THE COCOA TREE

• The perfect environment for the cocoa tree is found in the tropical heat of rainforests near the Equator.

• Cocoa Trees originally grew in the tropical regions of Central America, now the modern day countries of Venezuela, Mexico and Honduras.

• Today the fertile soil in West Africa provides the majority of the world's cocoa crop: approximately 75% of the world's cocoa now comes from Ghana and the Ivory Coast. Cocoa cultivation represents the main source of income for thousands of African farmers.

• Cocoa is also grown in Indonesia, Brazil, Ecuador, Mexico and Papua New Guinea.

• Trees begin to produce cocoa pods after the first five to six years of life.

• The cocoa tree flowers twice a year.

• No more than 40 flowers on a single tree will develop into cocoa pods.

• There are three species of cocoa tree and each produces cocoa beans with different flavours and characteristics. Most chocolate is made from a blend of different types of bean but you can still buy rarer single origin chocolate and taste the difference!
HARVESTING AND PREPARING THE BEANS

- After six months the pods are fully grown and have changed colour from green to yellow/orange.

- Farmers can check whether a pod is ripe by tapping on its shell. If the pod makes a solid sound, it is ready to be harvested.

- The pods are ripened for the main harvest from October to March. A smaller harvest follows from May to July.

- After harvesting, the pods are opened up and the white pulp inside, together with the cocoa beans, are scooped out.

- The contents of the pods are heaped on the forest floor and covered with banana leaves. This causes the cocoa beans to ferment. In about seven days, the sugars in the fruit pulp are broken down, and the chocolatey aroma and colour starts to develop.

- If drying is too slow, there is a danger that mould may develop so the next stage of the process has to happen quickly.
DRYING AND SHIPPING THE BEANS

• The beans dry for about ten days on a raised bamboo matt in the full sun, being turned every now and then by hand.

• The cocoa farmers take their precious harvest to a special centre where the beans are graded.

• From each farmer's harvest a sample of 100 beans is inspected, the contents of the bean are graded and each batch is given a quality code.

• After the weighing and packing of the beans, the sacks are sealed to ensure the source and quality of the beans.

• They are taken to huge warehouses and the origin of the cocoa beans inside each sack is recorded.

• After a second quality control check, the sacks await either shipping, or processing into cocoa nibs or cocoa liquor.

• The cocoa then goes into storage at the port, ready to be shipped to a new destination.
PROCESSING THE COCOA BEANS

- Jute sacks, filled with cocoa beans, arrive in factories and processing plants from the equatorial regions of Africa, America and Asia.

- Cocoa beans of different types and from different countries are blended, unless the factory is producing rare ‘single origin’ chocolate.

- The cocoa beans are cleaned of any stones, dirt and sand and quickly roasted under heaters. The beans must be roasted for at least 15 minutes at 115 degrees centigrade.

- The temperature must be just right – if it is too hot the outside will burn while the inside remains raw and if too cold, the beans won’t be heated enough to kill off any bacteria.

- After this the beans are winnowed. Winnowing is a little bit like using a gigantic fan. The air flow allows the core of the chocolate bean, known as nibs, to escape from the ‘husk’ or shell.

- The cocoa beans are broken up and the shells around them removed. Only the pieces of kernel or “nibs” remain.

- After winnowing, the nibs are then crushed to form a smooth paste called cocoa liquor.
MOULDING CHOCOLATE

- Cocoa liquor, cocoa butter, sugar and powdered milk: with these raw materials we can make all of the different types of chocolate.

- Until chocolate moulds became popular, chocolate was enjoyed only in its liquid form in fashionable cocoa houses across England.

- Moulds are set on vibrating plates after pouring to allow air bubbles to come to the surface. Pouring too fast will result in lots of air bubbles and a brittle texture.

- Before pouring, warm liquid chocolate must be cooled slowly in a process called tempering or the chocolate will become discoloured and the texture will not be appealing.

- The tempering process ensures good quality chocolate which should melt easily in the mouth; have a glossy appearance; and produce an audible ‘snap!’ when broken.