

DIFFERENCES BETWEEN EXTINCT MASTODONS AND MAMMOTHS

	American mastodon <i>Mammot americanum</i>	Mammoths For example, <i>Mammuthus primigenius</i>
BODY COVERING	1. Unknown. The possibility exists that body covering included underfur and long hair	1. Long hair, dense underwool; skin thickness similar to that of living elephants; subcutaneous fat up to 9.0 cm (3 ¹ / ₂ in) thick
SKELETON	<ol style="list-style-type: none"> 1. On the whole, stockier, with heavier frame 2. Head and shoulders are slightly above hindquarters 3. More thoracic vertebrae (20–21 pairs) 	<ol style="list-style-type: none"> 1. More delicately built 2. Head and shoulders are much above hindquarters 3. Fewer thoracic vertebrae (18–20 pairs)
CRANIUM	<ol style="list-style-type: none"> 1. Flattened on top and bottom (low-domed) 2. Borders of eye socket are rounder 3. Tusks project slightly below horizontal, curve outward and then inward 	<ol style="list-style-type: none"> 1. Flattened on front and back (high-domed) 2. Borders of eye socket are squarer 3. Tusks project much below horizontal, curve outward and then much more inward
MANDIBLE	<ol style="list-style-type: none"> 1. Elongated 2. Sometimes possess a pair of incisors (tusks) at front 	<ol style="list-style-type: none"> 1. Shortened (brevirostry) 2. No incisors (see under dentition)
DENTITION	<ol style="list-style-type: none"> 1. Nipple-like chewing surface (bunodont, adapted for browsing) 2. Low-crowned (brachyodont) 3. Crown without or with very little bonding material (cement) 4. Thicker enamel 5. Fewer ridges per a given length (low Laminary Index) 6. Dental formula is: $\begin{array}{c} 1 \ 0 \ 3 \ 3 \quad 1 \ 0 \ 3 \ 3 \\ \text{————— or —————} \\ 0 \ 0 \ 3 \ 3 \quad 1 \ 0 \ 3 \ 3 \end{array}$ a total of 26–28 teeth 	<ol style="list-style-type: none"> 1. Flat chewing surface with ridges (lophodont, adapted for grazing) 2. High-crowned (hypsodont) 3. Crown with much cement 4. Thinner enamel 5. High Laminary Index 6. Dental formula is: $\begin{array}{c} 1 \ 0 \ 3 \ 3 \\ \text{—————} \\ 0 \ 0 \ 3 \ 3 \end{array}$ a total of 26 teeth
FEEDING HABITS	<ol style="list-style-type: none"> 1. Fed on a variety of plant material, twigs and leaves being most commonly eaten (mostly browser) 2. Jaws used in crushing action in up-and-down motion 	<ol style="list-style-type: none"> 1. Fed on a variety of plants, grasses being the most commonly eaten (mostly grazer) 2. Jaws used in grinding action in a forward-backward motion

Figure 6. Differences Between Extinct Mastodons and Mammoths.

Shoshani, (ed.) 1992, (p 56.),
Frank Knight, Illustrator