**Land Beneath Our Feet NCFE Essential Questions**

Why are the Earth's layers in the order that they are? Describe each.

How does the inside of Earth affect the outer layer of Earth (crust)?

What is the relationship between rocks, soil, and the environment?

Why are Earth’s layers arranged in this order?

How does the inside of Earth affect the outer layer of Earth (crust)?

How and why is Earth constantly changing?

How does the inside of the Earth affect the outer layer of Earth?

How do rocks change?

How do weathering and erosion processes affect rocks?

What is the relationship between rocks, soil, and the environment?

How does soil quality affect humans and humans affect soil quality?

What is formed when 2 plates collide? When 2 plates separate?

**Growing and Flowing NCFE Essential Questions**

How do flowering plants survive, reproduce, and defend themselves?

How do the processes of respiration, photosynthesis and transpiration allow organisms to survive?

How do plants survive in harsh or changing environments?

 How does energy cycle through organisms on Earth?

How is the sun connected to life on Earth?

How do abiotic factors affect organisms?

How do different organisms survive in different biomes?

What is the function of the anther?

Write the equation for photosynthesis and cellular respiration. Identify the reactants – substances that combines and products – the result

What is the process of transpiration?

What are stomates?

**MATTER UNIT NCFE REVIEW QUESTIONS**

What happens to the molecules of a substance when heat is added to it? Cooled?

How does heat travel by conduction, convection and radiation?

What is thermal equilibrium?

Why do materials expand and contract?

What is the relationship between atoms and elements?

How are atoms of one element similar to and different from atoms of other elements?

What are physical properties of matter?

**CATCH A WAVE NCFE REVIEW QUESTIONS**

How is energy like a wave?

What are the similarities and differences between the waves that produce earthquakes, light and sound?

What is the nature of sound?

How do we hear sound?

How can you see different colors?

What is the relationship between light and sound?

How do electromagnetic waves interact with/affect different types of matter?

How are materials chosen for different technological design projects?

**SPACE UNIT NCFE REVIEW QUESTIONS :**

What is affected by the relative motion and position of the sun, moon, and Earth?

How is Earth able to sustain life while other planets do not appear to be able to sustain life?

What is the link between technology and our ability to explore and travel into space?

What causes day and night?

What causes tides on Earth?

What causes seasons on Earth?

Why does the moon undergo phases?