The following is a list of the main topics you have learned this year followed by key terms/phrases that could guide you as you identify questions about these topics.

1. The scientific method
   1. Data
   2. Importance of analyzing data
   3. Procedure
   4. Hypothesis
   5. We based conclusions on…
   6. A controlled experiment
   7. Dependent variable
   8. Independent variable
   9. Observation (qualitative vs. quantitative)
   10. Inference vs. observation
   11. Constants
   12. Importance of trials to a scientific investigation
2. Photosynthesis
   1. What is need and what is produced?
3. Seed
   1. Parts of the seed and function (seed coat, embryo, stored food)
4. Math related
   1. Using a ruler to find length
   2. Measuring volume
5. Minerals and Rocks
   1. Rock cycle (how to read it)
   2. Fossils (Can be found in sedimentary rocks)
   3. How to read rock layers (bottom is the oldest, top is the newest if the rocks have not been overturned)
   4. Properties of minerals: harness, streak, luster surface color
   5. Reading a table to identify properties of minerals
6. Weather:
   1. Spheres of the earth: hydrosphere, atmosphere, lithosphere,
   2. Fronts: cause unstable weather conditions; when two air masses meet, their representation in a weather map
   3. Winds move from west to east
   4. Reading a weather map
   5. Weather vs. Climate
   6. Differentiating between hurricane and tornadoes
   7. How do humans prepare for: blizzards, tornadoes, Hurricanes
   8. High air pressure: sunny day, low air pressure: unstable weather
   9. Air pressure in a weather map
   10. Water cycle: ECPR
   11. States of matter: solid, liquid, gas; representation of molecules movement
7. Living things and classification based on energy source
   1. Characteristics of living things: example, all made out of cells, reproduce, grow and develop etc.
   2. Unicellular vs. multicellular
   3. Producers vs. consumers
   4. Different types of consumers: carnivores, herbivores, omnivores, and decomposers.
   5. Understanding a dichotomous key
   6. Metamorphosis
8. Food chains and food webs
   1. Biotic and abiotic factors
   2. Difference between food chain and food web
   3. How to read a food chain and a food web
   4. Difference between a food chain and an energy pyramid
   5. Factors that affect population growth
   6. Competition between organisms
   7. Ways in which humans negatively affect the environment
   8. Ways of obtaining electricity: hydropower, windmills, gas, oil, coal- We touched renewable and nonrenewable resource