Elements of Art: Texture

Suitable Ages:
Suitable for ages 14+

Skill Level:
Basic

Materials Required:
• 3Doodler 2.0: one per student (recommended; can also deploy one per two students)
• 3Doodler PLA or ABS strands: 3 strands per student
• Paper

Duration:
~45 minutes.
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Objective
Upon completion of this lesson, students will be able to use the 3Doodler to create artwork that mimics textures found in nature. Observation is key, and students must be able to interpret visually and express in words the textures that they plan to reference. Success in this exercise will lead to a greater understanding of where artists get their inspiration from, and how texture can be used in art.

Warm Up
As a class compile a list of 8 objects in nature and identify the textures associated with them. Discuss the ways of describing these textures, what they can convey in a work of art, and why (for example, jagged textures convey pain and discomfort; while fuzzy, soft textures convey comfort).

Activity
Students will review the concept of texture, identify examples of texture in the world around them, and then use the 3Doodler to fill in a 2” × 2” square with a texture from the list compiled by the class. Textures may be used in conjunction with color, as per the example below.
Sequence & Pacing

1. Students will be introduced to the relevant terms using the Texture handout on page 6 and will be shown images of objects in nature. The class will compile a list of 8 objects in nature, the textures associated with them and adjectives to describe them (15 minutes)
2. Each student will receive three strands of 3Doodler plastic and chose one of the objects in nature from the class-compiled list. They will then recreate the object with the 3Doodler in the template provided on the handout on page 7 (20 minutes)
3. Each student will write a sentence describing the texture and the feelings it conveys in art (5 minutes)
4. Exit reflection: How do textures differ visually and physically? How are they the same? (5 minutes)

Striving Students

Encourage striving students to choose a simpler, more repetitive texture may improve results and increase confidence.

Paying close attention to these students will ensure safe use of the 3Doodler as well as readily available assistance. Grouping striving students with accelerated students can provide additional support.

Accelerated Students

Texture can convey quite a lot of meaning with minimal information, but just how much? Encouraging students to use as many adjectives as they can to describe the texture that they have chosen.

Grouping these students with striving students will give them an opportunity to provide assistance and encouragement to their fellow classmates, reinforcing the lesson for both of the students in the group. Accelerated students who complete their work early should be encouraged to further explore by creating additional three-dimensional geometric forms.

Evaluation Strategies

Students will be graded according to a rubric on their attentiveness and participation as well as the completion of the included hand-out. Successful use of the 3Doodler will also contribute to the student's grade. The hand-out will be collected at the end of class and corrected for use as reference material for future lessons.
# Evaluation Rubric

<table>
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<th>4</th>
<th>3</th>
<th>2</th>
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<tbody>
<tr>
<td><strong>Participation</strong></td>
<td>Students raise their hands to ask and answer pertinent questions. Follow directions. Stay on task.</td>
<td>Students raise their hands to ask and answer pertinent questions. Follow directions.</td>
<td>Students answer when called upon. Follow directions.</td>
<td>Students fail to engage in classroom discussion. Failure to follow directions/stay on task.</td>
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<td><strong>Attentiveness</strong></td>
<td>Students are following along and paying close attention at all times.</td>
<td>Students are following along with the lesson.</td>
<td>Students need to be reminded of instruction due to lack of attention.</td>
<td>Students are not following along/paying attention.</td>
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<tr>
<td><strong>Texture Creation</strong></td>
<td>Solid explanation of what they referenced and how it can be interpreted artistically.</td>
<td>Explanation of reference supports decisions.</td>
<td>Explanation can support final piece.</td>
<td>Failure to create a describable texture.</td>
</tr>
<tr>
<td><strong>Sentence explaining object/texture/feeling</strong></td>
<td>Correctly associates all three.</td>
<td>Correctly associates two.</td>
<td>Describes one of the three.</td>
<td>Does not identify any of them.</td>
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<tr>
<td><strong>Exit Reflection</strong></td>
<td>2 examples of each.</td>
<td>2 examples of one, 1 example of the other.</td>
<td>1 example of each.</td>
<td>Doesn't complete exit reflection.</td>
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</tbody>
</table>
Handout: Texture

When discussing art, we break its features down into their simplest terms. These are known as the Elements of Art. When we discuss the methods of creating art, we talk about the Principles of Art. A simple way to distinguish between the two is to think of the Elements as the pieces, and the Principles as the ways in which they are used or put together. Elements are put together according to certain Principles.

This lesson will deal with one of the most important Elements of art: Texture. The lesson will focus on this element, as well as how the 3Doodler radically changes the ways that we can create these Elements.

Texture is an element of art that refers to the way things feel, or look as if they might feel if touched. In this way, texture can refer to the actual surface of a material in the tactile sense, or the perception of texture as represented visually.

There are two different types of texture:
1. **Three-dimensional texture**: texture that you can not only see but can also feel using the sense of touch. This is literally how a surface or material feels to the touch.
2. **Visual texture** (or two-dimensional texture): this refers to how a surface or material may feel if it were touched. Visual texture can be either simulated or invented.
   - **Simulated visual texture** seeks to accurately replicate real-life texture in two dimensions.
   - **Invented visual texture** uses patterns of repeating lines and shapes to convey the impression of texture.

With the 3Doodler, there are a number of techniques that can be used to achieve different textures, including:
- Varying the thickness of the 3Doodled line
- Using different nozzles to produce lines of varying thicknesses, shapes, or with corners or other properties
- Using the smoothing tool to smooth out bumps and edges or create lines, ridges, or other contours
- Doodling different shapes in repeated patterns
- Ironing or baking your Doodles to flatten the plastics or add a glossy, glass-like, finish
- Using different colors to add highlights that achieve visual texture
- Layering the 3Doodled plastic to achieve actual three dimensional texture
- Using outside objects like a heater or hairdryer to alter the finish, look and feel of Doodles (for example: melting, flattening and smoothing).

We recommend browsing the sites of artists like Rachel Goldsmith ("Painting with Plastic") and Niki Firmin ("2D to 3D") to see more complex examples of how the 3Doodler can be used to create texture: rachelgoldsmith.com and nikifirmin.com.
Instructions:
1. List eight objects from nature, along with words that describe their texture, and the corresponding feeling(s) that they convey.
2. Choose one of those textures and use the 3Doodler to reproduce it within the 2” × 2” template space below.
3. Write a sentence that explains the object, texture and feeling of the texture that you 3Doodled.
4. Engage with your classmates to discuss and answer the Exit Reflection question.

<table>
<thead>
<tr>
<th>Object in Nature</th>
<th>Texture</th>
<th>Feeling</th>
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<tbody>
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Template:

Explaination of object / texture / feeling:

Exit Reflection

How does texture differ visually and physically? How are they the same?
Additional Resources

Tutorial Videos
Please visit the3Doodler.com/videos/#started to find videos demonstrating the skills required for this activity. Individual videos that will be useful include:

- **Inserting Plastic:**
  - YouTube: [https://www.youtube.com/watch?v=ZSmddZEnMDE](https://www.youtube.com/watch?v=ZSmddZEnMDE)

- **The Buttons:**
  - YouTube: [https://www.youtube.com/watch?v=mos2SBukObo](https://www.youtube.com/watch?v=mos2SBukObo)
  - Dropbox: [https://www.dropbox.com/s/cqkozrmhktr3u38/Buttons.mp4?dl=0](https://www.dropbox.com/s/cqkozrmhktr3u38/Buttons.mp4?dl=0)

- **Reversing Plastic:**
  - YouTube: [https://www.youtube.com/watch?v=aD84E55mgac](https://www.youtube.com/watch?v=aD84E55mgac)

Featured Artists
Rachel Goldsmith: “Painting with Plastic” @ rachelgoldsmith.com.
Niki Firmin: “2D to 3D” @ nikifirmin.com.

Additional Inspiration
For additional inspiration and ideas about other simple projects that can be accomplished at this level, check out the following links:

- Stencils and Projects: the3Doodler.com/community/
- Doodles by You: the3Doodler.com/doodles/
- Videos: the3Doodler.com/videos/
  - Getting Started: the3Doodler.com/videos/#started
  - Tips & Tricks: the3Doodler.com/videos/#tips

3Doodler/EDU
More curricular materials are available at the3Doodler.com/education/.

If you have additional ideas for classroom activities or lessons, feel free to reach out to us at education@the3Doodler.com!