





PATTERN ADJUSTMENT

CF = center front CB = center back CM = chest measurement HM = hip measurement WM = waist measurement

Self-made with perfect fit!

Sewing for children is fun and rewarding as you can make exactly the kind of clothes you want and ensure that they are the right fit. However, children, just like adults, have their own body type, and therefore even a high-quality sewing pattern might require adjustments if you want to achieve a perfect fit. Pattern adjustments are not difficult to make once you master certain basic rules.



What does the pattern size indicate?

OTTOBRE design® magazines use the European sizing system, in which the clothes sizes are based on the child's height. The other measurements that affect the fit of clothes are given in our size charts. The pattern sizes are expressed in centimeters in increments of 6 cm, usually starting at size 50 cm.

The size number means that a size 104 cm pattern, for example, is the best fit on a child whose height is around 104 cm and whose chest, waist and hip measurements correspond to those given in the size chart for that height.

The most important length measurements to be checked against the size chart are the sleeve length, the outside leg length and the back waist length. You'll find the size charts and measuring instructions on the next page. You can print out a fill-in body measurement chart from our website.

Does the pattern allow for growing room?

Besides the design ease and the amount of ease that works for the intended fabric, the patterns include the necessary wearing ease.

The patterns do not have a built-in allowance for growing room. However, we occasionally add features to our designs that extend the life of the garment. These include turn-up sleeve or leg cuffs, an extra set of snap fasteners at the crotch of a bodysuit, or adjustment buttons on shoulder straps.

When a child grows 6 cm, which corresponds to one pattern size, the chest, waist and hip measurements only increase by 2-3 cm. If the child's measurements correspond to those of the size chart, it's not advisable to add any extra for growing room except perhaps to the length measurements of the pattern.

How to choose the correct pattern size?

For a start, it's essential to take the child's measurements carefully. Measure the child's height first, then find the pattern size in the size chart that corresponds closest to the height.

- If the child's height (e.g. 101 cm) falls between two pattern sizes, choose the size by comparing the child's chest, waist or hip measurement with the corresponding measurements in the size chart. If the difference between the measurements is only ± 1–2 cm, there is no need to adjust the pattern. The bigger pattern size (in this case 104 cm) will work well!
- If the child is slightly slimmer than the size chart measurements, choose the smaller size (in this case 98 cm) and add I-2 cm extra to the sleeve length and to the hemline of a shirt, or 2-3 cm to the length of pants legs or to the hemline of a dress. Adjust the sleeve, hemline and leg lengths when you try the garment on the child.

My child's girth measurements don't correspond to those in the size chart – what can I do?

You can adjust the pattern using two alternative methods, depending on the amount of width that needs to be decreased or increased.



SIZE CHARTS

For taking the measurements, you'll need a tape measure and a length of firm tape that is placed round the waist. You can sew a waist tape for this purpose of a strip of cotton folded in four (finished width 15 mm). Place the tape horizontally round the child's waist and secure with a safety pin.

MEASURING

THE CHILD

The child should stand upright with a relaxed posture with the arms hanging free at the sides.

The measurements are taken on top of underwear (briefs or panties and a light-weight undershirt) close to the body, yet not too tight. It is advisable to take the measurements in front of a mirror so that you can see the position of the tape measure behind the child.

Height of the child:

With the child standing up with the back and heels against a wall, mark the height at the top of the head on the wall using a straight angle (e.g. a book). The height of the child is the distance measured from the floor to the marking.

Chest measurement:

Horizontal measurement round the body with the tape measure running over the chest and shoulder blades.

Waist measurement:

Measurement round the waist without the waist tape.

Hip measurement:

Horizontal measurement round the seat (the fullest part of the bottom).

Outside leg length:

Distance from the waist to the floor measured from the lower edge of the waist tape.

Inside leg length: Distance from the crotch to the floor when the child is standing legs slightly apart with the weight evenly on both feet.

Shoulder length:

Distance from the base of the neck to the tip of the shoulder.

Arm length:

Distance from the tip of the shoulder to the wrist measured over the elbow with the arm slightly bent.

Back waist length:

Distance from the most prominent vertebra at the base of the neck to the lower edge of the waist tape.

The measurements in the chart are taken on the body. The patterns include the necessary allowances for ease of movement.

BABIES 50-92 cm

Height cm	50	56	62	68	74	80	86	92
I. Chest measurement	43	44.5	46	47.5	49	50.5	52	54
2. Waist measurement	46	47	48	49	50	51	52	53
3. Hip measurement	51	52	53	54	55	56	57	58
4. Arm length	18	20	22	24	26	28	30	32
5. Inside leg length	15	18	21	24	27	30	33.5	37



PRESCHOOLERS 92–122 cm

Height cm 98 104 110 116 92 122 I. Chest measurement 54 56 58 60 62 64 53 57 58 2. Waist measurement 54 55 56 3. Hip measurement 58 60 62 64 68 66 4. Back waist length 22.5 24 25 26.5 28 29.5 5. Arm length 32 34 40 42 36 38 58 62 70 74 6. Outside leg length 54 66 7. Shoulder length 8.0 8.4 8.8 9.2 9.6 10

GIRLS AND BOYS

GIRLS 128–170 cm

Height cm	128	134	140	146	152	158	164	170
I. Bust measurement	66	68	71	73	76	79	82	85
2. Waist measurement	59	61	63	64	66	68	70	72
3. Hip measurement	70	72	75	79	82	85	88	91
4. Back waist length	31	32.5	34	35.5	37	38.5	40	41.5
5. Arm length	44	46	48	50	52	54.5	57	59.5
6. Outside leg length	78	82	86	90	93.5	97	100.5	104.5
7. Shoulder length	10.4	10.8	11.2	11.6	12	12.4	12.8	13.2

BOYS 128-170 cm

Height cm	128	134	140	146	152	158	164	170
I. Chest measurement	66	68	71	75	78	81	84	87
2. Waist measurement	59	61	63	66	68	70	72	74
3. Hip measurement	70	72	75	78	81	84	87	90
4. Back waist length	31	32.5	34	35.5	37	39	41	43
5. Arm length	44	46	49	51.5	54	56.5	59	61.5
6. Outside leg length	78	82	86	90	93.5	97	100.5	104
7. Shoulder length	10.4	10.8	11.2	11.6	12	12.5	13	13.5









TRACE THE PATTERN BY COMBINING TWO PATTERN SIZES

If the child's girth measurements differ by 2–5 cm from the size chart, trace the pattern as follows:

A.1 TOP GARMENT

(shirt, tunic or dress)

Choose the pattern size according to the child's chest or waist measurement and trace the hemline and the bottom edge of the sleeve from the pattern size that corresponds to the child's height. (Figures 1 and 2)

If the design has a bodice and a lower section, joined with a waist seam, trace the bottom edges of both pieces from the pattern size that corresponds to the child's height.



Figure I Top garment for a slim child (- 2-5 cm)



Figure 2 Top garment for a plus-size child (+ 2–5 cm)

A.2 PANTS

Choose the pattern size according to the child's hip measurement. Trace the bottom edges of the legs from the pattern size corresponding to the child's height. (*Figures 3 and 4*)

- If the pants have a front placket (with a zipper or buttons) and a fitted waistline, check and adjust the waist width when you try the garment on the child. Make adjustments also to the waistband pattern if necessary.
- On pants with an elasticated waist, no adjustment is required to the waistline as the waist width on the pattern is the same as the hip width.



Figure 3 Pants for a slim child (- 2-5 cm)



Figure 4 Pants for a plus-size child (+ 2-5 cm)



CUT UP AND SPREAD THE PATTERN TO ENLARGE (PLUS SIZES)

If the child's girth measurements differ by + 6–8 cm from the size chart, adjust the pattern as follows:

B.1 TOP GARMENT

(shirt, tunic or dress)

Choose the pattern size according to the child's height and adjust the pattern to correspond to the child's girth measurements. Examine the child's measurements and choose either the chest measurement (CM) or waist measurement (WM), according to whichever differs most from the size chart measurement, as the base for pattern adjustment.

Calculate the required width increase as follows: Child's CM or WM minus size-chart CM or WM = width increase (X). Divide the width increase by four $(X \div 4=Y)$ because the patterns for the front and back represent halves of the garment pieces.



Figure 5A

Cut up the patterns for the front and back as shown in figure 5A, then pin and glue the pieces on pattern tissue as shown in figure 5B.

- 1. Add 2–4 mm to the center-front and center-back edges of the pieces A of the front and back. The garment's neckline will thus widen slightly.
- Lay pieces A and C side by side, leaving a gap of Y minus 2–4 mm between them. The chest, waist and hip widths of the pattern should now be the right fit.
- Lay piece B above piece C, leaving a gap of 6–10 mm between it and piece A.
- **4.** Redraw the underarm curve and the side seam to the armhole point on the adjusted patterns for the front and back. Since the armhole becomes slightly wider, widen the sleeve pattern accordingly.
- 5. Add 1–2 cm extra length to the hemline and adjust the hemline when you try the garment on the child.



Figure 5B

B.2 PANTS

Choose the pattern size according to the child's height and adjust the pattern to correspond to the child's girth measurements. Take the child's waist measurement (WM) and hip measurement (HM) and compare these with the size chart.

Calculate the required width increase as follows: Child's WM or HM minus size-chart WM or HM = width increase (X). Divide the width increase by four $(X \div 4=Y)$ because the patterns for the pants front and back each represent a quarter of the width of the garment.

Cut up the patterns for the pants front and back as shown in figure 6, then pin and glue the pieces on pattern tissue as shown in figure 7 or 8 (see pages 8 and 9).

- Adjusting the pattern by adding the same amount of width to the hip and waist works for the rectangular body shape (figure 7).
- Adjusting the pattern to accommodate a full waist works for a child who has a round belly but whose other measurements correspond to those in the size chart (figure 8).



Figure 6 Pants for a plus-size child (+ 6-8 cm)



Rectangular body shape

Body with a full waist

B.2.1 RECTANGULAR BODY SHAPE

Pattern adjustment by adding the same amount of width to the hip and waist works for the rectangular body shape.

ADDING THE SAME AMOUNT OF WIDTH TO THE HIP AND WAIST (figure 7)

- 1. Lay pieces A and B side by side, leaving between them a gap that corresponds to a quarter of the calculated hip width increase (Y). The hip width should now be the right fit. Lay piece C below pieces A and B.
- 2. Check the waist width and, if necessary, decrease it at the side seam on the pattern for the pants back (red line). If the pants have front-hip pockets, redraw the side seamline also on the pattern for the front-hip pocket piece.

Note! If the pants have a front placket (with a zipper or buttons) and a fitted waistline, check and adjust the waist width when you try the garment on the child. Make adjustments also to the waistband pattern if necessary.

On pants with an elasticated waist, no adjustment is required to the waistline as the waist width on the pattern is the same as the hip width.

- **3.** Raise the front and back waistlines by 1–2 cm. Redraw the waistline on the patterns for the front-hip pocket piece and pocket facing.
- Redraw the leg inseams and side seams. At the same time, increase the crotch length at the leg-inseam edges by 3–6 mm.
- If the required width increase (X) is big, widen the leg bottoms at the side-seam and leg-inseam edges by 3–5 mm. If the design has leg cuffs, adjust the pattern for them accordingly.
- 6. Check the placement and size of the back pocket.







B.2.2 BODY WITH A FULL WAIST

Pattern adjustment to accommodate

a full waist works for a child who has a round belly but whose other measurements correspond to those in the size chart.



INCREASING THE WAIST WIDTH (figure 8)

- Lay pieces A and B side by side, leaving between them a gap that at the waistline corresponds to a quarter of the calculated waist width increase (Y). The waist width should now be the right fit. Lay piece C below pieces A and B. Adjust the waistband pattern accordingly.
- Raise the front and back waistlines by I-2 cm. Adjust the patterns for the front-hip pocket piece and pocket facing accordingly.
- 3. At the same time, increase the crotch length at the leg-inseam edges by 3–6 mm.
- 4. Check the placement and size of the back pocket.



Figure 8 Adjustment to accommodate a full waist

B.2.3 ADJUSTING THE PATTERN AROUND THE BOTTOM

(figures 9, 10 and 11)

Examine the shape of the child's body and adjust the pattern to fit the shape of the bottom. On well-fitting pants, the back waistline is straight, whereas the front waistline slopes slightly toward the center-front.





Flat bottom

Round bottom

PATTERN ADJUSTMENT TO ACCOMMODATE A ROUND BOTTOM (Figure 10)

If the wearer has a round bottom, the crotch seam might be too short, causing the waistline to lie too low at the center-back. The pants might not stay on properly and might feel too tight round the bottom.

- Adjust the pattern for the pants back as shown in figure 10: Cut the pattern in half along the hip line and spread pieces A and B apart. The amount of increase to the crotch length is 1.5–3 cm.
- Raise the waistline by I-2 cm at the center-back and adjust the height of the back waist when you try the garment on the child.
- 3. Increase the crotch length at the leg-inseam edge by 3–6 mm.
- 4. Redraw the side seam, creating extra ease around the bottom.





Figure 9

Figure 10 Pattern adjustment to accommodate a round bottom

PATTERN ADJUSTMENT TO ACCOMMODATE A FLAT BOTTOM (Figure 11)

If the wearer has a flat bottom, the crotch seam might be too long, causing the waistline to lie too high at the center-back. The pants might feel too slack around the bottom.

- Adjust the pattern for the pants back as shown in figure 11: Cut the pattern in half along the hip line and overlap the edges of pieces A and B. The amount of decrease to the crotch length is 1.5–2.5 cm.
- 2. Redraw the crotch seam and, if necessary, decrease the crotch length at the leg-inseam edge by 2–4 mm.
- **3.** Redraw the side seam and, if necessary, straighten the curve of the side seam slightly at the end of the hip line.



Figure 9

Figure 11 Pattern adjustment to accommodate a flat bottom

Α

B

(3)

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FINAL TOUCH TO THE PANTS PATTERN ADJUSTMENT:

Lay the patterns for the pants front and back side by side along the upper portions of the leg inseams and check that the curve of the crotch seam is regular. (Figure 12)

Figure 12

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