

Inquiry **MiniLab**

LESSON 2: 20 minutes

How strong are your hand muscles?

Have you ever done hand exercises? Do your hand muscles tire?

Procedure

1. Read and complete a lab safety form.
2. Choose a partner. While your partner keeps time with a **stopwatch**, count how many times you can squeeze a **tennis ball** in one minute. Record your data in the table below.
3. Immediately count how many times you can squeeze the ball for another minute. Again record your data in the table. Switch roles so your partner can collect the data.


Data and Observations

Student Name	Number of Squeezes	
	First Minute	Second Minute

Analyze and Conclude

1. **Compare** the results from the first minute to the second minute for both partners.

2. **Design** an experiment to determine whether daily practice would increase the number of squeezes per minute.

3.  **Key Concept** Evaluate the importance of doing exercises to keep muscles strong.

Content Vocabulary

LESSON 2

The Muscular System

Directions: Answer each question on the lines provided. Use complete sentences.

1. What is a muscle?

2. How do involuntary muscles differ from voluntary muscles?

3. What is one example of a location of a smooth muscle in the human body?

4. Are cardiac muscles voluntary or involuntary? Explain.

5. What is the function of skeletal muscle?

6. Muscles convert chemical energy into thermal energy when you exercise. How does this affect your body?
