

Hop to It Claim-Evidence-Reasoning Rubric

	Claim A statement or conclusion that answers the original question/problem. Are male toads smaller than female toads?	Evidence Scientific data that supports the claim. The data need to be appropriate and sufficient to support the claim.	Reasoning A justification that connects evidence to claims and shows why the data count as evidence by using appropriate and sufficient scientific principles.
Beginning	Indicates an understanding of size but does not make a claim. <i>Example:</i> Some toads are big and some are small.	Does not support the claim. <i>Example:</i> Toads come in all shapes and sizes.	Does not provide reasoning, or only provides inappropriate reasoning. <i>Example:</i> Some toads are big and some are small. All are bumpy.
Developing	Makes an accurate claim based on weight OR length, but not both. <i>Example:</i> <ul style="list-style-type: none"> • <i>Female toads are longer than male toads.</i> 	Makes an appropriate and general statement about how the data support the claim, but does not include specific data. <i>Example:</i> <ul style="list-style-type: none"> • <i>The data show that female toads are bigger than male toads.</i> 	Uses weight OR length as reasoning components, OR BOTH, but does not include why large females and smaller males might provide an advantage in having young. <i>Example:</i> Big toads are easier to see and so it would be easier to find potential mates.
Proficient	Makes an accurate claim based on weight AND length. <i>Examples:</i> <ul style="list-style-type: none"> • <i>Female toads weigh more and are longer than male toads.</i> • <i>Male toads weigh less and are shorter than female toads.</i> 	Uses specific measurement data for weight OR length, but not both to support the claim. <i>Example:</i> <ul style="list-style-type: none"> • <i>The average weight for the female toads is _____ and the average weight for the male toads is _____.</i> 	Uses weight OR length as reasoning components, AND includes why size might provide an advantage in having young. <i>Example:</i> Toads engage in amplexus (a male mounts a female) and this leads to external fertilization. Since females have to support the male's body weight it might be an advantage to have larger

			females and smaller males.
Exemplary		<p>Uses specific measurement data for weight AND length to support the claim.</p> <p><i>Example:</i></p> <ul style="list-style-type: none"> • <i>The female toads' average weight and length are:</i> _____ (weight) _____ (length), while the male toads' average weight and length are: _____ (weight) _____ (length). 	<p>Uses weight AND length as reasoning components, AND includes why size might provide an advantage in finding mates and/or reproducing.</p>