TRADE IS A COMPLEX CHAIN OF EVENTS

OBJECTIVE:

Students will gain a better understanding of the complex interactions that are required to provide a variety of items used in their daily lives.

KEY POINTS:

- Trade often requires a series of transactions
- Even simple commodity products can be sourced from many different places

ACTIVITY: Research the materials and human resources used to create a product

(grades 9-12, adjust expectations to grade level)

Trace the transactions that are required to bring a common consumer product to market.

As individuals or as small teams, students choose a favorite product that they use every day from one of these categories (feel free to add others). Encourage students to choose products made locally; students may wish to contact companies directly to research their answers and invite a company representative as a guest speaker.

1. Very simple non-mechanical consumer products such as toothbrushes, pencils, CD's, etc.
   (A great product description of a simple object, as well as a fun presentation of the information, can be found at http://www.fee.org/about/ipencil.html)
2. Mechanical products such as wind-up clocks and plastic toys
3. Consumer electronics (ideally choose something that is broken and take it apart to see where the components come from—use care!).
4. Packaged food items (fruit juices, tuna fish, lunchmeats, etc.)

For each product selected, students first research the following questions:

What components are contained within your product? Be sure to list all the components. For very complicated products, you might want to group components into categories. For example, a computer circuit board might have hundreds of components made in several different countries and assembled in yet a different country. So you would list the circuit board as one component, but for the next question you'd list all of the types of materials used. For food products, be sure to include packaging materials.

What materials were used to create each component of your product? Is the component made from plastic, steel, silicon chips, copper wire, leather, tin or what? There may be several materials in the component, and you'll also need to be thinking about where these materials come from and how they are made as well.

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What's the national origin of the materials that were used to create each component of your product? Where does copper come from, steel, iron ore, wheat and so on. Many raw materials can be found in several different countries, and yet some are found in surprisingly few countries. List all of the countries that might be logical sources for the raw materials, and then discuss why some might be more likely than others to be the actual source for your product.

What jobs are required to get your product into the hands of the consumer (that's you)? From beginning to end—think about who gathers the basic raw materials, how those raw materials get to where they need to be, the inventors who come up with ideas for products, the people who make the equipment that other people use to make the products, the people that create the advertising that makes you want the product at all, the people who transport he products, and the people who made the vehicles that are used for transportation, the people who sell you the product, and on and on.

What jobs are needed to make these components and where are they located? Think global (anywhere), national (be specific as to which country), regional (your home region or state) and local (where you live). For example, if you know that oil was used in the creation of your product, then some of those jobs are going to be global in nature—anywhere in the world that there is oil. The person who created the advertising that made you want to buy the product could be anywhere in the nation, unless you know that they happen to be in your particular region. But no matter where the product came from or how it got there, the person who sold you that product has a job in your local store.

Students create a chart similar to the following and present the results to the class:

TOOTHBRUSH

Components	Materials	National Origin	Jobs required	Job locations
Plastic Handle	Crude Oil by-product	Any oil-producing country	Oil Exploration- geologist	global
			Oil Drilling- Roughneck	global
			oil refinery workers	regional
			plastics workers	regional
			people that make the molding machines	global
			Industrial designer to create toothbrush	national
			Marketing people to advertise the brand	national
			Transportation workers	national
			Retail clerks in the store	local

In addition to the chart, students might also want to utilize maps to demonstrate the geographic distribution of the products they analyze.

Suggestion for assessment:
Grade on depth of exploration and accuracy of information