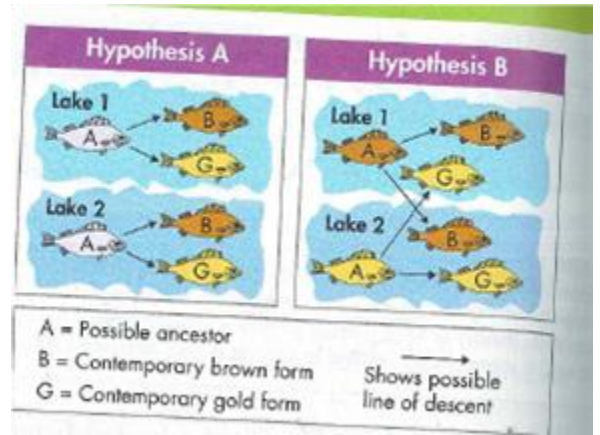


Speciation

Name: _____

How are these fish related?

A research team studied 2 lakes in an area that sometimes experiences flooding. Each lake contained two types of similar fish: a dull brown form and an iridescent gold form. The team wondered how all of the fish were related, and they considered the two hypotheses diagrams on the right.



1. Study the two diagrams.
 - a. What does hypothesis A indicate about the ancestry of the fish in Lake 1 and 2:

- b. What does hypothesis B indicate about the ancestry of the fish in:

2. According to the two hypotheses, what is the key difference in the way the brown and gold fish populations might have formed?

3. A DNA analysis showed that the brown and gold fish from Lake 1 are the most closely related. Which hypothesis does this evidence support?

4. To help determined whether the brown and gold fish are members of separate species, what question might scientists ask?