Scientific Process

2nd Grade Science

Standard 1

1. I can use the processes of scientific investigation: framing questions, designing investigations, conducting investigations, collecting data, and drawing conclusions.

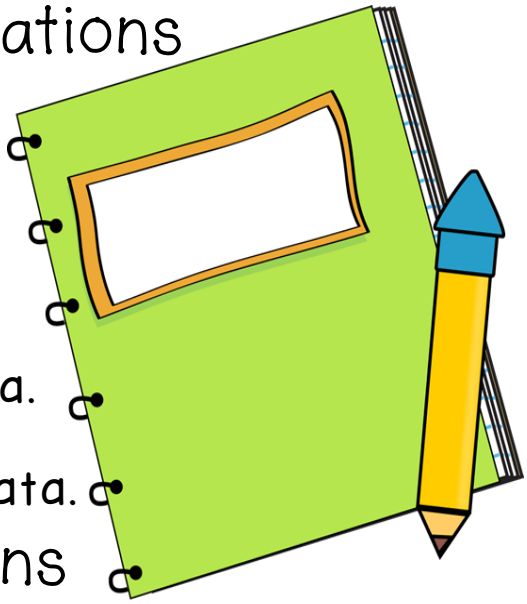
Framing Questions

1.a □ I can observe using my senses.
1.a □ I can create a hypothesis about what I observe.
1.a □ I can come up with a question that can lead to an investigation.

Designing Investigations

1.b □ I can think of reasons that support my ideas.
1.b □ I can identify ways to gather information to test my ideas.
1.b □ I can design fair tests.

Conducting Investigations



1.c □ I can observe.
1.c □ I can manipulate.
1.c □ I can measure.

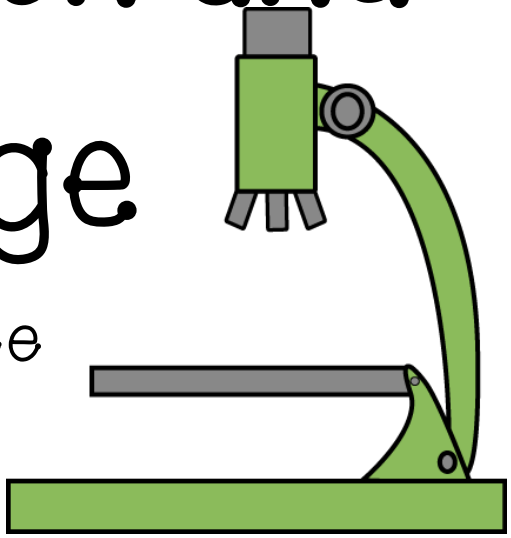
Collecting Data

1.d □ I can decide what data to collect.
1.d □ I can decide how to organize the data.
1.d □ I can decide how to record the data.
1.d □ I can decide how to manipulate the data.

Drawing Conclusions

1.e □ I can analyze data.
1.e □ I can make conclusions from the data or evidence gathered.
1 e. □ I can identify limitations or conclusions.
1.e □ I can identify future questions to investigate.

Scientific Communication and Knowledge



1st Grade Science

Standard 1

2.I can communicate effectively using science language and reasoning

2.a □ I can develop social interactions skills with my peers.
2.b □ I can share ideas with peers.
2.c □ I can connect ideas with reasons or evidence.
2.d □ I can use multiple methods to communicate reasons and evidence such as verbal communication, charts, and graphs.

3. I can understand the nature of science.

3.a □ I can understand that ideas are supported by reasons.
3.b □ I can understand that ideas in science are limited by what can be observed, measured, and verified.
3.c □ I can understand that differences in conclusions can be settled through additional observations and investigations..
3.d □ I can understand that communication of ideas in science is important for helping to check the reasons for ideas.

Earth and Space

2nd Grade Science

Standard 2

1. I can describe the characteristics of different rocks.

1.a □ I can explain how smaller rocks come from the break age and weathering of larger rocks.

1.b □ I can describe rocks in terms of their parts, such as crystals, grains, and cement.

1.c □ I can sort rocks based upon color, hardness, texture, particle size, and type. For example: igneous, metamorphic, or sedimentary.

2. I can observe and record recognizable objects and patterns in the night sky.

2.a □ I can observe, describe, and record patterns in the appearance and apparent motion of the moon in the night sky.

2.b □ I can observe and describe the number, arrangement, color, and brightness of stars in the night sky.

3. I can observe, describe, and measure seasonal weather patterns and local variation.

3.a □ I can compare and contrast the seasonal weather pat terns during the school year.

3.b □ I can analyze and interpret data such as temperatures in different locations and different times.

Physical Science

2nd Grade Science

Standard 3

1. I can communicate observations about falling objects.

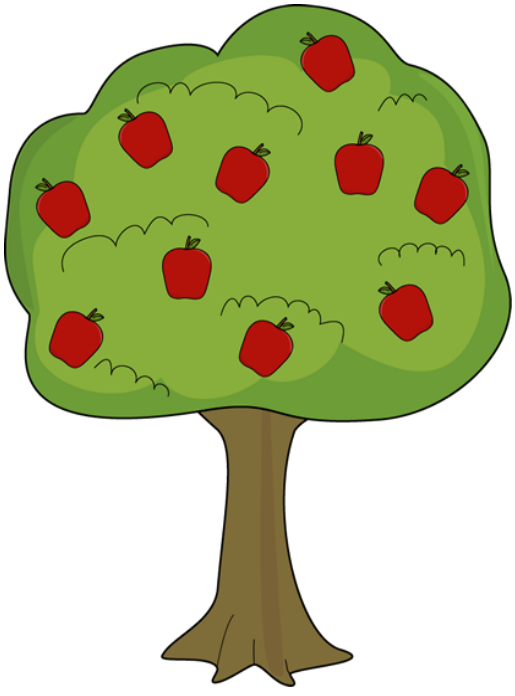
1.a □ I can observe falling objects and identify things that prevent them from reaching the ground.

1.b □ I can communicate observations that similar objects of varying masses fall at the same rate (for example, a large rock and a small rock).

2. I can observe compare and contrast the differences in how different materials respond to change.

2.a □ I can model physical changes of various materials.

2.b □ I can investigate and provide evidence that matter is not destroyed or created through changes.



Life Science

3rd Grade Science

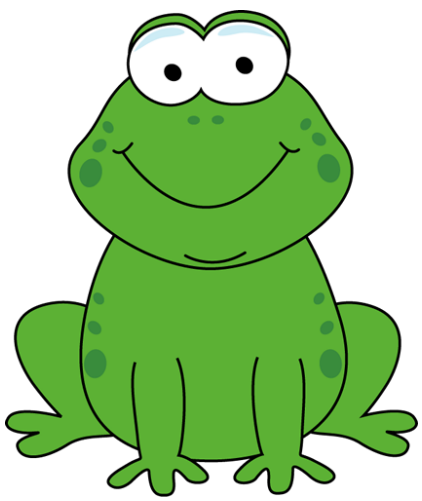
Standard 4

1. I can tell how external features affect an animal's ability to survive in its environment.

1.a □ I can compare and contrast the characteristics of living things in different habitats.
1.b □ I can develop. Communicate, and justify an explanation as to why a habitat is or is not suitable for a specific organism.
1.c □ I can create possible explanations as to why some organisms no longer exist, but similar organisms are still alive today.

2. I can identify basic needs of living things (plants and animals) and their abilities to meet their needs.

2.a □ I can communicate and justify how the physical characteristics of living things help them meet their basic needs.



2.b □ I can observe, record, and compare how the behaviors and reactions of living things help them meet their basic needs.
2.c □ I can identify behaviors and reactions of living things in response to changes in the environment including seasonal changes in temperature and precipitation.