

Tzedakah Box Project  
Grade 9-10  
Sculpture and Ceramics Unit Plan  
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### Overview and Description

In this unit the student will create a tzedakah box with a fitted lid based on a theme or motif using ceramic construction and glazing techniques. Possible motifs and themes include:

- Jewish Calendar cycle
- Jewish concepts- Tikun Olam, Chesed, Tzedakah
- Jewish or world architecture
- General themes- clothing, food, animals, underwater, fantasy
- Historical themes- investigation of art historical isms,-e.g. Dada, Surrealism
- Nature

### Key Concepts

- Understand the concept of Tzedakah
- Manipulation and properties of clay as a sculptural medium
- Manipulation of glaze and other decorating techniques
- Understanding of the whole clay process –green ware, bisque, glaze
- Understanding of the creative process in relation to the chosen theme
- Understanding form as a design element.

### Content Base

- Pinch, coil, and slab construction methods in clay.
- Experiment with textures and surface decoration of clay to emphasize tactile qualities of the medium.
- Planning of decorative designs that correspond to the design theme and the use of a variety of 3 d forms and /or carving (additive and subtractive sculpture techniques.
- Use of glazes to add the element of colour
- Demonstrate an understanding of the basic properties of clay.

### Expectations covered

#### Grade 10

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|--------|---|
| THV.01 | demonstrate an understanding of the design process  |
| TH1.01 | describe the steps of the design process  |
| TH3.01 | explain how they have incorporated into their studio assignments characteristic materials and expressive qualities of artworks studied. |

TH3.02	explain how their personal artworks have been influenced by works they have viewed in galleries and museums.
CRV.01	produce a work around specific objectives and challenges.
CRV.02	demonstrate the ability to take varied and creative approaches to using materials, tools, processes, and technologies in studio activities.
CRV.03	explain the importance of process in relation to the final product.
CRV.04	use concepts of visual literacy in describing their art activities.
CR.1.01	use various strategies in creating images
CR1.02	use tools, materials, processes, and technologies safely and appropriately
CR1.03	use research from various sources as part of the creative process
CR2.01	demonstrate the ability to solve artistic problems and make creative choices when completing artworks that reflect their concerns.
CR2.02	demonstrate the ability to use an increasing range of tools, materials, processes and technologies in producing works of fine art and applied design.
CR3.01	use appropriate visual arts vocabulary in describing materials and processes.
CR3.02	develop sketchbooks, a portfolio and /or planners that document their personal art process.
CR3.03	demonstrate the ability to review and evaluate the creative process they use, as well as the resulting artworks.
ANV.01	apply critical analysis processes to their art work and works studied
AN1.01	describe the stages of the design process followed in a particular assignment.
AN2.02	demonstrate an understanding of the symbols in creative expression.

#### Grade 9

VTV.01X	apply an understanding of the elements and principles of design to personal, historical, and contemporary artworks.
VT1.02X	understand and apply the elements and principles of design as expressive components in their personal creative works.
VT3.01X.	demonstrate the ability to incorporate personal interest and hobbies in their art.
VT3.02X	describe how some of their own studio activities are influenced by historical artworks or historical art.
VCV.01X	use materials and processes to create art objects that express their intent.
VCV.02X	apply the elements and principles of design.
VCV.03X	produce 3 and 3 dimensional artworks using a variety of materials, tools, processes and technologies .
VCV.04X	apply the creative process in their work.
VC2.02X	demonstrate an understanding of materials, basic skills and concepts in painting, printmaking and sculpture.
VC2.03X	complete studio projects in fine art and applied design using the creative process.
VC3.01X	use appropriate art vocabulary related to materials, processes, and technologies.
VC3.02X	understand how to apply criteria for ongoing review, and evaluation of processes and products.
VAV.03X	demonstrate an understanding of connections between art and cultural identity and context.

- VA1.02X describe the materials used and steps followed in the creation of a particular artwork.
- VA1.04X explain how artistic intentions are expressed in specific examples of historical and student artworks.
- VA2.02X explain the organization of visual content in the creation of artworks.
- VA2.03X demonstrate an understanding that the functions of art may vary from culture to culture.

## Resources

Ball, F. Carlton and Lovoos, Janice. Making Pottery Without a Wheel. Van Nostrand Reinhold. 1965.

Clark, Kenneth. The Potters Manual. Chartwell Books. 1983

Mackey, Maureen, Experience Clay. Davis Publications, 2004. ISBN 0871925982

500 Teapots: Contemporary Explorations of a Timeless Design. Editor Tourtilliot, Suzanne J. E. Lark Books. 2002

There are countless websites that explore the use of clay as a sculptural medium.

## Procedure

### Planning Notes

- The teacher will plan an introduction to the theme or motif chosen. Plan a lesson on Tzedakah based on resources found on the BJE web site.
- For example Jewish architecture- plan a power point or slide presentation on the interior and exterior architectural designs and motifs of specific buildings. ( i.e. grouped by historical period or region.)
- Introduce the material to be used. (the properties of clay, the stages of clay-green ware, bisque and glaze )
- Introduce the possible building techniques. ( pinch pot, coil, slab, slab over a form)
- Introduce joining techniques, ( score, slip)
- Discuss how to form lids. Look at examples of fitted lids on clay vessels.
- Introduce surface decoration techniques. ( incising, additive, application of textures)
- Introduce and demonstrate the use of tools.
- **PLAN FOR, EXPLAIN AND DEMONSTRATE PROPER STORAGE OF WORKS IN PROGRESS.**
- Introduce the use of painting techniques( underglaze and glaze)
- Demonstrate safety and studio management techniques.
- Discuss how to work with this medium and understand the limitations of clay.
- Take the students through a planning process. At this point the teacher should take into consideration the size and time requirements. A field trip or guest artist or web research

will show them the possibilities for design. (see the BJE web site for examples of a variety of Tzedakah boxes. See teapot web site that show fitted lids.)

- Make arrangements to fire (put in the kiln) the finished pieces. Remember that if the clay pieces are going to be glazed they will be fired twice.
- Encourage student analysis and critique during the entire process

Teaching/ Learning Strategies.

## INSTRUCTIONS TO STUDENTS

In this project your will construct and decorate a tzedakah box and then write a brief reflection.

1. Choose a specific theme for your tzedakah box from the general theme. Your surface decorations and the shape of the box should relate to this theme. What form will your box take? Use magazines, books, and the internet, etc. to give you ideas. Keep source images in your process section of your sketchbook.
2. Using pencil crayons or pastels, in your sketchbook draw a minimum of 3 thumbnail sketches to explore the theme and the form of your box. Consider the colours that you may want to use. They should reflect the theme of the piece. You may try different colour schemes. Explore the textural qualities that you will use. These drawings should be detailed and carefully drawn, and should show different angles or views of the box.
3. Now consider and document the construction technique(s) that best suits your design. Will you use pinch, coil or slab construction, or a combination or two or more techniques? How will you create the particular surface qualities that you have planned for?
4. Once your final drawing/proposal has been approved, you can start constructing in clay. Knead the clay first to remove any air bubbles (which may cause the piece to explode in the kiln). Remember to keep the clay well covered to avoid premature drying. Also, keep extra clay well wrapped.
5. Add texture to the surface of the box. Attach shapes using the **score – slip – squeeze – knit** method. Keep small or thin pieces wrapped with plastic wrap so they don't dry before the rest of the piece.
6. Once the clay is bone-dry (no longer cool to the touch) the box will be fired (baked in the kiln).
7. Now glaze and refire the box.
8. Now, that you have completed the creative process of this project, write a reflection (maximum 1 page typed and double-spaced) responding to the following outline:

1. Where did the idea come from and how does your completed piece reflect the given theme?
2. Describe how you planned and created the form.
3. How did you incorporate the elements and principles of design into your plan?
4. How did you use the ceramic building and decorating techniques to effect your design?
5. What problems did you encounter and how did you solve them?
6. If you were to do this project again, how would you change it?

#### Materials Needed

- Clay- suggest earthenware ( red or white)
- Variety of ceramic tools.
- Rolling pins, old knives, forks, sponges, spoons, utensils to create texture.
- Glazes and underglazes.
- Newspaper and large sheets of plastic to cover desks.
- Old dish towels or sheeting and large plastic bags( and twist ties) to cover clay
- Rigid piece of material (e.g.masonite ) for bases.
- Water and slip containers (slip is made by combining clay and water)

Evaluation See attached Rubric

#### Accommodations

For students with learning discrepancies or disabilities

- Teacher can pre-form slabs of clay
- Student can be assisted with tools and materials
- Teacher can provide cookie cutters for surface application

For advanced or gifted students

- Student can be encouraged to more fully explore the work of artists working in clay for sophisticated ideas on sculpting and surface decoration

See Appendices for instructions for students

## Appendix I

### BASIC CLAY INFORMATION

1. We are using \_\_\_\_\_ clay.
2. **When you take a piece of clay**, knead it to remove air bubbles. **Wedge** it by slamming it down on the board, picking it up, rotating it, and repeating. This also helps remove air bubbles. Sometime you will take a ball of clay that has been used already.
3. When returning left over clay, roll it into a ball and be sure to wet it with some water so it will be soft and pleasant to use for the next student. Be sure to return it to an air tight container. Any tiny pieces or crumbs may be added to the slip containers. Be sure to keep that slip at a good consistency by adding small amounts of water if it is getting dried out and thick.
4. Until your box is complete, you need to protect it and keep it moist. **At the end of every class, spray the clay, apply a moisten cloth and then seal it in a plastic bag.**
5. **Avoid air bubbles or trapped air within a piece.** The air will expand when heated in the kiln and your piece may crack, or worse, it could explode.
6. **To prevent cracking or having pieces break off, try to keep the thickness of the piece uniform, or wrap thinner parts to allow them to air dry slowly.** The idea is to keep all parts of your clay box at the same moisture level as it dries.
7. **To ensure attached pieces stay affixed to the main body, use the score-slip-squeeze-knit method.** This means that whenever you attach pieces of clay you must rough up the two edges, score it and add slip. **Slip** is a “glue” made of clay and water. Then you smooth the pieces together by squeezing them together. Next, blend the clay seams with your fingers, or with a tool, knitting the two pieces into one, ensuring no air bubbles are left in the seam. **Sometimes you may need to reinforce a seam with a thin coil of clay.**
8. Once the clay dries in the air, it is **fired** in a **kiln** and it becomes stronger as the silica in it “glassifies”. The piece also shrinks approximately 10% as the moisture evaporates during air-drying and firing.
9. A work made out of clay, before it is fired, is called **greenware**. After it is fired it is called **bisque ware**.
10. Apply **coloured underglazes** to the greenware or **glazes** to the bisque ware and then a **clearcoat glaze** on top of the colour if you want a shiny finish. Coloured glazes alone will leave a matte finish. One coat of coloured glaze will produce a streaky, sheer finish. Three coats will result in a smooth, intense finish. You may try to experiment with layering or mixing various coloured glazes, but be aware that glazes are different

than paints, and the results may vary drastically. Never mix glazes in the containers! Use a separate brush for each colour. Glazes can also be applied with sponges.

**Note:** Glazes are very costly, so please respect the materials and other students who want clean colours for their projects.

## Appendix II

### GLAZING INSTRUCTIONS AND IMPORTANT GLAZING TERMS

Each point is a very important step in the glazing process. You must read each instruction and follow each one very closely.

1. Select the colours you wish to use from the sample tiles. Record the numbers for easy reference.
2. Find the glaze container with the corresponding number and then you can, again for reference, also record the name of the colour from the container.
3. Use the sponge applicator or your painting brushes to apply the glaze in thin even coats. You must apply three coats for a totally smooth, intense result, but you may use one or two coats for a more translucent or streaky effect.
4. If you want the glaze to look matte, you are finished, but if you want the glaze to be shiny, you must apply 2 coats of the clear glaze on top of the coloured glaze. This clear coat will dry to a light blue colour. It makes the container waterproof and safe to seat or drink from, so you may also want to apply it to the inside of your box.
5. If a container of glaze is lumpy or very thick, add water and stir carefully, until it is about the consistency of yogurt.
6. Each coat must be totally dry before applying the next one. You can tell the glaze is dry when it lightens and looks chalky and is dry to the touch.
7. It is important not to get glaze on the bottom of your piece, or on the bottom lip or edge of your lid, or it will not fit on properly. You should also avoid putting glaze near the bottom of the sides of your piece. If some drips down onto either of these areas, be sure to wash it off with some paper towel and water.
8. You cannot mix glazes as you can paints. You may experiment by layering colours on your piece.
9. Be sure to wash the brush/sponge well and do not contaminate the glazes. They are very expensive and are for all to share, so be responsible and keep them in good condition.

10. You will have to share colours, so if one you want is being used, wait and use another glaze for a different part of your box, or sit next to someone using the same colours that you wish to use. Brushes can also be shared, saving on clean up.
11. At the end of class, all containers must be tightly closed and returned to the counter. Be sure to put the matching lid on the correct container. Tops and bottoms are labeled.

### Appendix III

#### **IMPORTANT CLAY AND GLAZING TERMS**

**BISQUE WARE:** unglazed ceramics that have been fired at a low temperature to remove all moisture from the clay.

**CRAWLING:** bare, unglazed areas on fired ceramic ware alternating with thickened glazed areas. This is usually caused by grease or dust on the surface of the bisque ware.

**CRAZING:** unintentional cracks that occur over the entire glaze surface because the glaze expands and contracts more than the clay body to which it is applied.

**GLAZE:** fine ground minerals that, when applied to a clay surface and heated to a certain temperature, fuse into a glassy coating. (This is why it is very important not to get glaze on the bottom of the container, or on the inside of the lid.)

**GREENWARE:** unfired pottery or sculpture.

**FIRING:** heating pottery or sculpture in a kiln to bring the clay to glaze to maturity.

**KILN:** a furnace or oven built of heat resistant materials for firing pottery or sculpture.

**MATURING POINT:** the temperature and time in firing at which a clay or glaze reaches the desired condition of hardness and density.

**SLIP:** a “glue” used to join seams, made of clay and water.

**STAIN:** glaze materials that lightly coat the surface of the clay, filling the cracks and grooves of the surface with subtle colour.

**VISCOSITY:** the ability to resist running or flow. A glaze must have enough viscosity to avoid flowing off the ware when it is melted under heat.

**VITREOUS:** having the nature of glass. In ceramics, a vitreous glaze has been fired to a dense, hard, and nonabsorbent condition.