

Chapter 10 Math Link: Wrap It Up!

This worksheet will help you with the Math Link: Wrap It Up! on page 407.

Design a piece of art or a logo using at least two circles.

- Incorporate each circle property that you have studied into your design, and label where you use these properties.
 - You may wish to use some or all of the designs that you created in the Math Link exercises throughout the chapter.
1. Review the circle properties you studied. Describe a radius, central angle, inscribed angle, arc of a circle, perpendicular bisector, chord, congruent, tangent line, and tangent to a circle. Write out what each of these terms means to you.
 2. Prepare your materials. You will need a piece of paper, some scrap paper, grid paper, a compass, a ruler, a protractor, a pencil and eraser, and coloured pencil crayons or markers.
 3. Decide how large your project will be. Label a sheet of scrap paper or grid paper with the dimensions of your finished work.
 4. Draw the circles that will form the basis of your design. Are the circles connected? Is one circle inside of the other? Mark a diameter line across each of the circles to ensure symmetry. Put at least one radius line on the circles.
 5. Use central angles, inscribed angles, chords, and tangents to bring out the shape of letters or an image.
 6. Copy your work onto a piece of paper to make your good copy. Make sure you have straight lines, and that you mark all features of your logo or design on the artwork.
 7. On another piece of paper, create a table such as the one below, using as many rows as you need. Include it with your design. Use the table to describe your art, following the example in the first row.

Circle Property	Measurement	Where It Features in My Artwork
Chord	10 cm long, 6 cm inside larger circle, 90° radius	Top of the larger circle. This chord creates the top of the letter F.