Lesson Plan 2
CAWS
Rehau: June 23-27
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Objective: Students will use metric situations and conversions to compare and contrast the US metric system to that of Germany while discussing the process of manufacturing a BMW and learning terms for car parts and plant terms.

Lesson:

A. Watch video clip from BMW's website so that the students can see what model is being manufactured
B. Introduce the car parts and the factory terms for the machines using Powerpoint:
   -das Auto = car
   -der Luftabweiser = spoiler
   -die Windschutzscheibe = windshield
   -der Hauptscheinwerfer = headlights
   -die Spritzgießmaschine = injection molding
   -der Klebstoff - glue
   -die Autotür –car door
   -der Stoßfänger - bumper
   -die Fabrikation -fabrication
   -das **Bremslicht** –break light
   -der Grundanstrich = primer
   -die Erstlackierung = base coat
   -die **Farbschicht** = clear coat
   -die Reifen - tires
   -das Leitgitter – grill
   -das Gießharz = resin
   -die Lackieranlage = paint line

C. Give students pictures to label using these parts and departments like a map.
D. Explain the metric system & how to convert without using a computer: (They can make themselves a conversion chart as we go & use calculators)
   Fahrenheit = Celsius
   Kilogram/Gram = Pounds
   PSI= Bars
   Liters= gallons
   Nanograms= micrograms

E. Using the whiteboards and markers and their conversion charts they have made, practice converting things back and forth.

F. Give the students word problems stemming from real life Rehau processes: Work one together and let them complete the rest. (etc…probably about 8 different problems like these)
   a. The injection molding machine is currently running at 200°C. It is supposed to be running at 425°F. How many degrees Celsius should we adjust the temperature to if the machine is supposed to be running at 425°C?
   b. The glue should be heated to 125°F so that it will adhere correctly. It is currently at 75°C. How many degrees Fahrenheit should we adjust the temperature to so that the pieces adhere?
   c. The paint line has a problem….the temperature should be at 24°C so that the friction and everything works properly to adhere the paint. It is currently at 75°F. What do we need to do to make sure the temperature is at 24°C?
   d. The resin has just arrived at the receiving door and they received an order of 350 pounds. According to the Rehau order they were supposed to receive 220 kilograms of resin. How many pounds should we have if we received 220 kilograms?

G. Discuss the word problems the students have completed in class. Go over answers and how we got them…students come to Smartboard and explain how they got their answers.
H. Let students begin Internet matching games for review with car parts and metric conversions for remainder of period to help them prepare for the vocab and metric quizzes later this week.

Homework: Study for metric and vocab quizzes later in the week.