

# Drawing with the Grid

## Proportions in Drawing

### BIG IDEA:

- Grid exercises: Proportions in drawing

### ESSENTIAL QUESTIONS:

- How does using the grid help the drawing process?
- How does using the grid help enlarge an image when drawing it?

### GOALS: For students to...

- Practice the grid technique redrawing an image the same size.
- Practice using the grid to enlarge an image.

### OBJECTIVES: Students will...

- Learn the process of using a gridded image and gridding a blank sheet of paper to redraw an image in proportion.
- Practice the grid process using basic worksheets.
- Learn the process of enlarging an image using the grid method.

### STANDARDS: <http://www.nationalartsstandards.org/>

- ART:
  - Visual Arts/Creating: VA:CR2.7a: Demonstrate persistence in developing skills with various materials, methods, and approaches...in creating works of art or design
  - Visual Arts/Creating: VA:Cr1.7b: Develop criteria...to guide making a work of art or design to meet an identified goal
  - Visual Arts/Connecting: VA:Cn10.1.HSI: Document the process of developing ideas from early stages to fully elaborated ideas.
  - Cambridge IGCSE – AO4: Selection and control of materials, media and processes. 1. Show exploration and experimentation with appropriate materials. 2. Select and control appropriate media and processes, demonstrating practical, technical, and expressive skills and intentions
  - Cambridge IGCES – AO2: Explorations and development of ideas. 1. Explore a range of visual and/or other ideas by manipulating images.

### SUPPLIES:

- Berenstain Bears worksheets/practices
- Albert Einstein grid image
- 8.5"x11" white paper
- Printed image, divided into 1"x1" squares
- Pencils
- Erasers
- Shading tools (optional)

## PRODUCT:

- Redrawn Berenstain Bears image – to scale (same size)
- Redrawn Berenstain Bears image - enlarged
- Redrawn Albert Einstein image

## PRINTABLES:

- Berenstain Bears worksheets/practices
- Albert Einstein grid
- Viewfinder template

## VOCABULARY:

- **Value:** The lightness or darkness of tones or colors. White is the lightest value; black is the darkest. The value halfway between these extremes is called middle gray.
- **Highlight:** the lightest spot or area; any of several spots in a modeled drawing or painting that receives the greatest amount of illumination.
- **Contrast:** art experts refer to it as the arrangement of opposite elements (light vs. dark colors, rough vs. smooth textures, large vs. small shapes, etc.) in a piece, so as to create visual interest, excitement and drama. Considered a principle of design with variety.
- **Contour line:** a line that defines a form or an edge. The outline or silhouette of a given object or figure. Can also be used to show basic details or changes within the plane of an object.
- **Line quality:** Using a range of types of line to show expression, texture, movement, light, space, etc. to add interest to a drawing.
- **Grid method:** A pattern of parallel lines at right angles drawn on top of an image in order to create a guide to redraw or enlarge the image.
- **Elements of art:** The building blocks of a work of art. The visual components of color, form, line, shape, space, texture, and value.
- **Principles of design:** describe the ways that artists use the elements of art in a work of art. Includes: balance, emphasis, movement, proportion, repetition, pattern, rhythm, unity, and variety.

## **IMPLEMENTATION: A Day: 2/4 (Monday) & B Day: 1/30 (Thursday)**

### **DAY 1: Introduction**

- Have you ever used the grid method to draw an image?
  - Grid Drawing: combining math and measuring skills with art to redraw an image.
  - Grid method: A pattern of parallel lines at right angles drawn on top of an image in order to create a guide to redraw or enlarge the image.
    - Why it's important to learn:

- We often get so focused on trying to draw a face, animal, or object that we start drawing what we *think* we see rather than what we **actually** see.
  - When drawing something accurately you need to focus on the lines and shapes that create the object rather than the object as a whole.
  - It can become overwhelming to try to redraw something complex, like a face, if you are just learning how to draw.
  - The grid method helps to break an image up into smaller sections. This allows you to focus on one box at a time, helping you see the lines and shapes.
- Berenstain Bears Practice Worksheets
  - You will be redrawing the picture(s).
  - Start with simply drawing the bears picture into the grid below – both images will be the same size
    - Focus on just one box at a time
    - Match up the lines in each top box to the box below – use the letters on the side and the numbers in the middle to make sure you are in the same box in both the image and where you are drawing.
  - Now, you are going to ENLARGE the image of the bears on the front into the grid on the second page.
    - Repeat steps above.
- Viewfinders:
  - Another way to help you focus on just one box at a time is to block out the rest of the picture by using a viewfinder.
  - Lay the viewfinder hole over one of the boxes and redraw the lines on the box on the blank gridded sheet. (making sure you are in the matching boxes for both your image and the drawing)
  - You can start at one corner and work across. REMEMBER to pause every now and then and count the boxes to make sure you are working in the same box on the image and on the blank grid (ex: count 2 down, B, and 4 across on the image of the bears, count 2 down, B, and 4 across on the blank grid, it should be the same box you are redrawing on both sheets).
- Complete the 1<sup>st</sup> grid drawing and as much as you can of the second grid drawing... time is limited on this – what you don't finish in class, you will have to do on your own... I am here after school every day until 4 PM.
- Clean-up the last 8 minutes of class. Refer to syllabus for how everything is to be cleaned up and how the class will be dismissed. (VA.Cr.2.6b)

**DAY 2: Albert Einstein worksheet A Day: 2/6 (Wednesday) & B Day: 2/5 (Tuesday)**

- Demo: How to accurately draw the grid onto your blank sheet of paper
  - Line the ruler up with the edge of the paper, with the 0" mark lined up with the top of the paper.
  - Put a small mark at every 1" mark
  - The very last box will only be ½" on the short side of the paper.
  - DO NOT pick up the ruler, instead slide the ruler straight down the paper to the other side and repeat the steps above. (This prevents you from accidentally turning the ruler and ending up with the ½" box on the opposite side.)
  - Line the ruler up with the first mark at the top of your paper, and the first mark at the bottom of the paper and draw a LIGHT line to connect them.
  - Slide the ruler over to connect the next two marks and draw another LIGHT line, repeat until all the lines are drawn on the paper.
  - You should end up with 1"x1" boxes drawn on the paper with one row of ½"x1"
  - Repeating the above steps for the long edges of the paper.

- REMEMBER to draw light lines on the blank sheet because you will erase the grid once your drawing is complete.
  - REMEMBER to pay attention as you measure the grid and to count the boxes to make sure you are drawing in the correct box.
- Clean-up the last 8 minutes of class. Refer to syllabus for how everything is to be cleaned up and how the class will be dismissed. (VA.Cr.2.6b).

**DAY 3: Grid Drawings worksheet wrap up. A Day: 2/7 (Thursday) & B Day: 2/8 (Friday)**

- **All 3 Grid drawings need to be complete by the end of class.**
  - Remember to pay attention to measuring, drawing in the correct box, and erasing the grid lines once you are finished with the drawing.
    - Add the lines to show the shading (3D look) of the image (Albert Einstein)
- Clean-up the last 8 minutes of class. Refer to syllabus for how everything is to be cleaned up and how the class will be dismissed. (VA.Cr.2.6b)

**GRADING:**

- Berenstain Bears worksheets & Albert Einstein drawing will be graded based on accuracy and using the grid checklist

**All Drawings Due:**

**A Day – 2/7 (Thursday)**

**B Day – 2/8 (Friday)**

Name: \_\_\_\_\_

## Berestain Bears & Albert Einstein Grid Checklist

1. Berenstain Bears – same size drawing: Completed : \_\_\_\_\_
2. All squares were accurately drawn and included all the details in the original image: \_\_\_\_\_
3. Berenstain Bears – enlarged drawing: Completed : \_\_\_\_\_
4. All squares were accurately drawn and included all the details in the original image: \_\_\_\_\_
5. Albert Einstein: The drawing's accuracy shows that the grid was drawn correctly: \_\_\_\_\_
6. Albert Einstein: The grid lines were erased: \_\_\_\_\_
7. Albert Einstein: All squares were completed: \_\_\_\_\_
8. All squares were accurately drawn and included all the details in the original image: \_\_\_\_\_

8 checklist items  
Class Work Ethic

8 pts.  
x 5 pts.  
Total Points Possible: \_\_\_\_\_/40

Name: \_\_\_\_\_

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1. Berenstain Bears – same size drawing: Completed : \_\_\_\_\_
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5. Albert Einstein: The drawing's accuracy shows that the grid was drawn correctly: \_\_\_\_\_
6. Albert Einstein: The grid lines were erased: \_\_\_\_\_
7. Albert Einstein: All squares were completed: \_\_\_\_\_
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