**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Ecology of a Chocolate Bar: Video Note-taking Guide**

Fill in the blanks of these notes on the 26-minute stream-able video CocoaNomics (CNN) by pausing of the video at prescribed spots and writing in relevant terms and facts. You can compare thoughts and notes with a partner or ask your teacher to replay part of the video as needed.

**0:00-3:08**

In early October, the cocoa pods are ripe for picking. This crop is the foundation for a product worth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

There is extreme poverty and the problem of child labor in the equatorial country called the Ivory Coast, or the Côte d’Ivoire, source of \_\_\_\_\_\_\_\_\_\_ of the world’s cocoa.

It takes about \_\_\_\_\_\_\_\_\_\_ beans to make about \_\_\_\_\_\_\_\_\_\_ Kit Kat bars, Nestle’s top seller.

The method of harvesting the cocoa beans is to smash open the pods with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is low-tech and labor intensive.

According to the U.S. government, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ child workers are involved in the cocoa supply chain. They may work up to \_\_\_\_\_\_\_\_\_\_ hours a day sometimes on their own parents’ farm but are sometimes hired out as labor to neighboring farms. They may never get\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**3:09-7:06**

\_\_\_\_\_\_\_\_\_\_\_\_ is the biggest chocolate producer in the world with 468 factories in 86 countries.

Solutions to the problems within the industry are not easy, admits Jose Lopez. They have started initiatives to address issues, but the business may have waited too late to address these issues. A lack of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ may be high on the list of farmers’ woes.

The people of the Ivory Coast are beginning to better understand the issue, and their attitude toward child workers might be reflected in a saying: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

An organization called the Fair Labor Association mapped the supply chain in \_\_\_\_\_\_\_\_\_\_. (What year?)

A chocolate company has pledged \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for a 10-year program called the Sustainable Cocoa Plan. It has the following goals: 1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and

3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Child labor is a symptom of a deeper problem: \_\_\_\_\_\_\_\_\_\_ . Cocoa farmers earn only \_\_\_\_\_\_\_\_\_\_ of what’s defined as a poverty wage. (That’s 1/10 of what the world considers bare minimum.)

A big part of the reason is a systemic one: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ farms that have been worked for \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**7:07-11:35**

Another factor keeping these people in poverty comes from the price for cocoa beans, when adjusted for inflation, actually going down: In 1980, the price was about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but the amount now is about \_\_\_\_\_\_\_\_\_\_\_\_\_\_. That means that the relative value of the chocolate in a bar has been falling for the last 50 years.

The amount earned by the chocolate growers from the price of a chocolate bar has also been going down: in the mid-1970s, cocoa suppliers got about \_\_\_\_\_\_\_\_% of the candy’s cost. In the 1980s it was only \_\_\_\_\_\_\_\_\_% and in 2012, it went down to about \_\_\_\_\_\_\_\_\_%.

The parts of the industry that have taken over most of these earnings are (3): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

It’s not just bad for the farmers, but it’s also bad for big chocolate if some are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or moving to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Nestle admits that it must look beyond the typical business responsibilities to help save the source of the industry.

Their goal: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The Ivory Coast has \_\_\_\_\_\_\_\_\_\_\_\_\_ cocoa farmers. Making of 1/5 of the country’s economy, so while the group taken as a whole is rich, the individuals remain very poor.

Nick Weatherill speaks of the problem for an international cocoa initiative, saying that with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in place, they must reform the cocoa sector. The Prime Minister says that all improvements must all be tied to business and that the country wants to be sure to provide a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to people who put money into their country’s industry.

They have set a guaranteed, minimum steady price for the cocoa beans of \_\_\_\_\_\_\_\_\_\_\_\_ to help the farmers.

Some of the problem can be compared to a “\_\_\_\_\_\_\_\_\_\_\_\_” (an impossible situation where you are prevented from doing one thing until you have done another thing that you cannot do until you have done the first thing): The farmers are getting a low yield of cocoa beans from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so there is not enough \_\_\_\_\_\_\_\_\_\_ to buy new trees or to buy products to improve the trees.

**11:36-16:59**

The chocolate industry is also attempting to use science to improve matters through research. In the capital of Abijan, labs have used plant genetics in nurseries of “super saplings” to create \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ trees. This will mean a higher income for those who farm chocolate. By 2022, Nestle intends to give \_\_\_\_\_\_\_\_\_\_\_ of these high-performance trees to farmers.

These programs are not meant just for generosity and lending a helping hand to poor cocoa farmers, but it’s also good business sense to make sure that the company \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to continue making its products.

Another aspect of the industry is the middle men, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, who demand their cut.

The company Cargill processes \_\_\_\_\_\_\_\_\_\_ of all beans produced in the Ivory Coast, mostly from cooperative groups of farmers, or co-ops.

Some beans are exported raw while other may already be ground into cocoa \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, products which are used to make chocolate. This work adds \_\_\_\_\_\_\_\_\_\_ to the bean, but the farmers get none of that additional price.

Cargill wants to increase farmer revenues and their standard of working and so they reward the extra work that is required by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a stamp of approval from groups like Fair Trade, the Rain Forest Alliance for strict standards such as no use of child labor.

However, the warehouses that store the beans in two categories—\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ –are the only authority of whether certified beans are worth the premium price and whether they are truly kept separate. Less than \_\_\_\_\_\_\_\_\_\_ is currently sold as “certified.”

 Other chocolate giants \_\_\_\_\_\_\_\_\_\_\_& \_\_\_\_\_\_\_\_\_\_\_ have committed to sourcing; purchasing 100% certified cocoa beans by \_\_\_\_\_\_\_\_\_\_. Nestle, however, does not commit to this. They instead choose to “walk the talk, not talk the walk” in terms of sustainability about improving\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (at least three items).

Cargill holds field school academies to help farmers get certified so that they can enjoy higher income to be reinvested into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ so that they can break out of the poverty trap.

**17:00-end (about 25:00)**

An irony of life for the growers of cocoa beans who produce these products through their daily toil is that most of the people who farm the crop have never \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

The First Lady of the Ivory Coast is determined to end \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The government and the corporations like Nestle are dependent upon one another to make life better for those involved in the industry by finding solutions.

An 8 and a 12 year old may work the family farm, as this is a practice reinforced by the culture, but \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the main long-term weapon. Lots of groups are building schools, but it will take \_\_\_\_\_\_\_\_\_\_\_\_ (how long?) to lift these children and their families out of poverty.

Nestlé’s annual profit was recently \_\_\_\_\_\_\_\_\_\_ Swiss francs, but they don’t want to hand money away. Instead, they want to build the capacity for those farmers to improve their yield. For prosperity to enter villages takes \_\_\_\_\_\_\_\_\_\_\_\_&\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Short term imperative is to stop child labor, but there isn’t enough \_\_\_\_\_\_\_\_\_\_ about how things might be improving for children.

This challenge escalates solutions that make growing cocoa work for farmers; otherwise, cocoa farming becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Hope comes from people’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Consumers can demand sustainable chocolate even if it means higher prices.

Every second \_\_\_\_\_\_\_\_\_\_ Kit Kat bars are eaten around the world.