Let's Talk STEM with Canada Company

Manufacturing

Manufacturing is the process of converting raw materials into finished goods that meet the needs of a customer or customers.

Manufacturing today has evolved dramatically since its earliest days. It is characterized by strong exports, high productivity, skilled-labor, advanced technology, innovation and growth all of which supports Oklahoma's economy in every way. More than any other sector, manufacturing creates jobs and wealth outside its own sector. These jobs range from construction and mining, to jobs in fields like packaging and telecommunications. A well-rounded community needs a combination of housing, education, retail, healthcare, entertainment, and industry. However, only one of these has the ability to provide for the others. Without a strong manufacturing industry, no one will be able to afford housing, retail, entertainment, or healthcare. In Oklahoma, strong industry and housing provide taxes for education. Without a strong industry, there are fewer dollars for education services.

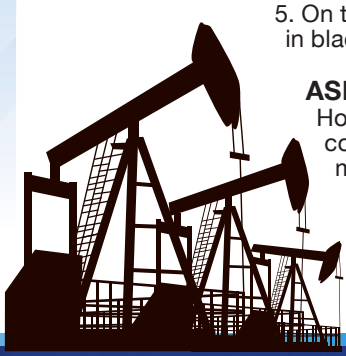
How do factories make the products we use every day? Have students plan, create, test and redesign a color block using the most efficient process possible.

SUPPLIES NEEDED:

- 2 brown paper lunch bags
- Paper
- Markers
- A circle shape to trace
- Ruler
- Stopwatch

COLOR BLOCK PRODUCTION

1. The block is made of two brown lunch bags.
2. Stuff one bag with paper and slide remaining bag to cover the open end of the stuffed bag.
3. Using an orange marker, draw three large polka dots, measuring 1" and three smaller green polka dots, measuring 0.5" on the larger side of the bag.
4. Draw four parallel 1" purple stripes on the shortest sides.
5. On two remaining empty sides write "Color Block" in black marker.



ASK STUDENTS:

How long did it take you to make one color block? How could this have been done more efficiently? Have them make a plan and test it for making this production more efficient. They should create and explain their plan using a flow chart and include their results.

ASK STUDENTS:

How was your second plan more efficient than the first? How could you automate this process?

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