

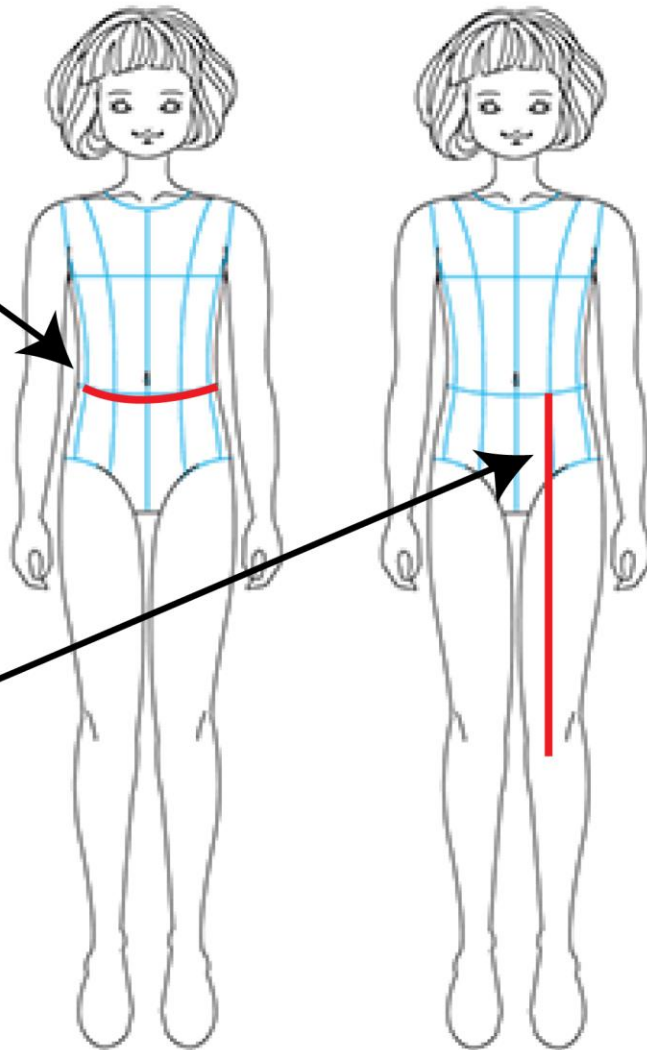
DIY WRAP
Skirts
Handout



Fashion
through science

Step 1:

Measure
around your
waist
circumference



Measure down from
your waist to a desired
length to obtain the
skirt height.

Height	Length
4'-4'5"	16"
4'6" -5'4"	18"
5'5" -6'	21"



Instructions:

1. Measure around your waist with a measuring tape. Add 10-12” to this measurement. This is the amount to add for the overlapped wrap section of your skirt. Write this number down.
2. Measure down from your waist for your desired skirt length. Write this number down. Check the table of suggested lengths on the previous page. You can choose to make your skirt longer!
3. Now you will draw the waist of your skirt directly on the fabric, using chalk. You will draw a half circle centered on the long **selvage** edge of the fabric. Fold the selvage edge of your fabric to find the middle, and put a pin in this spot.

VOCABULARY

Selvage (Selvedge) : the finished edge on woven fabric produced during manufacture that prevents it

4. To draw a half circle that will be the right measurement for your skirt, we need to know the radius for the circumference of a circle made using the waist measurement plus the 10-12” overlap (step 1). If you know the circumference, you can calculate the radius using the formula:

where:
 $C / 2\pi = \text{radius}$ **C** is the **circumference** of the waist plus overlap circle
 π is **Pi**, approximately 3.142

You can calculate your radius, but you can also look it up on the chart on the next page!

VOCABULARY

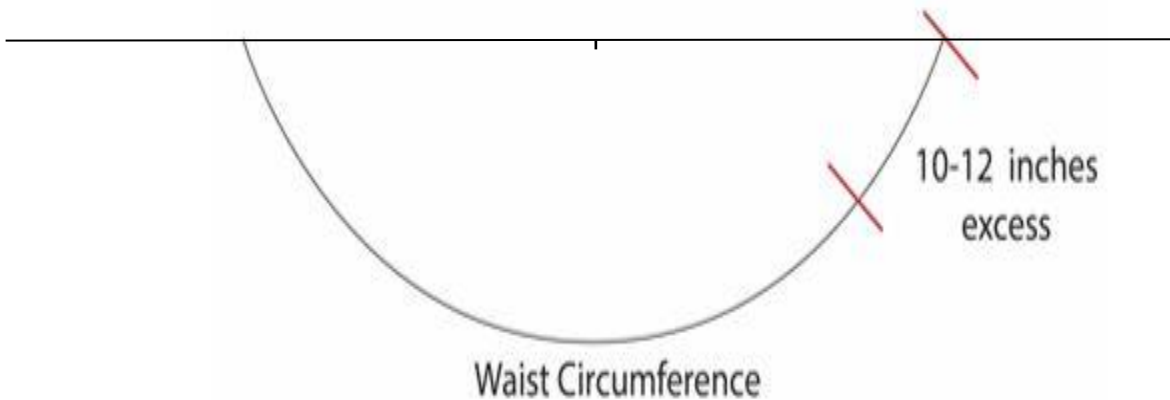
Circumference: the distance around the outer edge of a circle

Radius: a straight line from the center to the circumference of a circle

Find your waist measurement on the left, and look for the radius in the last column.

Radius Measurements

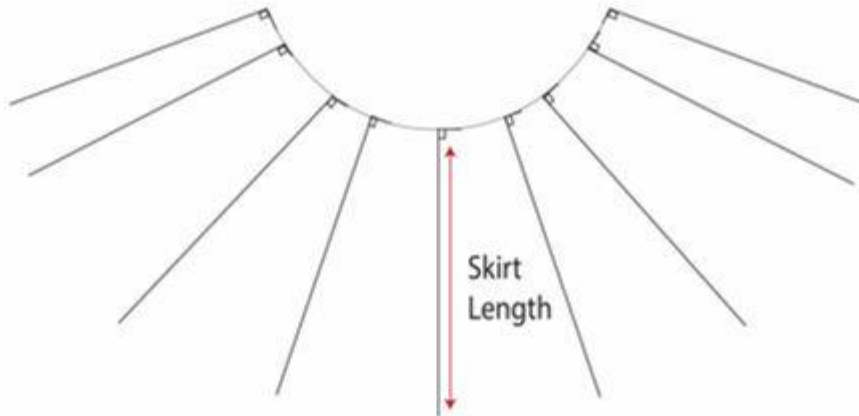
Waist Measurement (inches)	Waist Measurement + 11 inches	Radius Rounded to Nearest ¼ inch
16	27	4.25
17	28	4.5
18	29	4.5
19	30	4.75
20	31	5
21	32	5
22	33	5.25
23	34	5.5
24	35	5.5
25	36	5.75
26	37	6
27	38	6
28	39	6.25
29	40	6.5
30	41	6.5
31	42	6.75
32	43	6.75
33	44	7



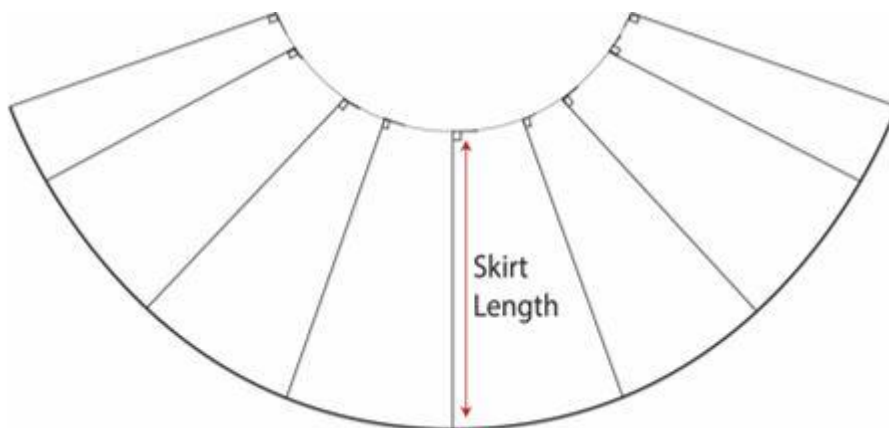
5. Tie one end of a piece of string the string to the chalk. Measure the length of the radius on the string starting from the chalk and put a knot at this spot. Align the knot with the center mark on the selvedge of your fabric. With the string pulled tight, rotate it and draw a smooth curve on the fabric with the chalk (see above).
6. Now mark radiating lines perpendicular to the waist curve (place the end of your yardstick flat along the waist curve to make your line perpendicular). The length of the lines should be the skirt length measurement taken previously. See image below:

VOCABULARY

Perpendicular: a straight line at an angle of 90° to a given line, plane, or surface.



7. Join the ends of the radiating lines to form a smooth curve, completing the outline of your skirt. See image below.



8. Following the chalk lines, cut out your flared skirt.
9. Measure ribbon or bias tape. Wrap it around your waist twice, and add enough to tie a bow, or cut 3x your waist measurement.
10. Pin the bias tape or ribbon to the skirt waistline, starting from the center of the fabric, and of the ribbon, and working your way to the sides.
11. Sew the bias tape or ribbon to the waistline, removing the pins along the way.
12. Sew a straight stitch, zig-zag stitch, or serge along the raw edges of the skirt so it does not fray.

13. Your skirt is now ready to wear and personalize with ribbons, buttons, fabric markers. OR make it light up by applying LED lights, to turn your creation into wearable electronic art!

