

Stratigraphic Units That Can Be Seen From Ft. Niobrara (Note-taking Pages)

Formation Name	How long ago	Name of Time	Description	Depositional Environment	Climate	Fossils
_____	_____ _____ _____	Late Pleistocene and Early _____	Medium to _____ grained _____ dunes, held in place by _____	_____	Similar to _____ climate	_____, bighorn sheep
River alluvium terrace	_____ _____ _____	Late in the Epoch – in the Quaternary Period of the _____ Era	_____ to boulder-sized clasts (_____)	_____ (The ancestral Niobrara R. valley during this time was _____ times wider, but only _____ as deep as modern river's trench.	This was the height of the last glaciation. No glaciers here, but a _____ climate.	Bison, _____, horse, _____, wolf
Member of the Ash Hollow Fmn. (part of the Ogallala Group)	_____ _____	Later in the Epoch – in the _____ Period of the Cenozoic Era	A _____, porous sandstone	_____; Some layers within this formation are wind-blown _____.	It may have been more arid (dry) than during the time of the _____.	Large tortoises, _____, horses, camels, more _____ and fewer trees than when the Valentine Fmn. was deposited

<p>_____</p> <p>Fmn. (part of the _____ Group)</p>	<p>_____</p>	<p>Middle of _____</p> <p>Epoch - in the Tertiary Period of the Cenozoic Era</p>	<p>An easily-crumbled _____ unit. Consists mostly of unconsolidated fine to medium sand and _____ sandstone. Does show some cross-bedding. The lower half contains _____.</p>	<p>It was deposited by a _____, with alternating intervals of high-energy _____ and low-energy currents.</p>	<p>A milder, _____ climate than today's; frost-free</p>	<p>Mastadons, rhinos, horses, camels, grasses, subtropical _____.</p> <p>Hardwood forests grew on the low, broad floodplains and an open, grassy woodland or savanna grew on the slightly higher areas.</p>
<p>_____ – a type of unconformity that records a time when the rock was exposed and _____</p>						
<p>_____</p> <p>Fmn. (part of the Arikaree Group)</p>	<p>_____</p>	<p>_____</p> <p>Epoch – in the Tertiary Period of the Cenozoic Era</p>	<p>A pinkish-tan _____. The low permeability of this formation compared with that of the loose sands of the overlying Valentine Fmn. Gives rise to numerous _____ and seeps at the unconformity between the two formations.</p>	<p>It was deposited by a _____ with low energy _____ on a wide, flat _____.</p>	<p>A _____ and temperate climate</p>	<p>_____ fossils have been found.</p>