

12 Dogs Mean, Median and Range

At Guide Dogs we breed and train dogs that help people with sight loss get out and about and live independently. Today we're focusing on a recent litter of 12 Puppies, 6 boys and 6 girls, born to guide dog mum Abby.

When Abby's puppies were born, they only fed from their mums' milk, their eyes were closed and their movement was limited. At 2.5 weeks old they were each eating small amounts of dry food 3x a day and were still having mum's milk. At 4 weeks old they began exercising in the garden. By the time they reached 6 weeks old they were fully weaned (no longer receiving milk) onto puppy food and ready to leave mum.

The following tables show information on the weight of the 12 Puppies from birth to 6 weeks.

Using the information in table 1 can you work out the range of each male puppy's weight and fill in the last column in table 1?



Table 1 male puppy weights

Weight in grams	Birth weight	Week 1 weight	Week 2 weight	Week 3 weight	Week 4 weight	Week 5 weight	Week 6 weight	Range
Arrow	470	770	1007	1530	2240	2830	3730	
Baxter	370	510	860	1420	2000	2690	3540	
Chaz	430	610	930	1580	2090	2750	3720	
Dell	390	540	900	1520	2110	2730	3610	
Elmo	400	660	990	1480	2210	2820	3740	
Ford	490	650	1180	1630	2290	2880	4100	

Which of the male puppies has the smallest weight range?

How could this affect their growth and development?

Which of the male puppies has the largest weight range?

How could this affect their growth and development?

What factors could cause these differences in weight between the puppies?

Table 2 female puppy weights

Weight in grams	Birth weight	Week 1 weight	Week 2 weight	Week 3 weight	Week 4 weight	Week 5 weight	Week 6 weight
Goldie	400	540	1010	1450	2150	2710	3780
Inca	360	520	910	1430	2080	2710	3550
Jessie	450	630	1080	1400	2060	2800	3900
Kira	480	620	1000	1480	2100	3010	3800
Lola	390	540	880	1450	2090	2840	3720
Milly	430	630	1040	1510	2250	2810	3750

Use the data from table 2 to calculate the Mean, Median and Range of the female puppy weights from birth to week 6 and fill out table 3.

Table 3

	Mean	Median	Range
Birth			
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			

What is the average weight of the female pups when they are born?

Is there any correlation between the average weight (mean) and the middle value (median)?

What can this tell us about the puppies?

How does the range of weights differ over the 6 weeks of data?

Why could this be important to Guide Dogs?

How could the volunteers have influenced the reduction in range when the puppies were weighed at 3 weeks old?

What factors could have had an impact on the range when the puppies were weighed at 5 weeks old?