

Radial Design Project



Materials Needed:

15 x 15 White Railroad Board
Pencil and Eraser
Protractor
Ruler
#3 Triangle [wedge #3](#). Template
Scissors
Color Pencils
16 x 16 Black Railroad Board
Elmers Glue

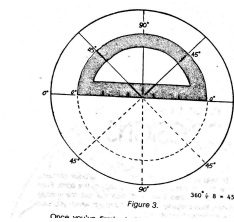
Instructions: [Video Demo](#) for [steps 1 - 3](#), [Video Demo](#) for [step 4](#), [Video Demo](#) for [step 5](#)

1. On the dull side of the 15 x 15 white board, use a ruler and draw a straight pencil line across the middle of the square. Measure the line and mark the center point.

*7.5 is half of 15

2. Now divide the space into 8 sections. Use a protractor to do this. Center it on the straight pencil line and put a pencil mark at both 45 degrees and one at the 90 degree mark (See figure 3). Next, invert the protractor and do the same thing again in the bottom half of the circle. Now connect opposite pencil marks with straight pencil lines running across the circle. Do this carefully and neatly, and check your work to make sure it is accurate.

Keep all pencil lines as light as possible; they will have to be erased later on.



4. Use the template for [wedge #3](#).

*See requirements for your design below this chart.

Use pencil to plan your design.

5. Shade the back side of the wedge template then cut it out. You will use it as a template to trace 8 times onto your 15 x 15 sheet of paper. Use a ball-point pen to trace it so that your design will transfer.

Requirements for your wedge design:

- | |
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| 1. Choose one of the two following themes as your subject matter: <ul style="list-style-type: none">• Hobby, sport, talent or interest• Insect, animal or reptile and their environment |
| 2. There needs to be at least 3 continuous elements (things that would line up and continue all the way around), 2 stand-alone items (things that would not line up), a variety of line types (thin, thick, etc), and a balance between positive and negative (black and white). <ul style="list-style-type: none">• <u>How to line things up:</u> <i>Measure 3 inches up on one side of the wedge, then 3 inches up on the other side of the wedge. A line drawn between those two points will line up and go all the way around the circle when the wedges are put together.</i> |
| 3. Must show a variety of values and at least one gradation. |
| 4. Be creative with the contour of the “circle.” |

Vocabulary:

- **Radial Balance** - A visual balance based on a circle with its design extending from the center.
- **Line of symmetry** - A line of symmetry divides a figure into two mirror-images halves.
- **Point of symmetry** - When every part has a matching part/The same distance from the central point but in the opposite direction. It looks the same when viewed from opposite directions, such as when rotated upside down.
- **Perpendicular** - Vertical, upright, straight up and down.
- **Diameter** - the width of a circle
- **Radius** - a straight line extending from the center of a circle
- **Gradation** - A gradual transition from one value to another value.
- **Value** - The lightness or darkness of tones or colors.