

GRADE LEVEL AND CONTENT AREA:

K/Science Properties

☺ This unit is about using the 5 sense to explore and learn about the properties of objects. The unit explores the five senses using lesson and the properties of wood using the Foss Wood kit*. Please feel free to expand this and make it your own. This unit will use literature skills such as labeling, reading, connecting literature to science and self, it will also use math skills such as comparing and contrasting, graphing, analyzing, data collection, organization and presentation.

☺ * *If you do not have the kit available you might try exploring different mulches. Nursery owners are usually happy to help out and will give you a grocery bag full for free.*

STANDARDS AND INDICATORS (LISTED BY NUMBER):

K.1 Objects have properties that can be observed and used to describe similarities and differences.

A.2 Sort objects made of materials such as wood, paper and metal into groups based on properties such as flexibility, attraction to magnets, and whether they float or sink in water.

GRADE-LEVEL CONCEPT: ◆ Some properties can be observed with the senses, and others can be discovered by using simple tools or tests.

GRADE-LEVEL EXPECTATIONS:

1. Humans have five senses that they use to observe their environment. A specific sense organ is associated with each sense.
2. Objects have properties that can be observed using the senses. Examples include size, weight, shape, color, texture, transparency, etc. An object's observable properties do not include the object's name or its uses.
3. Sorting objects into groups based on one (or more) of their properties makes it possible to observe and describe their similarities and differences.
4. Placing objects in order based on their size or weight makes it possible to observe patterns and describe relationships among the objects in a group.
5. Objects can be described and sorted based on the materials from which they are made (for example, wood, paper, fabric, plastic, glass or metal). Objects can be made of a mixture of materials.
6. Objects can be described and sorted based on the results of simple tests. Simple tests include actions such as bending, squeezing, holding it near a magnet or putting it in water. Objects can be described as magnetic/nonmagnetic, flexible/not flexible, hard/soft, a floater/sinker, etc.

7. The heaviness of objects can be compared using the sense of touch. Balances and scales are measurement tools that allow people to observe and compare the heaviness of objects more accurately. Objects can be sorted into groups that have the same heaviness, or into groups that are “more heavy than” or “less heavy than” a given object.

KEY SCIENCE VOCABULARY: senses, observe, observation, property, sort, classify, material, float, sink, flexible, heavy, magnetic, nonmagnetic, thermometer

CONCEPTS: Need To know about ...

- The five senses can be used to explore/learn about the world around us.
- Objects have properties that can be determined by using your five senses.
- Objects have properties that can help them be sorted, compared.
- Objects can be similar and different from one another.

SKILLS: Be able to do:

- Recognize and use their five senses
- Record data
- Compare/analyze data
- Communicate findings through illustrations, graphs, and/or verbally

Misconceptions:

- Complex tests are needed to determine properties.
- The 5 senses are not a tool in science.
- Properties limit an object to one grouping.

TOPICS OR CONTEXT: (WHAT YOU WILL USE TO TEACH CONCEPTS AND SKILL-PARTICULAR UNIT, LESSONS, ACTIVITIES)

- Lessons provided with the unit
- Foss kit-wood
- Literature from the kindergarten vocabulary and comprehension

BIG IDEAS

- ✦ That some properties of objects can be determined using just your five senses.

Cumulative questions/ Essential questions to guide instruction and assessment:

- ? What are the five senses?
- ? How can we use our five senses to help use learn about objects?
- ? What did we learn about wood?
- ? Can we do what we did with wood with other things?

Lesson Plan Outline for Properties

| Lesson | Objective/Purpose | Goal | Done |
|--------|--|--|------|
| 1 | 5 Senses- introduce the 5 senses using K-curriculum book: My Five Sense by Alik | Students will be able to recognize and identify their five senses and the body part associated with each sense. | |
| 2 | 5 Senses- Sight and Hearing | Students will focus in on the sense of sight and hearing. Students will be able to identify qualities/properties that can be determined by sight and/or hearing. | |
| 3 | 5 Senses- Smell/Taste/Touch | Students will focus in on the sense of smell, taste, and touch. Students will be able to identify and determined objects by smell, taste, and touch. | |
| 4 | 5 senses- | Students will identify vocabulary that is used to describe objects using senses. | |
| 5 | Using the Foss Wood Kit: Activity 1 part 1 | Introduction to Wood samples | |
| 6 | Activity 1 part 2 | Wood Hunt | |
| 7 | Activity 1 parts 3,4, and 5 | Wood and Water, Sink the Pine and Plywood, Sinking Investigation | |

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| 8 | Activity 2 parts 1 and 2 | Sanding wood, Sawdust and Shavings | | |
| 9 | Activity 2 parts 3 and 4 | Making Sawdust Wood, Making Sandwich Wood | | |
| 10 | Activity 2 parts 5, 6, and 7 | Nailing, Staining, and Wood Sculptures | | |