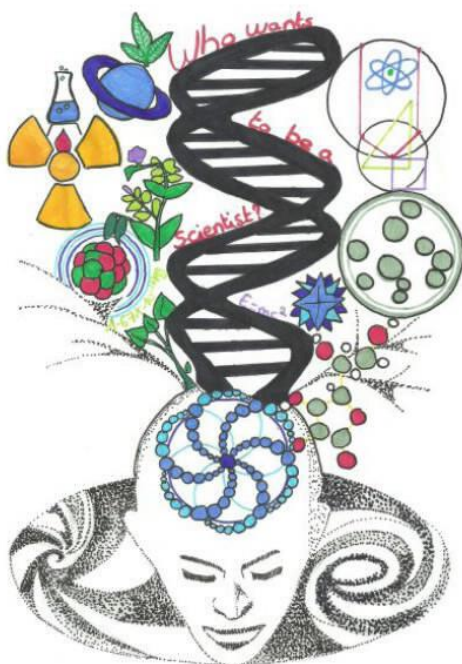
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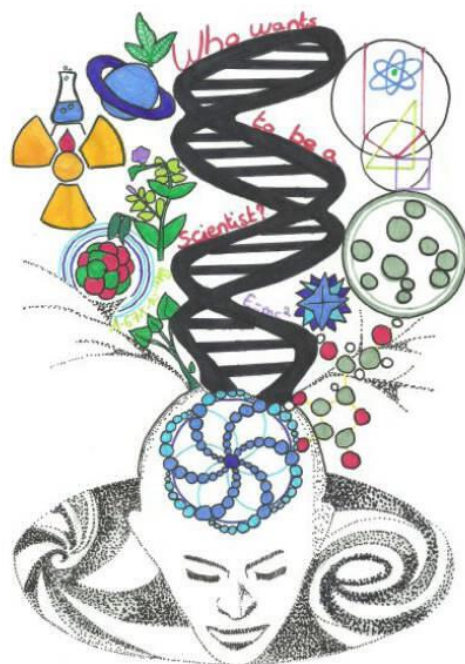
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SCIENTIFIC OBJECTS

DESCRIPTION

It is the world's largest and most powerful particle collider, the largest, most complex experimental facility ever built, and the largest single machine in the world. It was built by the European Organization for Nuclear Research (CERN) between 1998 and 2008 in collaboration with over 10,000 scientists and engineers from over 100 countries, as well as hundreds of universities and laboratories.

LHC

Large Hadron Collider

SCIENTIFIC OBJECTS

DESCRIPTION

It is an object-detection system that uses radio waves to determine the range, angle, or velocity of objects. It can be used to detect aircraft, ships, spacecraft, guided missiles, motor vehicles, weather formations, and terrain. It transmits radio waves or microwaves that reflect from any object in their path.

Radar

SCIENTIFIC OBJECTS

DESCRIPTION

It is a levitating platform (that looks like a skateboard without wheels) that can be used for personal transportation. The term was invented for the movie *Back to the Future II*, where protagonist Marty McFly travels into the future to discover that teenagers are riding on levitating boards without wheels.

Hoverboard

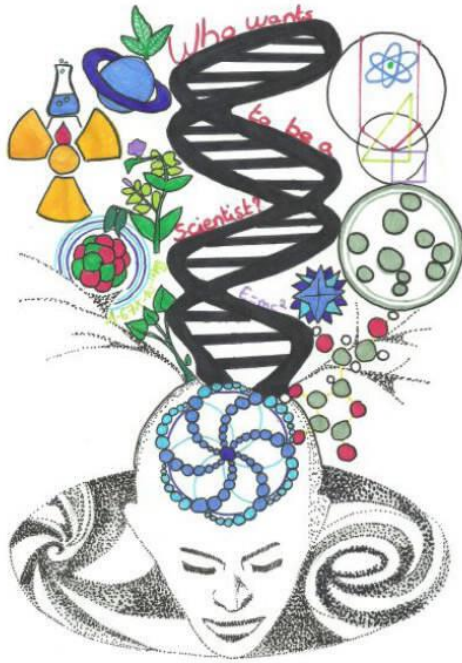
SCIENTIFIC OBJECTS

DESCRIPTION

It is a semiconductor diode, electronic device that permit current to flow in only one direction. It is formed by bringing two slightly different materials together to form a PN junction. In a PN junction, the P side contains excess positive charge ("holes," indicating the absence of electrons) while the N side contains excess negative charge (electrons).

LED

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SCIENTIFIC OBJECTS

DESCRIPTION

It is a particle that follows Bose–Einstein statistics. It's name was coined by Paul Dirac to commemorate the contribution of the Indian physicist Satyendra Nath Bose in developing, with Einstein, Bose–Einstein statistics—which theorizes the characteristics of elementary particles.

Boson

