

Due Thursday March 19, 2009 (Please write CLEARLY)
Read each question carefully.

1. Trace fossils (e.g. *agrichnia*) are? (please circle one) **[1 pt.]**
 - A. Fossilized imprints of soft-bodied animals and plants.
 - B. Segmented worms that existed during the late Precambrian.
 - C. Vestiges of fossilized tracks, trails and burrows made by ancient animals.
 - D. Small bits or remnants of the hard body parts of ancient marine animals.
 - E. Partially metamorphosed fossils of which only a "trace" remains.

2. Widespread deposition of a kind of sediment called "banded iron-formation" ("BIF") ceased about 1.9 billion years ago. The paleoenvironmental conditions for BIF deposition imply that ocean water mixing was subdued and ocean dissolved-oxygen levels were extremely low. Why then do they REAPPEAR in the rock record 900 million years ago? [hint: look in your reading! Consider what we talked about in lecture!]. **[2 pts.]**

3. Early Cambrian fauna can be categorized by the means in which they obtained food. [2 pts.]

- *Deposit feeders – that eat organic matter in sediments*
- *Grazers – that eat algae growing on surfaces*
- *Suspension feeders – that eat food particles in seawater*

- A. *Contrast* the different categories listed above.
B. *Name* an early Paleozoic fossil example for each category

(Use the space below)

3 A. **Contrast** the different categories

3 B. **Name** an early Paleozoic fossil example for each category



DEPOSIT FEEDER



GRAZER



SUSPENSION FEEDER

a geologist
dates a rock