Paper/Chpt _____   Name _____

A Guide for Evaluating Science in the News
For each question, check the appropriate box from the "Possible Answers" columns

Question	Possible Answers	
	Preferred Answer	**Raises a red flag**
1. What is the basis for the story?	☐ Hypothesis Test	☐ Untested assertion *No data to support claims in the article.*
2. What is the affiliation of the scientist?	☐ Independent (university or government agency)	☐ Employed by an industry or advocacy group *Data and conclusions could be biased.*
3. What is the funding source for the study?	☐ Government or non-partisan foundation (without bias)	☐ Industry group or other partisan source (with bias) *Data and conclusions could be biased.*
4. **If the hypothesis test is a correlation:** Did the researchers attempt to eliminate reasonable alternative hypotheses?	☐ Yes	☐ No *Correlation does not equal causation. One hypothesis test provides poor support if alternatives are not examined.*
If the hypothesis test is an experiment: Is the experimental treatment the only difference between the control group and the experimental group?	☐ Yes	☐ No *An experiment provides poor support if alternatives are not examined.*
5. Was the sample of individuals in the experiment a good cross section of the population?	☐ Yes	☐ No *Results may not be applicable to the entire population.*
6. Was the data collected from a relatively large number of people?	☐ Yes	☐ No *Study is prone to sampling error.*
7. Were participants blind to the group they belonged to and/or to the "expected outcome" of the study?	☐ Yes	☐ No *Subject expectation can influence results.*
8. Were data collectors and/or analysts blinded to the group membership of participants in the study?	☐ Yes	☐ No *Observer bias can influence results.*
9. Did the news reporter put the study in the context of other research on the same subject?	☐ Yes	☐ No *Cannot determine if these results are unusual or fit into a broader pattern of results.*
10. Did the news story contain commentary from other independent scientists?	☐ Yes	☐ No *Cannot determine if these results are unusual or if the study is considered questionable by others in the field.*
11. Did the reporter list the limitations of the study or studies on which he or she is reporting ?	☐ Yes	☐ No *Reporter may not be reading study critically and could be overstating the applicability of the results.*

Adapted from: Belk and Borden Maier, Biology: Science for Life