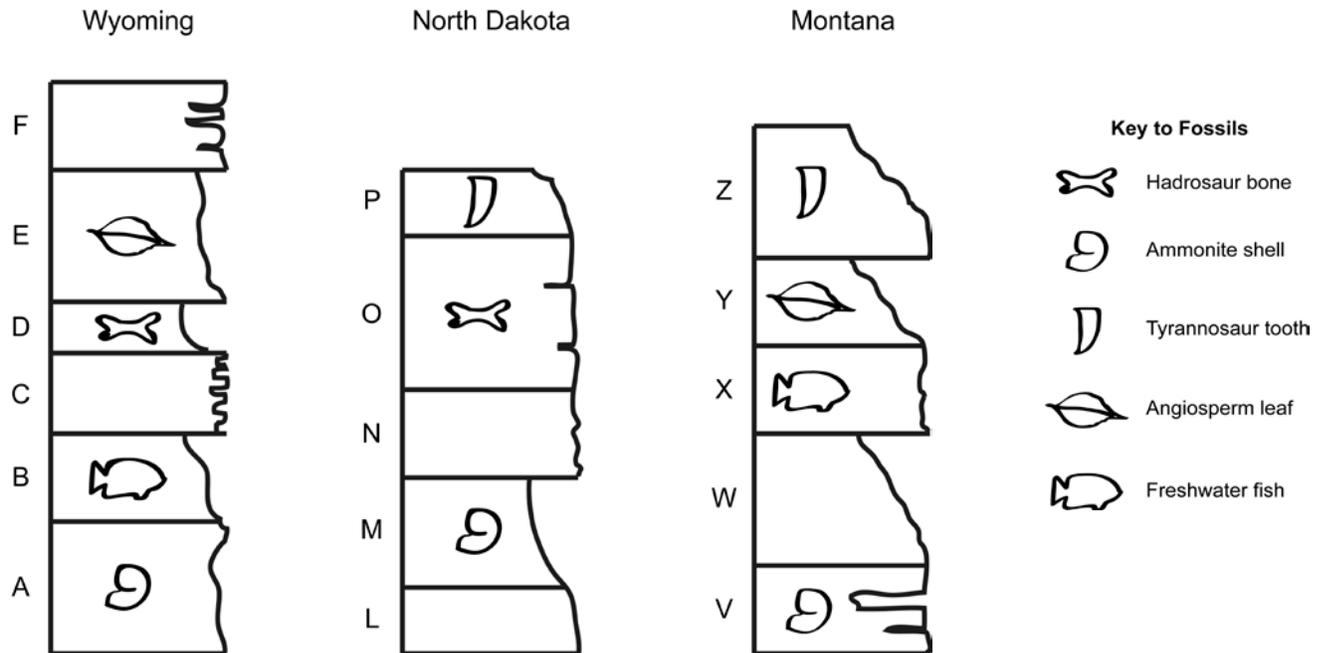


## HOW OLD IS THAT FISH?

Here are field sketches of three rock sections. Each rock layer is labeled with a letter (A, B, C, etc.). If a fossil is found in the layer, a picture of it is included.



Let's use some **geologic logic** to figure out how old the fossil fish is.

Here are the rules:

- Younger layers sit on top of older layers.
- A specific kind of fossil can only be one age.
- If two layers have the same fossil, then they are the same age.

Let's practice using these rules!

1. Which other rock layers are the same age as Layer A?
2. Which other rock layers are the same age as Unit Y?
3. Which fossil is younger, the angiosperm leaf or the freshwater fish?
4. Which fossil is younger, the ammonite shell or the freshwater fish?
5. Which fossil is younger, the ammonite shell or the angiosperm leaf?
6. A volcanic ash fall within Unit Y has been dated to 72 million years ago. An ash fall within unit A has been dated to 74 million years ago. How old is the fossil fish?

*Answers on the back!*

Answers:

1. Which other rock layers are the same age as Layer A?

**Layers M and V – they have the same ammonite shell fossil.**

2. Which other rock layers are the same age as Unit Y?

**Layer E – it has the same angiosperm leaf fossil.**

3. Which fossil is younger, the angiosperm leaf or the freshwater fish?

**The angiosperm leaf – it is above the freshwater fish.**

4. Which fossil is younger, the ammonite shell or the freshwater fish?

**The freshwater fish – it is above the ammonite shell.**

5. Which fossil is younger, the ammonite shell or the angiosperm leaf?

**The angiosperm leaf – it is above the ammonite shell.**

6. A volcanic ash fall within Unit Y has been dated to 72 million years ago. An ash fall within unit A has been dated to 74 million years ago. How old is the fossil fish?

**The fossil fish must be between 72 and 74 million years old, because it lies in between layers A (=V) and Y (=E).**

**We can't actually be any more specific than this, from the information given, since we don't know exactly how much time it took to deposit all the layers in between A and Y.**