Forms of Energy Song (tune to Frosty the Snowman) written by Stacey Mayo
sung by Mary Massey

(Frosty the snowman…)
Forms of energy
There are many you should know
When you're stopped or when you're on the move
There is energy in us all

(Frosty the snowman…)
First there's Magnetic
It's a force that pulls and pulls
And Solar energy is grand
It helps the plants make food

(He led them down…)
Electrical is power
It's not heat or light alone
Mechanical is movement like
A car driving on roads

(Frosty the snowman…)
Heat is called Thermal
And Chemical includes
When food digests or makes a mess
When it's burned on the stove

(He led them down…)
Potential includes food and when
Something is stopped or stored
Kinetic is the opposite
Like a jump or swinging sword

(Frosty the snowman…)
Forms of energy
There are many you should know
When you're stopped or when you're on the move
There is energy in us all

Reason for the song from the SC Standards

6-5.1 Identify the sources and properties of heat, solar, chemical, mechanical, and electrical energy.

It is essential for students to know that energy can be in many different forms. Students should know sources and properties of the following forms of energy:

Heat energy

- **Heat energy is the transfer of thermal energy (energy that is associated with the motion of the particles of a substance).**
- **Remember that all matter is made up of particles too small to be seen (5th grade).**
- **As heat energy is added to a substance, the temperature goes up indicating that the particles are moving faster. The faster the particles move, the higher the temperature.**
- **Material (wood, candle wax) that is burning, the Sun, and electricity are sources of heat energy.**

Solar energy

- ***Solar energy* is the energy from the Sun, which provides heat and light energy for Earth.**
- ***Solar cells* can be used to convert solar energy to electrical energy.**
- **Green plants use solar energy during photosynthesis (6-2.7) to produce sugar, which contains stored *chemical energy*.**
- **Most of the energy that we use on Earth originally came from the Sun.**

Chemical energy

- ***Chemical energy* is energy stored in particles of matter.**
- **Chemical energy can be released, for example in batteries or sugar/food, when these particles react to form new substances.**

Electrical energy

- ***Electrical energy* is the energy flowing in an electric circuit.**
- **Sources of electrical energy include: stored chemical energy in batteries; solar energy in solar cells; fuels or hydroelectric energy in generators.**

Mechanical energy

- ***Mechanical energy* is the energy due to the motion (kinetic) and position (potential) of an object. When objects are set in motion or are in a position where they can be set in motion, they have mechanical energy.**
- ***Mechanical Potential energy: Potential energy* is stored energy. Mechanical potential energy is related to the position of an object. A stretched rubber band has potential energy. Water behind a dam has potential energy because it can fall down the dam.**
- ***Mechanical Kinetic energy*: *Kinetic energy* is the energy an object has due to its motion.**
- **Mechanical kinetic energy increases as an object moves faster. A moving car has kinetic energy. If the car moves faster, it has more kinetic energy.**

6-5.2 Explain how energy can be transformed from one form to another (including the two types of mechanical energy, potential and kinetic, as well as chemical and electrical energy) in accordance with the law of conservation of energy.