

Dental Growth and Development

Primary Dentition						
	Calcification begins at	Formation complete at	Eruption		Exfoliation	
			Maxillary	Mandibular	Maxillary	Mandibular
Central incisors	4 th fetal mo	18-24 mo	6-10 mo	5-8 mo	7-8 y	6-7 y
Lateral incisors	4 th fetal mo	18-24 mo	8-12 mo	7-10 mo	8-9 y	7-8 y
Canines	4 th fetal mo	30-39 mo	16-20 mo	16-20 mo	11-12 y	9-11 y
First molars	4 th fetal mo	24-30 mo	11-18 mo	11-18 mo	9-11 y	10-12 y
Second molars	4 th fetal mo	36 mo	20-30 mo	20-30 mo	9-12 y	11-13 y

Permanent Dentition					
	Calcification begins at	Crown (enamel) complete at	Roots complete at	Eruption*	
				Maxillary	Mandibular
Central incisors	3-4 mo	4-5 y	9-10 y	7-8 y (3)	6-7 y (2)
Lateral incisors	Maxilla: 10-12 mo Mandible: 3-4 mo	4-5 y 4-5 y	11 y 10 y	8-9 y (5)	7-8 y (4)
Canines	4-5 mo	6-7 y	12-15 y	11-12 y (11)	9-11 y (6)
First premolars	18-24 mo	5-6 y	12-13 y	10-11 y (7)	10-12 y (8)
Second premolars	24-30 mo	6-7 y	12-14 y	10-12 y (9)	11-13 y (10)
First molars	Birth	30-36 mo	9-10 y	5.5-7 y (1)	5.5-7 y (1a)
Second molars	30-36 mo	7-8 y	14-16 y	12-14 y (12)	12-14 y (12a)
Third molars	Maxilla: 7-9 y Mandible: 8-10 y			17-30 y (13)	17-30 y (13a)

* Figures in parentheses indicate order of eruption. Many otherwise normal infants do not conform strictly to the stated schedule.

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 Logan WHG, Kronfeld R. Development of the human jaws and surrounding structures from birth to the age of fifteen years. J Am Dent Assoc 1933;20(3):379-427.