**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**MacGyver Wind Lift Pre/Post Poll**

Choose the best answer.

\_\_\_\_\_\_ 1. The amount of energy in the universe:

1. Is always the same but may have changed forms.
2. Is less because plants, animals and humans use energy every day.
3. Is more because we can create energy at power plants.

\_\_\_\_\_\_ 2. The uneven heating of the surface of the Earth by the sun causes:

1. Fossil Fuels
2. Seasons
3. Wind

\_\_\_\_\_\_ 3. Advantages of wind energy include:

1. It is clean with no emissions.
2. It is one of the lowest priced energy sources.
3. It is renewable.
4. All of these are correct.

\_\_\_\_\_\_ 4. To adjust the amount of force produced by the blades you would change the:

1. Length of string
2. Pitch
3. Hub

\_\_\_\_\_ 5. To figure out how much work is done by your MacGyver Lift, you need to know the length of the string or distance and:

1. The number of revolutions of the blades.
2. The time it took to lift the weights.
3. The weight or force of the pennies in the cup.

\_\_\_\_\_\_ 6. How fast your turbine does the work or completes the lift is known as power. The unit for power is:

1. Watts
2. Joules
3. Grams

\_\_\_\_\_\_ 7. The top killer of birds is:

1. Cars
2. Wind Turbines
3. Cats

\_\_\_\_\_\_ 8. In a real wind turbine, the blades are connected to a drive shaft, turning a generator which produces:

1. Light
2. Electricity
3. Chemical Energy

\_\_\_\_\_\_ 9. Wind turbines and windmills have been in use form hundreds of years. Some of their uses include:

1. Grinding wheat
2. Moving water
3. Making electricity
4. All of these have been used

\_\_\_\_\_\_ 10. Which of these blade pitch measurements would create the greatest lift or force?

1. 0⁰
2. 50⁰
3. 90⁰