global system choices Unit four

U4L3A1 Considering the hidden costs of production

overview

In this activity you will complete the National Geographic activity on an MP3 player to understand that each stage of production requires choices for people, profit and planet. Throughout the activity you are acting as company owners and using critical thinking skills to try to produce a sustainable MP3 player.

learning goal

• To understand that the items I purchase are produced through decision-making that impacts global sustainability.

success criteria

• Complete the MP3 production organizer to demonstrate critical thinking with respect to decision-making.

Inquiry Question

• How do companies balance social and environmental sustainability with the need for profit when producing consumer goods?

To access the interactive activity on making an MP3 player, click on the link below: globalcloset.education.nationalgeographic.com/map-done

- Complete the inquiry into building a MP3 player. Pay particular attention to the hidden costs as you collect badges. If you would like to read the transcript of the video, click Show Transcript in the top left corner. If you would like to change your mind about a decision you made, click the back arrow on the webpage and it will take you back one step.
- 2. Complete the organizer on the next page according to the following instructions as you proceed through the activity:
 - a You need to complete the '**How will you decide?**' section by identifying the costs and benefits for each option. To identify the costs and benefits, select each option to hear more about the impacts of each choice. In addition, you need to use prior knowledge from your understanding about sustainability.
 - **b** You also need to complete the **'What decision did you make'** section by identifying your choice and **explaining how it balances care for people and planet with need for profits.**



MP3 production stages	Options	How will you decide?	What decision did you make and WHY did you make it?
Metal	Reopen mine in the United Kingdom		
	Choose recycled indium		
	Open new mine in Bolivia		
Screen	Glass		
	Plastic		
	Specialist plastic		



MP3 production stages	Options	How will you decide?	What decision did you make and WHY did you make it?
Electronics	Factory with good human rights record		
	Well- established factory with sketchy human rights record		
	Low-cost factory in a natural disaster- prone area		



MP3 production stages	Options	How will you decide?	What decision did you make and WHY did you make it?
Software	Buy a company abroad that specializes in MP3 player software		
	Recruit software developers of your own		
	Buy a licence to use someone else's software		



Using the information from the activity and from your prior learning about sustainability, answer the following questions:

1. Do you think you have produced a sustainable product? Why or why not? Provide two reasons, being sure to connect it to the themes of sustainability (people, profit, planet).

2. What was difficult about choosing each of the materials for your MP3 player? Identify two barriers to making the sustainable choice for one raw material in the activity.

3. Did this activity accurately reflect the types of choices made by businesses in the real world? How was it perhaps easier for you to choose options than it would be for a business owner? Explain your answer using two examples from the activity.



4. Explain the importance of trade to the production of your MP3 player.

5. Indium is a by-product of tin mining and is also produced in Canada. How would using Canadian indium affect the sustainability (the impacts on people, profit, planet) of your product? Provide three ways.