Now that you have finished exploring the mystery of the Coelophysis at the Ghost Ranch, read the following passage:

## The Nature of Science

"A scientific world view is not something that working scientists spend a lot of time discussing. They just do science. But underlying their work are several beliefs that are not always held by nonscientists. One is that by working together over time, people can in fact figure out how the world works. Another is that knowledge is both stable and subject to change."

Benchmarks for Scientific Literacy

As a group, discuss and be ready to share what relationships your group sees between that passage and the story about the Coelophysis.

## Thinking like a scientist and writing like a scientist

In believing that what they think they know now may change later on based on more information, scientists will generally try to acknowledge that they cannot be absolutely certain, but they have can have "pretty good" ideas. They demonstrate this believe when they write by using "hedges" and "qualifiers." At the same time, they will try to avoid the use of terms and phrases that lead the reader to believe that no other possibilities exist.

These are words, phrases, and conventions of writing that scientists typically use:

Hedges

Scientists will use hedges as a way of recognizing that they may be wrong and that other possible

solutions/explanations

may exist.

Appears to be

The data suggests

Perhaps
Most likely
Tentatively
Apparently
To this date
At this time

Currently we think that

Supposedly Seems like

Qualifiers

Scientists use qualifiers to acknowledge that there may be exceptions to the explanations they make when solving problems.

Unless However Alternatively **Final Step:** 

Now that you have learned a little about how scientists think and write, go back to your observation and inferences made from the footprints. This time, rewrite your narrative in a way that you include the conventions of scientific writing.

See if you can offer up an alternative explanation to the one you generated.

These are words, phrases, and conventions of writing that scientists typically avoid:

**Absolutes** 

Proven
Absolutely
Definitely
Certain
Proved
Confirms

Unquestionably Categorically Unconditionally