

8. What were the primary reasons that the graphics used to evaluate the Challenger launch failed?

9. Differentiate a time-series graph with a space-time narrative.

10. Effective communication of ideas via graphics involves maximizing the data-ink ratio and data density while eliminating chartjunk. Describe what these mean.

11. According to Tufte, excellence in statistical graphics consists of complex ideas communicated with clarity, precision and efficiency. Graphic displays promote this by incorporating several items. List five of these.

12. Why do we use color in graphical representations?

13. Why does red appear fuzzy when on a blue background?

14. Differentiate hue, saturation, and value when describing color.

15. Describe RGB and CMYK color. What output device uses each?

16. List five items for effective use of color (what to do or not to do).

17. What is virtual reality? Give an example.

18. List the primary sections of a scientific publication.

19. Critique the following visuals. (You may make notes directly on the diagram and/or write information here).

(a)

(b)

(c)

(d)

(e)

20. Critique the following written passages. Rewrite.

(a) *A collection of museum grade rocks, minerals and fossils were available.*

(b) *The diamondiferous eclogites are hosted exclusively by kimberlites where they generally comprise $\leq 10\%$ of the xenolith population of any given locality. However, because of the presence of diamonds, these rare xenoliths have received more than their fair share of attention.*

(c) *Beginning four billion years ago, the authors show how microbes invented all of life's essential systems.*