

MISSING INFORMATION PROBLEM - "WHAT ON EARTH?" (SCIENCE)

MAIN OBJECTIVES

- Compare the observable physical properties of different kinds of materials, what textures, hardness, softness, flexibility they have, and why some objects are made with certain materials with specific characteristics.
- Use critical thinking skills
- Work together as a group
- Communicate findings to others

ACTIVITY

Question: The boss has assigned groups of employees to make an assigned product. They will make observations of several materials and determine which materials will be best suited for certain jobs. Given examples of products, students start to use critical thinking skills from thinking about efficiencies and inefficiencies of some designs to produce that product. As a group, students are assigned products to make with their choose of several materials. They will collaborate to solve the problem, communicate their ideas and demonstrate their findings to classmates. Group discussion, review, and revision follows.

MATERIALS

Warm up:

Gravel
Sand
Sage or other herb
Cotton
Saw dust
Nickels
Fishing weights
Water

Activity:

Clay (soup bowl)
Wooden rectangles (Spoons)
Card stock paper (Business Cards)
Cloth (gloves)
Parchment Paper (Alternate/less suitable)
Sheet Metal - taped edges (Alternate/less suitable)
Sheet Plastic (Alternate/less suitable)
Cheese Cloth (Alternate/less suitable)

CURRICULUM COMPONENTS

- K.P.2.2 Compare the observable physical properties of different kinds of materials (clay, wood, cloth, paper, etc) from which objects are made and how they are used.

Vocabulary:

size, rough, smooth, shiny, property, texture, weight