#### **West Virginia Studies Resource Development**

Title of Lesson:

**Natural Resources of West Virginia** 

Grade level:

8<sup>th</sup> Grade

Summary: Students will be able to describe what a by-product is and how it can be developed into a support business

#### **WV CCR Social Studies Standards**

#### SS.8.6

• Evaluate West Virginia's role in the global economy as it relates to natural resources and national/international business and trade.

#### **SS.8.9**

 Research and cite industries and products that are vital to the economy of the four regions of West Virginia both past and present, and categorize the related occupations (e.g., tourism, coal, glass, timber, chemical, oil, natural gas, agriculture service industries, and gaming).

#### **Essential Questions:**

 What are by-products of natural resources and how can they be developed into a support industry?

#### Materials:

- Computer paper
- Pencils
- Colored pencils
- Crayons
- Markers
- Rulers
- Rubric

#### **Learning Plan:**

- Divide the class into groups of two
- Describe what a by-product is
- Give each group a copy of the rubric and a prepared list of by-products
- Have each group create and design a flyer for their new company they are designing based on the by-products their group chose to sell.
- Each flyer must have the following items: Name for their company (Must be a new name), Company Logo, Catch Phrase Slogan, An Illustration showing the type of products the company sells, must be neat, colorful, and have names on the back

#### **Checking for Understanding:**

- Student participation in the creation of the flyer
- Completion of flyer (rubric)

Accommodations: Pair a student who is not creative with a more creative person

### **Natural Resources Flyer Rubric**

| Name of Student  |
|--|
| Name of Student  |
| DIRECTIONS: Each flyer must have the name of the business, logo, catch phrase slogan about your business, & an illustration of the products your business creates and sells. |
| 10 points for turning your flyer in on time  |
| 20 name of the Company you created (must be original and unique)   |
| 20 logo is clearly seen  |
| 20 catch phrase slogan is clearly stated   |
| 30 Illustration is visible, colorful, and neat   |
| /100 total   |

# A partial list of products made from Petroleum (144 of 6000 items)

One 42-gallon barrel of oil creates 19.4 gallons of gasoline. The rest (over half) is used to make things like:

| Solvents          | Diesel fuel        | Motor Oil        |
|-------------------|--------------------|------------------|
| Ink               | Floor Wax          | Ballpoint Pens   |
| Upholstery        | Sweaters           | Boats            |
| Bicycle Tires     | Sports Car Bodies  | Nail Polish      |
| Dresses           | Tires              | Golf Bags        |
| Cassettes         | Dishwasher parts   | Tool Boxes       |
| Motorcycle Helmet | Caulking           | Petroleum Jelly  |
| CD Player         | Faucet Washers     | Antiseptics      |
| Curtains          | Food Preservatives | Basketballs      |
| Vitamin Capsules  | Antihistamines     | Purses           |
| Dashboards        | Cortisone          | Deodorant        |
| Putty             | Dyes               | Panty Hose       |
| Percolators       | Life Jackets       | Rubbing Alcohol  |
| Skis              | TV Cabinets        | Shag Rugs        |
| Tool Racks        | Car Battery Cases  | Epoxy            |
| Mops              | Slacks             | Insect Repellent |
|                   |                    |                  |

| Umbrellas   | Yarn  | Fertilizers  |
|---|---|--|
| Roofing   | Toilet Seats  | Fishing Rods   |
| Denture Adhesive  | Linoleum  | Ice Cube Trays   |
| Speakers  | Plastic Wood  | Electric Blankets  |
| Tennis Rackets  | Rubber Cement   | Fishing Boots  |
| Nylon Rope  | Candles   | Trash Bags   |
| Water Pipes   | Hand Lotion   | Roller Skates  |
| Shampoo   | Wheels  | Paint Rollers  |
| Guitar Strings  | Luggage   | Aspirin  |
| Antifreeze  | Football Helmets  | Awnings  |
| Alluneeze   | 1 ootour Heimets  |  |
| Clothes   | Toothbrushes  | Ice Chests   |
|   |   |  |
| Clothes   | Toothbrushes  | Ice Chests   |
| Clothes   | Toothbrushes CD's & DVD's   | Ice Chests Paint Brushes   |
| Clothes  Combs  Vaporizers                                    | Toothbrushes  CD's & DVD's  Balloons                                    | Ice Chests  Paint Brushes  Sun Glasses                                       |
| Clothes  Combs  Vaporizers  Heart Valves                      | Toothbrushes  CD's & DVD's  Balloons  Crayons                           | Ice Chests  Paint Brushes  Sun Glasses  Parachutes                           |
| Clothes  Combs  Vaporizers  Heart Valves  Enamel              | Toothbrushes  CD's & DVD's  Balloons  Crayons  Pillows                  | Ice Chests  Paint Brushes  Sun Glasses  Parachutes  Dishes                   |
| Clothes  Combs  Vaporizers  Heart Valves  Enamel  Anesthetics | Toothbrushes  CD's & DVD's  Balloons  Crayons  Pillows  Artificial Turf | Ice Chests  Paint Brushes  Sun Glasses  Parachutes  Dishes  Artificial limbs |

| Fan Belts     | Car Enamel | Shaving Cream |
|---------------|------------|---------------|
| Refrigerators | Golf Balls | Toothpaste    |

## West Virginia's Natural Resources

| Name of the<br>Resource | Where in the state is it located (County or Relative location) | How can it be used<br>(Some may have multiple<br>uses) |
|-------------------------|--|--|
| Salt                    |  |  |
| Iron                    |  |  |
| Coal                    |  |  |
| Natural Gas             |  |  |
| Oil                     |  |  |
| Water                   |  |  |
| Timber                  |  |  |
| Chemicals               |  |  |