Multicellularity

The Evolution of Multicellularity
Read this Nature Education article about Volvox and the Evolution of Multicellularity and this blog entry about From Dyani Lewis' about Slime Molds and the Evolution of Multicellularity and write a two-paragraph summary.
Animal Diversity

Read the really brief, but full of terminology, blog entry overview of animal diversity and then get more details here from the Digital Atlas of Ancient Life. Then write a two-paragraph summary of the basics of the evolutionary relationships (tree) among the phyla of animals.
Cambrian Explosion and Burgess Shale

You don’t have to write summaries of this topic, but you might like to review the references.

Royal Ontario Museum--focus on Burgess Shale and Cambrian Explosion

Smithsonian Museum of Natural History Geologic Periods--Cambrian (great general resource)
Figure 11.6. A summary of animal phylogeny and Cambrian evolution, showing first-known appearances of stem and crown group members of extant phyla, as well as animal diversity through the Cambrian Period. To aid discussion in chapter 12, the record of carbon isotopes across the Proterozoic-Cambrian boundary is also shown. (Reprinted with permission from A. H. Knoll and S. B. Carroll, 1999. Early animal evolution: emerging views from comparative biology and geology. Science 284: 2129–2137. Copyright 1999 American Association for the Advancement of Science)
Additional Resources

We will cover diversity of plants and of fungi briefly.

Great review page on plant evolution (from Estrella Mountain?)

SEM courtesy of George Barron

Nice overview of Fungi Diversity
Multicellularity

From Wikipedia
Here’s a link from PBS’ Nova show with a game about how to make Evolutionary Trees or Phylogenies. You learn a lot both about how to construct a tree and about different groups of organisms...highly recommend it when you are feeling bored!

https://www.pbs.org/wgbh/nova/labs/lab/evolution/