SRPSD Grade 6 Science Rubrics

Life Science: Diversity of Living Things (DL)

DL6.1 Recognize, describe, and appreciate the diversity of living things in local and other ecosystems, and explore related careers.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can give examples of living things.	I am able to observe and document living things in local habitats. b) d)	I understand the diversity of living things in local ecosystems and can provide examples of careers in this field. a) c) f)	I can compare perspectives from various cultures to explain how living things are valuable. e)

DL6.2 Examine how humans organize understanding of the diversity of living things.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can sort living things according to my own criteria. a)	I can compare classification systems to describe how they are similar or different. b)	I understand how different classification systems can be used to classify living things. c) d) e) f) g)	I can explain why the scientific classification system is preferred over an individual classification system. h)

DL6.3 Analyze the characteristics and behaviours of vertebrates (i.e., mammals, birds, reptiles, amphibians, and fish) and invertebrates.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can give an example of a vertebrates and invertebrates.	I can identify common characteristics of vertebrates and invertebrates. a)	I can compare and represent characteristics and behaviours of vertebrates and invertebrates. b) c)	I can explain reasons why living things are classified from the internal structure instead of from their external appearance of behaviour. d) e)

DL6.4 Examine and describe structures and behaviours that help:

- individual living organisms survive in their environments in the short term
- species of living organisms adapt to their environments in the long term.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I understand that animals adapt to their environments.	I can define and give examples of structural and behavioural adaptations. a) c) d) i)	I can explain how structural and behavioural adaptations help organisms survive. e) g) h)	I can suggest reasons for why organisms are endangered or extinct and why explanations might be different. f) j)

DL6.5 Assess effects of micro-organisms on past and present society, and contributions of science and technology to human understanding of micro-organisms.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can give an example of a micro-organism.	I can define micro-organisms. a) b) c)	I understand the impact micro-organisms have made on society. e) g)	I can design, conduct, critique or discuss an investigation of how micro-organisms function. d) f)

SRPSD Grade 6 Science Rubrics

Physical Science: Understanding Electricity (EL)

EL6.1 Assess personal, societal, economic, and environmental impacts of electricity use in Saskatchewan and propose actions to reduce those impacts.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can list types of energy sources. a)	I can describe how electrical energy is generated from a variety of sources. a) b) c)	I can explain how electrical energy impacts the people of Saskatchewan. a) b) e) f)	I can propose actions to address the environmental impacts of electrical energy. d)

EL6.2 Investigate the characteristics and applications of static electric charges, conductors, insulators, switches, and electromagnetism.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can describe the characteristics of static electric charges. a) b)	I can describe the physical properties of conductors, insulators, switches, and electromagnetism. d) e) f) h) k) g)	I can explain the applications of static electric charges, conductors, insulators, switches, and electromagnetism. c) i)	I can assess, reflect and make suggestions for improving the strength of an electromagnet. j)

EL6.3 Explain and model the properties of simple series and parallel circuits.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can state the characteristics needed to make a simple circuit. a)	I can create and describe simple circuits. b) c)	I can model and explain simple series and parallel circuits. e) g) f)	I can design, build and troubleshoot an electrical circuit. d) h) i)

Physical Science: Principles of Flight (FL)

FL6.1 Examine connections between human fascination with flight and technologies and careers based on the scientific principles of flight.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can ask questions about flight.	I can describe how nature has influenced our understanding of flight. a) b)	I can describe how flight has changed overtime. c) d) f)	I can explain how flight affects the way we live. g) h)

FL6.2 Investigate how the forces of thrust, drag, lift, and gravity act on living things and constructed devices that fly through the air.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can list the principles of flight.	I can define the principles of flight. a)	I can use terminology appropriately when talking about flight. b) d)	I can compare and contrast how the principles of flight act on living things and man-made devices that fly through the air. e) f) h)

FL6.3 Design a working prototype of a flying object that meets specified performance criteria.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I understand the criteria for creating my design.	I am able to design a flying object to meet specific criteria. a) d)	I am able to construct a working model of a flying object to meet specific criteria. f) b) c)	I can analyze my data to suggest improvements and make changes. e) g) h) i)

Earth and Space Science: Our Solar System (SS)

SS6.1 Research and represent the physical characteristics of the major components of the solar system, including the sun, planets, moons, asteroids, and comets.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can list some of the major parts of the solar system.	I can list all the major parts of the solar system.	I can describe or model the physical characteristics of the sun, planets, moons, asteroids, and comets. g)	I can prove why the major parts of the solar system belong based on their physical characteristics. h) i)

SS6.2 Assess the efficacy of various methods of representing and interpreting astronomical phenomena, including phases, eclipses, and seasons.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I can identify astronomical phenomena like, phases, eclipses, and seasons.	I can explain astronomical phenomena through a worldview such as scientific, First Nations, or other cultures.	I can explain the effectiveness of using various methods to show and understand astronomical phenomena.	I can extend my understanding using any worldview to investigate changes to astronomical phenomena. i)

SS6.3 Evaluate past, current, and possible future contributions of space exploration programs including space probes and human spaceflight, which support living and working in the inner solar system.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
I recognize space exploration has changed overtime. a)	I can describe the support needed for human spaceflight. b) c)	I can explain inventions and barriers to space exploration. d) e)	I can design or investigate ways to support living within the inner solar system. f) g)