Instructions

Find the expected date of delivery (EDD) on the calendar and work upwards in the same column to find the weekly dates needed for the preterm date boxes until birth gestation is reached. For fortnightly dates on the 2 weeks to 6 months chart, work downwards in the same column from EDD (or DOB for term infants).

If DOB or EDD is 31st December use 30th December; in a leap year use 28th February for 29th February. The date box date at 6 months may differ from the calendar months date by up to 2 days, if the error exceeds 2 days then the boxes are dated wrongly.

When you get to the top of calendar (when working upwards from EDD) start again at the bottom in the same column.

Week			Day					Month
1	2	3	4	5	6	7		January
8	9	10	11	12	13	14		
15	16	17	18	19	20	21		
22	23	24	25	26	27	28		
29	30	31	1	2	3	4		February
5	6	7	8	9	10	11		
12	13	14	15	16	17	18		
19	20	21	22	23	24	25		
26	27	28	1	2	3	4		March
5	6	7	8	9	10	11		
12	13	14	15	16	17	18		
19	20	21	22	23	24	25		
26	27	28	29	30	31	1		April
2	3	4	5	6	7	8		
9	10	11	12	13	14	15		
16	17	18	19	20	21	22		
23	24	25	26	27	28	29		
30	1	2	3	4	5	6		May
7	8	9	10	11	12	13		
14	15	16	17	18	19	20		
21	22	23	24	25	26	27		
28	29	30	31	1	2	3		June
4	5	6	7	8	9	10		
11	12	13	14	15	16	17		
18	19	20	21	22	23	24		
25	26	27	28	29	30	1		July
2	3	4	5	6	7	8		
9	10	11	12	13	14	15		
16	17	18	19	20	21	22		
23	24	25	26	27	28	29		
30	31	1	2	3	4	5		August
6	7	8	9	10	11	12		
13	14	15	16	17	18	19		
20	21	22	23	24	25	26		
27	28	29	30	31	1	2		September
3	4	5	6	7	8	9		
10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29	30		
1	2	3	4	5	6	7		October
8	9	10	11	12	13	14		
15	16	17	18	19	20	21		
22	23	24	25	26	27	28		
29	30	31	1	2	3	4		November
5	6	7	8	9	10	11		
12	13	14	15	16	17	18		
19	20	21	22	23	24	25		
26	27	28	29	30	1	2		December
3	4	5	6	7	8	9		
10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29	30		

Once you reach the end of the year start again at the top, in the same column.

BOYS UK–WHO
Neonatal and Infant Close Monitoring Growth Chart
23 weeks gestation to 2 years corrected age

RCPCH
Royal College of Paediatrics and Child Health
Leading the way in Children's Health

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Plotting instructions

From birth until 2 weeks after the expected date of delivery (EDD) plot measurements on the **23-42 weeks gestation** chart. From EDD plus 2 weeks (42 weeks gestation) plot measurements on the **2 weeks to 6 months** chart.

Gestational correction is always required when plotting babies born **preterm** (before 37 completed weeks of gestation). Do not apply any gestational correction for **term** babies (37-42 completed weeks of gestation). If desired the chart may also be used to look up relative size for gestation but **always plot birth data for babies born between 37-42 completed weeks at 40 weeks.**

Calculating gestational, post-menstrual and corrected age from dates is difficult and mistakes are common. Although the chart can be plotted in the conventional way, this chart provides **date boxes** which will allow you to move directly from dates to gestational age and reduce the risk of error. To do this effectively, when first used the chart needs to be prepared as below.

> Before starting plotting use the calendar to fill in date boxes. Then use the date boxes for speedy and accurate calculation of age.

For preterm infants

1. If expected date of delivery (EDD) is not known, plot birthweight at the exact gestational age and then calculate the date of the next completed week (e.g. for date of birth (DOB) 24/2/09 at 27 weeks +3 days gestation, date at 28 weeks gestation will be 28/2/09). Then write in the date (day and month only) at each completed week of gestation, using the calendar (left) as a guide, until EDD is reached.

2. If EDD is known, write into the date box marked EDD then work backwards on the 23-42 weeks chart, writing in the date (day and month only) using the calendar (left) as a guide, for each completed week of gestation until birth gestation is reached.

> The date boxes are <u>weekly</u> on page 1 (23-42 weeks)
> <u>Fortnightly</u> on page 2 (2 weeks to 6 months)
> Per <u>Calendar month</u> on page 3 (6-24 months)

For all infants

After 42 weeks post-menstrual age use the **2 weeks to 6 months** chart. Mark the expected date of each **completed fortnight** after EDD (or DOB for term infants) in the boxes at the bottom of the chart, using the calendar (left) as a guide, and use these to identify the gestationally corrected age.

On the **6 months to 2 years** chart the date boxes are per **calendar month** (4.33 weeks). These dates can be calculated using the date in the EDD box. If a child's EDD was 23/1/10 then mark 23/7/10 in the 6 month box, 23/8 in the 7 month box, 23/9 in the 8 month box, etc. By age 6 months the data box date may be up to 2 days different from the calendar months date. This is not a problem, but the calendar month date should be used from 6 months. If day error is >2 days then a mistake has been made in dating the boxes.

> For preterm infants this chart is wholly gestationally corrected, using the date box method. Unlike the UK-WHO A4 chart the arrow drawn back method should not be used. New users need to be taught how to use this chart. A fact sheet and powerpoint can be downloaded free from www.growthcharts.rcpch.ac.uk

Which children is this chart suitable for?

This chart has been designed for plotting growth measurements of preterm infants from birth to the age of 2 years post-menstrual age. The chart is also suitable for term neonates or young infants requiring close monitoring. After this the UK-WHO 0-4 years charts can be used. For healthy preterm babies born at or after 32 weeks gestation the UK-WHO 0-4 years charts can be used from birth, unless there is a need for detailed growth assessment.

A specialist growth chart for low birthweight

The special features of this chart include:
- A 'date box' system to assist accurate calculation of gestational age
- Large scale for detailed monitoring
- Low reading (SD) lines to allow assessment of very small infants

The three charts display data from two sources:

1. **23-42 weeks gestation.** This chart is based on reanalysed *UK1990 data* and illustrates the size at birth of UK infants born at 23-42 weeks gestation around 1990[1]. The 23-42 weeks gestation chart does *not* describe how preterm infants grow after birth because it shows only birth measurements of infants born at different gestational ages. The weight of many babies born before 32 weeks, particularly the sickest and most immature, may fall by more than two centile spaces in the early days.

2. **2 weeks to 6 months corrected age** and **6 months to 2 years corrected age charts.** These charts are derived from the UK-WHO 0-4 years growth charts and use *World Health Organization (WHO)* data on healthy, non-deprived breastfed children of mothers who did not smoke[3]. These charts do not reflect the usual growth of the preterm infant population. However individual infants who have remained well should follow the trajectory indicated by the centile lines at their corrected age.

Measuring

Remove all clothing, including caps or bonnets, footwear and nappy.

Weight: Use class III electronic scales.

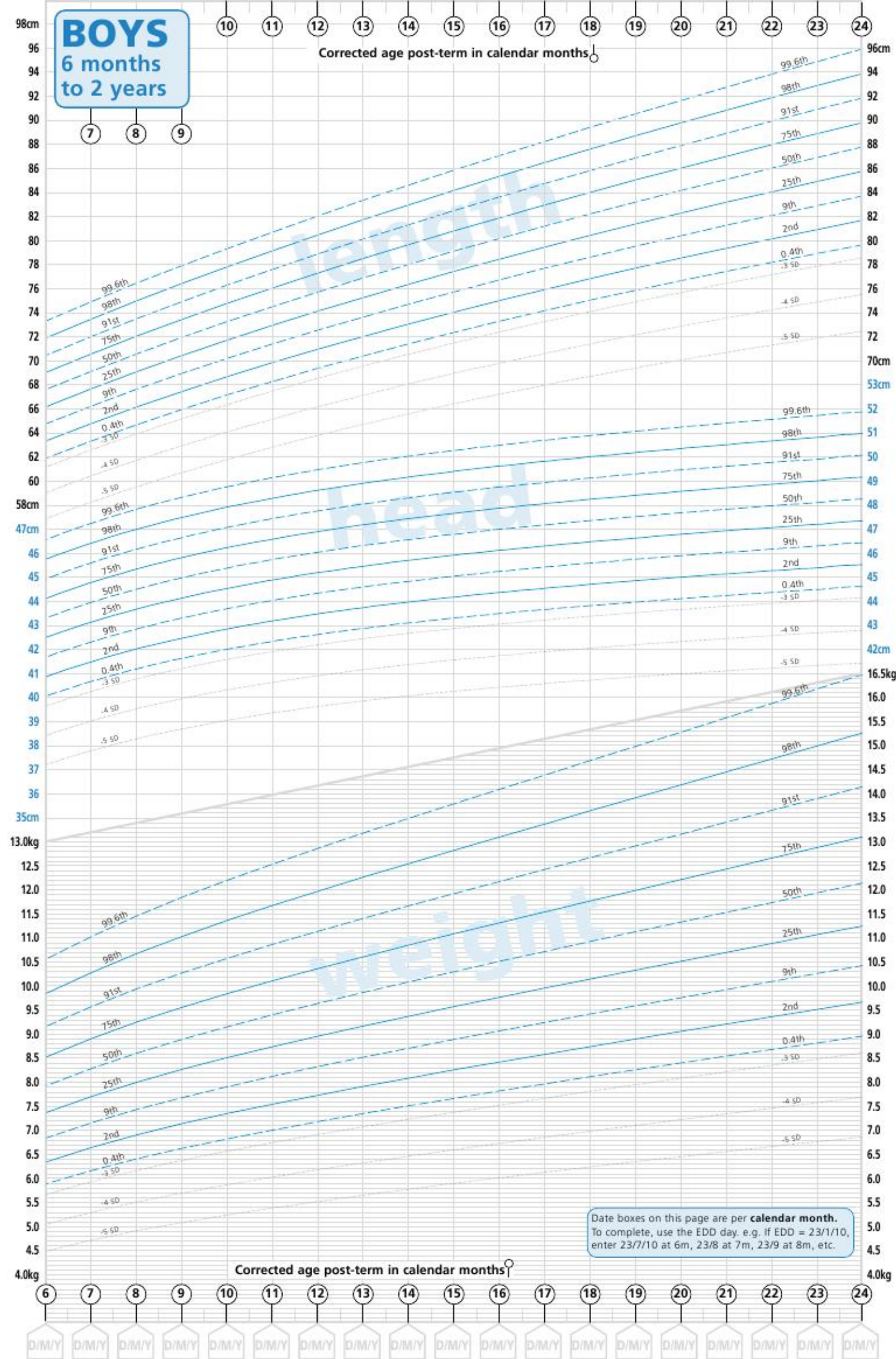**Length:** Use length board or mat. Do not use measuring tape.

Head circumference: Use non-stretchable tape.

Anyone who takes measurements should be suitably trained or supervised by someone competent. For further information and training materials see **www.growthcharts.rcpch.ac.uk**

This is a new chart which is still being evaluated and any feedback will be appreciated, via the feedback form on **www.growthcharts.rcpch.ac.uk**

References
1. Cole TJ, Freeman JV, Preece MA. British 1990 growth reference centiles for weight, height, body mass index and head circumference fitted by maximum penalized likelihood. Stat.Med. 1998;17:407-29.
2. WHO Child Growth Standards www.who.int/childgrowth/en
3. Engle WA; American Academy Of Pediatrics. Age Terminology During The Perinatal Period: Policy Statement. Pediatrics 2004 114:1362-4.

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BOYS 6 months to 2 years

Corrected age post-term in calendar months

Date boxes on this page are per **calendar month**. To complete, use the EDD day. e.g. If EDD = 23/1/10, enter 23/7/10 at 6m, 23/8 at 7m, 23/9 at 8m, etc.

Corrected age post-term in calendar months