# Year-at-a-Glance (YAG) --- Grade 3 --- Science

## Unit 1: Practice of Science and Engineering (embedded in Units 2, 3, 4, 5)

1. **I can provide evidence to support claims.** (3.1.1.1.1)
2. **I can generate scientific questions.** (3.1.1.2.1)
3. **I can recognize the outcome of a science investigation done the same way and under the same conditions.** (3.1.1.2.2)
4. **I can record and explain observations and procedures.** (3.1.1.2.3)
5. **I can construct explanations based on evidence.** (3.1.1.2.4)
6. **I can explain how people of all cultures have used scientific inquiry and engineering to understand the natural world.** (3.1.3.2.1)
7. **I can recognize that men and women of all ages and backgrounds have contributed to different types of science and engineering work.** (3.1.3.2.2)
8. **I can select and use the appropriate tool when making observations and collecting data.** (3.1.3.4.1)
9. **I can explain how engineered products and services impact our natural world.** (4.1.2.1.1)
10. **I can describe how an engineering design solution solves problems.** (4.1.2.2.1)
11. **I can plan how to solve a problem using the engineering design process.** (4.1.2.2.2)
12. **I can test and evaluate engineering design solutions.** (4.1.2.2.3)
13. **I can communicate my results after testing and evaluating an engineering solution.** (4.1.2.2.3)

## Unit 2: Life Science - Living Systems (7-8 weeks)

Module: FOSS Structure of Life and FOSS Human Body

1. **I can analyze the structures that help living things grow, reproduce, and survive.** (3.4.1.1.1)
2. **I can compare the characteristics, structures and behaviors of plants and animals.** (3.4.1.1.2)
3. **I can articulate the similarities and differences between inherited and acquired characteristics.** (3.4.3.2.1)
4. **I can give examples of differences among individuals that help them reproduce and survive.** (3.4.2.2.2)

## Unit 3: Earth Science – Sun and Moon (6-8 weeks)

Module: FOSS Sun, Moon, and Stars

1. **I can describe the daily position of the sun and explain how it changes with the seasons.** (3.3.3.1.1)
2. **I can recognize the pattern of the moon’s shape and position.** (3.3.3.1.2)
3. **I can explain how distance affects how large an object appears to be.** (3.3.3.2.1)
4. **I can explain the orbits of the Earth, moon and sun.** (3.3.3.2.2)
5. **I can explain how shadows form and can change.** (3.3.3.2.2)

## Unit 4: Physical Science – Energy and Properties of Matter (7-9 weeks)

Module: FOSS Matter and Energy

1. **I can explain how energy can appear in different forms.** (3.2.3.1.3)
2. **I can describe how light travels.** (3.2.3.1.3)
3. **I can measure with accuracy using the metric system.** (4.2.1.1.1)
4. **I can describe and compare the different properties of matter.** (4.2.1.2.1)
5. **I can explain how states of matter change.** (4.2.1.2.2)
6. **I can explain ways to generate heat energy.** (4.2.3.2.1)

## Unit 5: Physical Science – Sound (3-4 weeks)

Module: FOSS Physics of Sound

1. **I can explain the factors that affect pitch.** (3.2.3.1.1)

## Unit 6: Engineering and Life Science - Bioengineering (3-4 weeks)

Module: EiE Designing Model Membranes

1. **I can explain how engineered products and services impact our natural world.** (4.1.2.1.1)
2. **I can describe how an engineering design solution solves problems.** (4.1.2.2.1)
3. **I can plan how to solve a problem using the engineering design process.** (4.1.2.2.2)
4. **I can test and evaluate engineering design solutions.** (4.1.2.2.3)
5. **I can communicate my results after testing and evaluating an engineering solution.** (4.1.2.2.3)

* Based on three 60-minute science sessions per week

* Unit is taught when module is checked out

**NOTE:** Elementary science units may be taught in a different sequence depending on the availability of science kits.

**Spanish Version (Updated 09/10/14)**

**MN Standards:** MN K-12 Academic Standards in Science (2009)

**Kit Assignment Schedule by School**

**Revised 7/2014**