

## Exploring The Web

### Chapter 18

**18.54 Practically important?** Find an example of a study in which a statistically significant result may not be practically important. Summarize the study and its conclusions in your own words. The CHANCE website at [www.causeweb.org/wiki/chance//index.php/Main\\_Page](http://www.causeweb.org/wiki/chance//index.php/Main_Page) is a good place to look for examples.

**18.55 Wise use of inference.** The report of the American Psychological Association's Task Force on Statistical Inference is an excellent brief introduction to wise use of inference. The report appeared in the journal *American Psychologist* in 1999. You can find a copy of the initial report on the web in the list of TFSI Publications/Links from this journal at [www.apa.org/science/leadership/bsa/statistical/index.aspx](http://www.apa.org/science/leadership/bsa/statistical/index.aspx). Read the initial report. Are the authors of the report opposed to the use of hypothesis testing? Describe one abuse of hypothesis testing that is cited in this report.

**18.56 More wise use of inference.** In 2016, the American Statistical Association published a statement on *P*-values. The article is available online at [amstat.tandfonline.com/doi/abs/10.1080/00031305.2016.1154108](http://amstat.tandfonline.com/doi/abs/10.1080/00031305.2016.1154108). Read the article. Is the report opposed to the use of *P*-values? Describe one concern about the use of *P*-values that is discussed in this report.

**18.57 Spotting bad science.** Professor Pat Humphrey at Georgia Southern University mentioned to us that the website [compoundchem.com](http://compoundchem.com) posts "A Rough Guide to Spotting Bad Science." You can find this at [www.compoundchem.com/2014/04/02/a-rough-guide-to-spotting-bad-science/](http://www.compoundchem.com/2014/04/02/a-rough-guide-to-spotting-bad-science/). The guide gives 12 warnings. Which of these correspond to warnings given in this chapter? (Give page numbers.)