**“NOTIONAL SPACE”**

Written by Camilla S. Haneberg

### SUMMARY

“The notional space is the rectangle formed around an object when you find its height and width. Imagine the notional space as being a clear box that perfectly fits around your object.” - Juliette Aristides

Enduring Understanding: Artists and designers experiment with forms, structures, materials, and art-making approaches.

### OBJECTIVES

- identifying these shapes: rectangle, square
- identifying and verbalizing the orientation of the rectangles and squares as horizontal (lying down) and vertical (standing up)
- matching shape and orientation of a fruit or vegetable with the rectangle or square it fits inside of
- drawing a notional space rectangle or square appropriate to an individual fruit or vegetable, then drawing the object inside the “box”

### STANDARDS

National Art Standards
VA:Cr2.1.3a
VA:Cr2.1.4a
VA:Cr2.1.5a

VA:Cr3.1.3a
VA:Cr3.1.4a
VA:Cr3.1.5a

Literacy Common Core Standards
CCSS:ELA-Literacy.SL.3.1
CCSS:ELA-Literacy.SL.4.1
CCSS:ELA-Literacy.SL.5.1
STANDARDS CONTINUED

Math Common Core Standards:
CCSS.MATH.CONTENT.3.GA.1
CCSS.MATH.CONTENT.4.GA.1
CCSS.MATH.CONTENT.5.GA.1

BACKGROUND INFORMATION

For many years artists have been using strategies and techniques to make their drawings representational. Part of developing visual literacy for artists and budding artists is learning to recognize the overall shape of the object to be represented in the artwork. Knowing how to begin with a notional space helps with accurate proportion as well as placement of the composition onto the paper. The notional space is the first step in establishing a frame of reference for where the object sits in space by touching the uppermost, lowest, furthest right and furthest left points of the object. All these points determine where the notional space is placed.

If you think of a map of an island, and the island is the object that you will draw, the point most north, south, east and west determine where the horizontal and vertical lines will be drawn on your paper. From there you can use those points of reference for accuracy in the proportion of your drawing.

MATERIALS

- a variety of fruits and vegetables: for example...one of each, orange, apple, beet(square), carrot, green bean, sweet potato (rectangle in horizontal orientation), asparagus, celery(rectangle in vertical orientation), spaghetti squash, watermelon(wider rectangle in horizontal orientation).
- “notional box table” handout and “movable viewfinder handout”, one per student
- notional space powerpoint
- scissors, pencils and erasers
- drawing paper, one piece per child
STEP 1

Start by introducing the concept of notional space by using the “movable viewfinder” handout along with the “notional space powerpoint”. Students cut out movable viewfinders before beginning the powerpoint. They can then use the viewfinders to determine the shape and orientation of the notional spaces of the vegetables seen in the powerpoint. Discuss with students using vocabulary: vertical or horizontal rectangle and square.

STEP 2

Place vegetables in various places around the classroom. Make sure you have one to fit each of the notional space “boxes” on the “notional box table” handout. Introduce the term “notational space” as the “box” that the vegetable/fruit fits into. Explain that this is the first step of an accurate drawing of any object. Distribute “notional box table” handout to students. The procedure is for them to wander around and fit the appropriately shaped vegetable into each portion of the table with the corresponding information and drawing. Mingle and quiz the students on the orientation of the shapes on the handout verbally.

STEP 3

Set up mini still lifes for 3-4 students each containing one vegetable or fruit. Prompt them to look for a horizontal or vertical orientation before drawing a notional box. Prompt them also to make the notional space on their drawing paper as big as possible to make a good use of paper.

Students draw a notional space and then draw the vegetable or fruit inside of it.

EXPANDING THE LESSON

- Rotate the vegetables/fruits from area to area and the students can draw them each using a notional box to make them proportional. With 3-4 drawings, students can cut them out and arrange them into a composition, overlapping them to make the illusion of space.
- Coordinate with the math teacher in your school and ask her/him when you can reinforce her/his teaching of the rectangle and its orientation (or cross curricularly teach if you are self contained). Share how you used the movable viewfinder to determine the shape and orientation.
- Math link this exercise to graph points on a coordinate plane by drawing a vegetable and notional space on a piece of graph paper, then adding the x-axis/y axis, then listing the x-coordinate/y-coordinates that make up the shape of the notional space and vegetable/fruit.
- Using one of the Jeffery T. Larson images included in this plan, students can write a description of the painting using the acquired vocabulary: horizontal/vertical rectangle in context.
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<table>
<thead>
<tr>
<th>VERBAL ASSESSMENT</th>
<th>OBSERVATIONAL ASSESSMENT</th>
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<tbody>
<tr>
<td>• While students are completing the “notional box table” handout, verbally quiz</td>
<td>• During the powerpoint/movable viewfinder activity, observe which students are</td>
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<td>the students to see if they are correctly identifying the shapes and orientation</td>
<td>correctly assessing the shape and orientation of the notional spaces</td>
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<td>• During the powerpoint activity, keep the discussion active, reinforcing the</td>
<td>• Checking the answers on the “notional box table” handout is a measurable indicator</td>
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<td>vocabulary with students</td>
<td>of understanding the concepts presented</td>
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<td>• During the still life drawing activity, mingle with students and verbally quiz</td>
<td>• Final drawings will clearly show whether there is comprehension of how a notional</td>
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<td>on the vocabulary presented</td>
<td>box works by seeing if the vegetable/fruit is contained by the furthest points of</td>
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<td></td>
<td>north, south, east and west.</td>
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<th>RUBRIC</th>
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<tr>
<td>shape identification</td>
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<tr>
<td>orientation recognition</td>
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<tr>
<td>matching notional space to vegetable/fruit</td>
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<tr>
<td>drawing notional space for still life</td>
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ADDITIONAL RESOURCES

*Lessons in Classical Drawing: Essential Techniques from inside the Atelier*, Juliette Aristides

The images below are taken from the Art Renewal Center website, www.artrenewal.org

*Peach Crate*, Jeffery T. Larson

*Turnips*, Jeffery T. Larson
MOVABLE VIEWFINDER
Cut out the shapes below, hold them up to determine the notional space around objects you will be drawing.
Find a vegetable that fits into the notional box provided. Fill in the table with the additional information about the notional space (name the shape and orientation). Draw the vegetable.

<table>
<thead>
<tr>
<th>Notional box</th>
<th>Name of shape</th>
<th>Orientation vertical/horizontal</th>
<th>Drawing of vegetable Can you name the vegetable?</th>
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