The Scenario

Introduce the photo of the blue frog and ask students to make observations and start listing questions about what they see. Be sure not to judge their observations. Also, look out for students who make assumptions rather than observations.

Teacher's note: your objective is to find observations about a blue torso, green legs and perhaps, yellow spots. All other observations are worthy but immaterial.

Open-Ended Inquiry Question

What caused the frog to be coloured in this way?

Process Skill(s)

Observing, Inferring, Comparing, Contrasting

Instructions

Tell the students that their ideas are “Inferences”

An inference is a science process skill that uses known data to “guess” what has happened.

This is an appropriate time to introduce the frog lifecycle. The interesting point is that the frog spends its early life in water and has no legs. After going through metamorphosis, the frog has legs. This suggests that the frog’s environment might have had an influence on its coloration. For older students they might be prompted to consider the genetics/environment connection. Students can visit the Global Amphibian Bioblitz at http://www.inaturalist.org/projects/global-amphibian-bioblitz to take part in counting amphibians in their area.

Curriculum Connections

This inquiry is suitable for a variety of ages and fits well as a unit starter in habitats, ecosystems, niche roles, environmental issues, genetics, population studies.