

Biblically Integrated Physical Science Lesson Plan

Subject: Science

Teacher: Philip E. Giddings III

Grade level: 7

Concept: Energy at rest and energy in motion

Standards: NAD 7B.3 Recognize that a knowledge of God can aid in the understanding of science 7.2B.1 Describe and compare types of force and motion

Materials: Explore God's World Science/Health, Series A – textbook, index card (3x5) - 3, kite string – 100 cm, small weight or marble, masking tape, pencil, and scissors

Lesson Objective: To distinguish between potential and kinetic energy

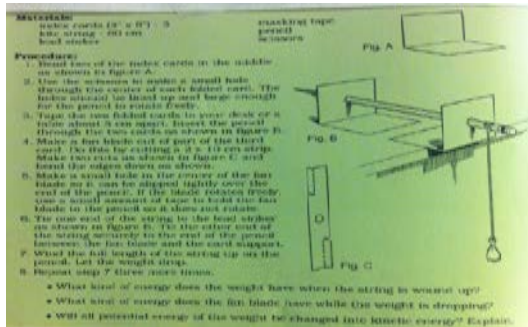
Biblical Principles: As a man thinks (potential) so he is (kinetic). If a man hates his brother (potential) he is a murder (kinetic)

Biblically Integrated Lesson Objectives:

- To understand that even a small kindness has the potential of becoming an enormous movement for change.
- To interject a word of encouragement to create an atmosphere of vibrant

Instruction/Anticipatory Set (hook):

Lab activity 15-1: Construct a fan that demonstrates the conversion from potential energy to kinetic energy.



Procedures/Instruction:

- Bend index cards
- Make holes with the scissors
- Tape and fold cards
- Make fan blade
- Tie string to the weight
- Wind string unto pencil
- Let weight drop
- Repeat

Assessment:

- What kind of energy does the weight have when the string is wound up?
- What kind of energy does the fan blade have while the weight is dropping?
- Will all potential energy of the weight be changed into kinetic energy? Explain.

Biblical Integration:

- I John 3:15 KJV Whosoever hateth his brother is a murderer.
- James 5:16 The prayers of a righteous man/woman availeth much.
- Proverbs 23:7 As a man thinketh in his heart, so is he.
- To understand that faith has the potential to change your physical inability (potential) which will allow you to walk (kinetic) after being immobilized.
- To be able to distinguish between the potential of belief and the kinetic implementation of that faith or belief system.

Biblical Integration Assessment:

- If you had to unethically eliminate you rival, would you put into motion your sinister plan?
- Would you use the same potential to positively impact both you and your rival?
- Using the Biblical principle of using good thoughts to blossom into good healthy actions, what options would you choose?