

---

# A Peer at Veneers

# Lesson 4



## Grades: Fourth & Up

**Overview:** In this lesson, students will learn about wood veneers and how they are used to improve the beauty of furniture. Then they will experience working with natural patterns and designs like those found in wood by taking rubbings and creating a collage of patterns from them.

## Estimated No. of Class Periods: 2

### Resources/ Materials in Kit:

- 1) Veneer squares
- 2) *Selectorama*, p. 1. “Decorative Veneer,” pp. 53 - 55
- 3.) *A Resource Guide for Teachers and Students* , published by the Furniture Discovery Center p. XII
- 4) Handout : *Decorative Veneer Cutting Methods* (make copies from *Selectorama*, p. 53)

### Resources/Materials to Get:

- 1) Sheets of newsprint for making texture rubbing and collages
- 2) Crayons

### Web Resources:

There are many Web sites on the topic of this lesson. Search on “veneer.” Some suggested sites: [erathveneers.com](http://erathveneers.com), [veneertech.com](http://veneertech.com) and [industrialveneersales.com](http://industrialveneersales.com).

### Prerequisites: None

### Focus Questions:

- What is a veneer?
- Why is veneering important to the art of furniture-making?
- What are some of the different types of veneer matches?
- How can the natural patterns in wood and other textures be used to create unique artistic designs?
- What is another definition of “veneer” that has nothing to do with wood but a lot to do with people?

---

## Learning Outcomes

After completing this lesson, students will be able to:

- define veneer
- state the reasons furniture makers use veneers
- identify some of the common types of veneer matches, i.e., diamond match; X-match; random match; book match
- make texture rubbings and use them to make a collage from a texture, using elements of art and principles of design.
- make a collage from a texture representing a veneer, using elements of art and principles of design
- discuss the choices made in designing a collage from implied, natural textures, i.e. to give flat surfaces interest and detail, etc.

## Vocabulary

**aesthetics** - a type of philosophy that explores the nature of beauty

**applied texture** - the look and feel of a piece of wood as created in nature; its real texture

**asymmetry** - beauty of form emerging from a lack of balance in proportions in an object; the opposite of symmetry

**balance** - physical or visual equilibrium

**bookmatch** - equal pieces of wood from the same flitch matched to make a balanced pattern in which one piece is flipped

**burl** - a hard, hemispherical outgrowth upon the tree's trunk and branches

**burl veneer** - a veneer cut from the burl of a tree; the grain runs in all directions

**flitch** - any part of a log that is produced for purposes of cutting veneer

**implied texture** - a smooth representation of an applied texture; for example, a texture rubbing is an implied texture because it reflects the look and feel of the actual texture of a surface.

**inlaid** - a decorative pattern set into the surface of a piece of furniture

**knot** - a lump or a small woody cluster found in branches

**mahogany** - the reddish-brown or yellowish-brown wood of trees in the mahogany family often found in tropical climates

**patterning** - a structured design used to enhance the appearance of something

**shape** - the visible make up and spatial form of an object

---

**symmetry** - beauty of form arising from balanced proportions in an object

**texture** - the look and feel of something according to its design and structure

**value** - the economic, aesthetic, or functional worth of something

**veneer** - a very thin layer of fine hardwood of superior appearance or value that is glued or bonded to another piece of wood

## Suggested Instructional Steps

1. Encourage students to play with the veneer squares from the kit. Ask students to describe what they see and what “veneer” means. Summarize by making sure students understand that a “veneer” is a thin slice of wood that’s applied to the surface of another piece of wood.
2. Show students how the veneer squares can be put together to create different designs or patterns. The 4 samples in the kit have veneer bonded on both sides. On the lighter side, the squares can be arranged to show a Diamond match and an X-match. On the darker side the squares can only be arranged to show a “random” match. This is called veneer matching. Show photos of veneers on page 54 - 55 of the *Selectorama*. Explain that veneer gives flat surfaces interest and detail and introduces variations of color to the surface. When showing the patterns in the wood veneers, introduce relevant vocabulary words.

3. Ask: In addition to making beautiful surfaces on furniture, what are some other uses of veneer?

*(Appropriate responses)*

- to solve the problems of warping and splitting that sometimes happen when solid wood is exposed to variations in temperature and humidity (function)
- to reduce the cost of using expensive woods where they are not seen (economic)
- to build difficult designs more effectively, such as curves (function)

## Texture Rubbing Activity

**Note:** If you have already done texture rubbing with your students, there are alternative “Play Veneer Matchmaker” activities provided in your kit in *A Resource Guide for Teachers and Students*, published by the Furniture Discovery Center, p. XII.

## Introduce Texture Rubbings and Demonstrate

4. Locate a hard, textured surface. Place a sheet of thin paper (such as newsprint) on the surface. Using a crayon or other soft writing material, rub the paper with even strokes. Tell the students that these are implied textures, rather than *applied* or real textures, meaning they are smooth to the touch but they are visually patterned, reflecting the actual or applied texture of the object.
5. Have the students make a collection of texture rubbings, filling entire sheets of paper and using a variety of colors.

6. Demonstrate making a collage (a cutting and pasting project with pieces that do not overlap) using elements of art and principles of design in *patterning* and *balance* to allow students to make value judgments about what looks good.
7. Have students design and make a collage from the texture rubbings and glue them together and apply to a stronger paper. Ask students to explain the technique they used to make the implied textures and to explain why they made the choices they did in their design, i.e., color? symmetry? asymmetry? etc.

## Extensions

1. Design and draw a piece of furniture and collage the surface.
2. Have students go the World Wide Web (WWW) and search on the word, “veneer.” There are many Web sites on veneer created by companies that sell veneers or veneer-related services. Students can learn about the veneer business today by going to these Web sites. Suggestions: Have students research questions using information found at Web sites like [erathveneer.com](http://erathveneer.com) or [veneertech.com](http://veneertech.com), [industrialveneersales.com](http://industrialveneersales.com), etc.

### Some Questions to Research on the Web

How is veneer cut today? How was it cut in Thomas Day’s time? How thick is veneer ? What is the thinnest width for a veneer you can find on the WWW? What are common ranges for the width of veneers cut today? Name jobs that exist in the veneer business. Students should support their answers with at least two sources and state the Web sites that were their sources of information.

3. Have students be a “veneer” detective and search for veneered furniture in their home or in the homes of friends and family. Have students write a report on the piece of veneered furniture. What kind of furniture is it? What kind of wood is the veneer made of? (use *Selectorama*) What kind of wood is the veneer applied to? How is the veneer used, for beauty, function, etc.?

## Assessment

- ✓ Can students explain in their own words the definition of “veneer”?
- ✓ Can students provide three reasons “veneers” are used in furniture making?
- ✓ Can students explain why they made the choices in the collage they created from texture rubbings using new vocabulary learned in this lesson ( i.e. symmetry, asymmetry, implied texture, applied texture, etc.)?
- ✓ Can students identify a diamond match, an X match, a random match and other veneer match patterns?