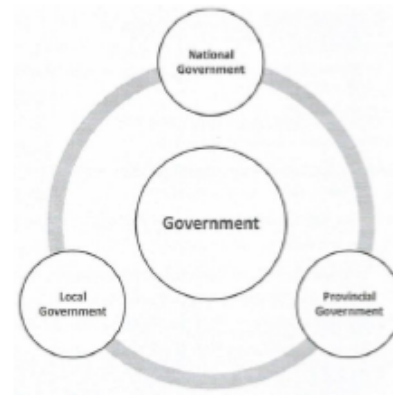


Business

Government's involvement in the Economy

- ✦ Government - group of people who create and implement laws to deal with political, legal + economic issues in a country.
- ✦ **Constitution of South Africa -supreme law of the country.**
 - It defines the structure of government.
 - It provides legal framework for all activities in the country by giving citizens certain rights (government has to protect) + stresses certain responsibilities citizens have as responsible members of society.
- ✦ **Government may be elected by people of the country / could take control through a coup - previous government is overthrown.**
 - SA, we have a democratically elected government that performs its functions in public sector.
 - Voters (people 18 years and older) vote during a general election (every 5 years) for political party of their choice to elect national government.
- ✦ **Government in SA functions on 3 levels:**
 - National level-Parliament (President and Ministers)
 - Provincial level -Premiers of Provinces and MECs (Members of Executive Councils)
 - Local level -Municipalities



<i>Sphere</i>	<i>Legislature</i>	<i>Executive</i>	<i>Department</i>
<i>National</i>	Parliament	President	Ministers
<i>Provincial</i>	Provincial Legislatures	Premier	Heads of Department (MECs)
<i>Local</i>	Municipalities of towns / cities / regions (such as West Rand or East Rand)	Mayor	Municipal managers and staff

The National Government

National Government has three branches:

Legislative branch	◆ all laws are debated formulated and passed.
Executive branch	◆ Implements laws and in doing so, carries out duties delegated to them by The President.

Creative Arts

Create in 3D: explore fashion design

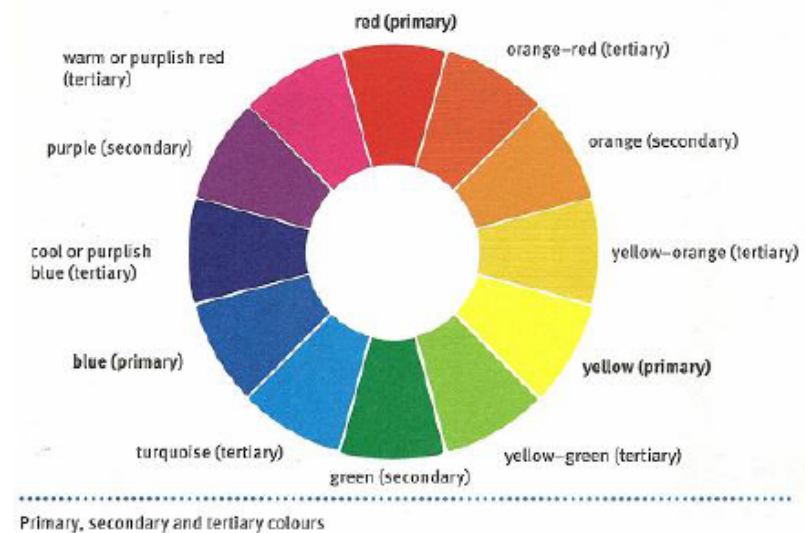
Fashion design

- Many of us follow international fashions.
- We buy new clothes every season, and try to copy the latest styles as worn by international celebrities.
- This was not always the case.
- Think about the very different outfits worn by the indigenous peoples of our country.
- South African designers usually follow and copy international fashions.
- They travel to the big fashion shows in New York, Milan and Paris to study trends.
- Sometimes they add a local flavor - and then market South African style internationally.

The colour wheel

- Artists use the colour wheel for mixing colours.
- It is also helpful for finding groups of colours that match and harmonise.
- Colours that are close together on the colour wheel are called analogous colours.
- Using them creates colour harmonies.
- You can use analogous colours for your clothing range.
- Red, yellow and orange are warm colours, like fire and sunshine.
- They can make us feel cosy, bright and upbeat.

- Green and blue are cool colours, like ice, water and shady leaves.
- They can make us feel calm



Create in 2D: the artist as social commentator

- Explore signs and symbols
- **Find signs for:**
 1. useful information
 2. human rights (such as shelter, education, healthcare, freedom of religion)
 3. a company logo
 4. Something you support or believe in.

EMS

Entrepreneurship

Factors of production

Important concepts

Factors of production	- Used to produce goods and service to satisfy human needs. Four factors of production: - capital - labour - natural resources - entrepreneurship
Remuneration	- Each factor of production has its own remuneration. - Remuneration = "payment" for that particular factor of production. - Remuneration belongs to owner of a particular factor of production.

Capital

Definition

- * Capital = money / capital goods - land, buildings + equipment that is contributed by a business owner to start a business.

A business owner can either contribute own capital / borrowed capital:

Own capital	Borrowed capital
Own capital = money contributed by business owner - used to generate income + produce goods and services.	- Obtained from financial institutions like banks. - Must be repaid with interest.

Remuneration

- ♦ Remuneration for capital is interest.

It works like this:

Own capital	Borrowed capital
- Belongs to business owner. - Business owner deposits capital into her business's bank account. - Money in bank account earns interest. - This interest + capital, belongs to business owner.	- Belongs to bank. - Money that was borrowed from a bank must be repaid with interest.

LO – Life Orientation

Starting your fitness programme

Understanding fitness

			
Strong muscles – to help you jump further, run faster, lift, push and pull.	Muscular endurance – to help you keep going when you exercise without getting tired.	Stamina – healthy lungs to breathe deeply and a strong heart to pump blood around your body.	Flexibility – joints and muscles that bend and move easily.

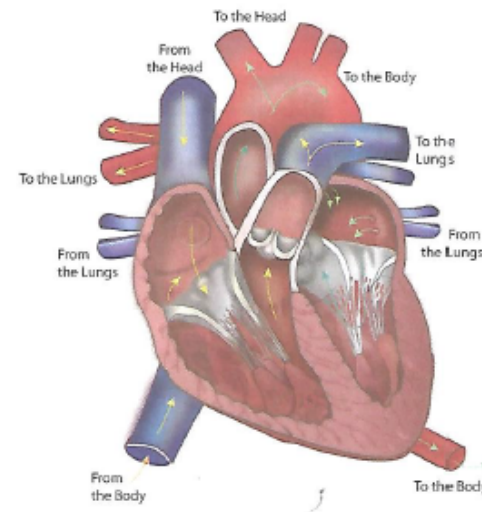
Understanding fitness

How your body, lungs and muscles work together

- Every time heart beats, right side heart pumps blood to lungs
- In lungs blood offloads 'rubbish' (carbon dioxide) brought from muscles to be exhaled, then fills up with oxygen and goes to left side of heart
- When heart beats, bright red blood (full of oxygen) is pumped out left side of heart to rest of body
- In muscles blood hands over oxygen (which muscles needs) and collects 'rubbish' (which muscle doesn't need)
- Bluish blood (full of carbon dioxide) travels back to right side of heart and is pumped to lungs again
- The more muscles work e.g. when running, more oxygen they need, heart pumps quicker so it can

quickly take lots of oxygen to muscles and quickly take away carbon dioxide

- You also take more breaths of air so lungs can give blood enough oxygen



- As heart, lungs and muscles get stronger, they are able to work harder with less effort
- As you get fitter heartbeat gets slower

NS – Natural Sciences

Photosynthesis and respiration

Photosynthesis

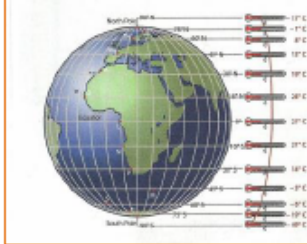
- Interaction and interdependence in an ecosystem - driven by the need for energy to sustain life.
- All organisms need energy to survive.
- Food contains stored energy.
- Plants and animals obtain energy from food.
- Animals eat plants and other animals as food.
- Plants don't eat food as animals do.
- Past - people thought plants acquired food from the soil.
- To find out if this is true - Belgian scientist, Jean-Baptiste van Helmont (1577 -1644) carried out an investigation.



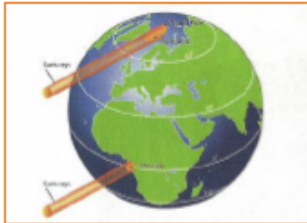
- He planted a young willow with a mass of about 2,3 kg in 90,9 kg of dry sand.
- Ground watered regularly.
- 5 years later, the tree and ground was weighed again.
- Helmont found the plant weighed 77 kg - ground only weighed a little less than previously.
- Where did increase in mass of plant come from?
- Plant could not have taken food from the soil.
- Increase in plant's mass must have come from another source.
- Scientists concluded plants manufacture their own food.

SS – Geography

Factors that influence temperature and rainfall



Mean annual temperatures at intervals of 15° of latitude



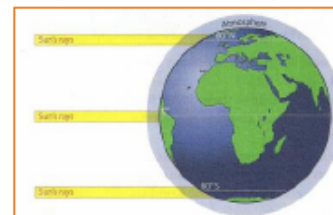
Solar heat is more concentrated at equator than near poles.

- Air temperature tells how hot / cold place is.
- Temperature at any place changes all time.
- Air temperature also varies from place to place.
- One measure of temperature of place is its mean annual temperature.
- **5 factors that strongly influence temperature, rainfall.**
 - NP=North Pole; B= Bjornoya; Be= Bergen;
 - Bo =Bordeaux; L=Libreville; A=Agadir; D=Dakar;
 - N=Namibe; P=Port Nolloth; M=Morian Island;
 - S= South Sandwich Islands; H=Halle; SP=South Pole

Distance from the equator (latitude)

Temperature

- Hottest places near equator (0° latitude).
- Figure find Libreville, town close to equator where mean annual temperatures in high 20's.
- Further place from equator, lower temperature.
- Figure shows how mean annual temperatures decrease with increase in latitude.
- Towards poles, mean annual temperatures drop below 0°C (freezing point).
- **2 reasons for temperature decrease towards poles.**
 - First, Figure shows Sun's rays striking Earth's surface.
 - Rays fall vertically to Earth's surface at Libreville on equator, heating area equal to width of rays.
 - Other hand, rays falling on Bjornoya (75°N) spread out widely, heat alarger area.
- Figure shows sun's rays travel greater distance through atmosphere near poles than at equator.
- More solar energy be absorbed by atmosphere near poles than at equator.



More solar heat is absorbed as sun's rays pass through atmosphere near poles.

SS – History

Industrial Revolution in Britain and Industrialisation in southern Africa from 1860

Changes during the Industrial Revolution in Britain

- World dependent on industries like manufacturing, mining to provide goods for almost every aspect of modern society, - work, home, school, transport, entertainment.
- These industries enormously dependent on capital (money), on labour of millions of men, women.
- Britain in 1700 and 1800 new industries established on much bigger scale than ever before.
- Thousands of people started to work in mines, factories = Industrial Revolution, changed world forever.

Wealth from the slave trade

- ◆ Trans-Atlantic slave trade led to economic gains for America, Britain.
- ◆ European slave traders captured slaves, took them to Americas to work on cotton, sugar, tobacco plantations.
- ◆ Traded slaves for guns, other goods for Europe.
- ◆ British slave trade lasted for about 245 years.
- ◆ British slave traders made about 10 000 voyages to Africa – captured, traded slaves.

- ◆ Historians say British ships carried about 3,4 million African slaves to Americas, sold them at great profit.
- ◆ Colonies sent raw materials, like cotton, back to Britain, where they were used in manufacture of goods.
- ◆ Money flowing into Britain from trade in goods with colonies, + slave trade.
- ◆ Between 1750 and 1780, about 70% of British government's income came from taxes on goods from its colonies.
- ◆ Some historians argue without slave trade, Industrial Revolution may not have happened.
- ◆ Why? Britain - world's largest slave trader for many years.
- ◆ Slave trade not made some people in Britain rich, they would not have had money to invest in new machines, new businesses.

Economy before the Industrial Revolution -Farming economy and cottage industries

- ◆ Britain, new ways of farming (Agricultural Revolution) led to Industrial Revolution.
- ◆ Why.
- ◆ Early 1700 agriculture most important economic activity in Britain.
- ◆ Farmers produced enough food to feed everyone.

Technology

Structures: Investigation skills

Definition of frame structures

- Structures are usually supported by skeleton, frame that can be made of wood, steel or reinforced concrete.
- Frames are very sturdy.
- Triangular frame, lightweight and sturdy.
- Bicycle frame made of triangles, cylindrical, hollow steel pipes.



FIGURE 1 How frame structures function

- If structure has more than one part, each part of structure called member.
- Include columns, beams, arches, buttresses, struts, stays, guys and ties.

- All different members designed to withstand or resist different forces.
- Bridges, electricity pylons made in similar way.
- Electricity pylons profile or shape of material used will be solid and not hollow.

Purpose of structural members

- Structural members of wood trusses are supported to add strength.

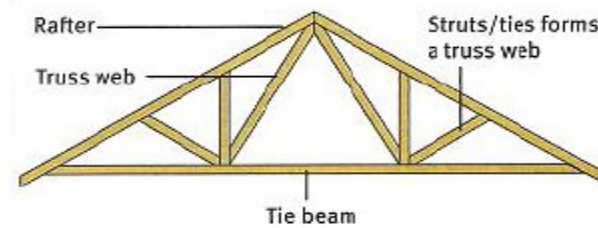


FIGURE 2 Wood trusses

- Structural members of steel beam trusses supported to add strength.
- Members supporting steel roof structure are different from those of wooden truss.
- Steel members have several advantages over wooden ones.