

# Sarcomere Challenge

Working in a group of 2 members, create a model of a muscle fiber in a contracted or relaxed state using the sheet of paper provided. Each fiber must consist of at least two sarcomeres in one myofibril. All the other organelles must be represented and are found in the list below.

Each model must contain the following structures labeled or with a key:

**Muscle Fiber**

**Sarcolemma**

**Myofibril**

**Sarcolemmic reticulum**

**Ca<sup>2+</sup>**

**Mitochondria**

**ATP**

**T tubules**

**Sarcomere - Contracted or Relaxed**

**Actin**

**T and T system**

**Myosin**

**Myosin head**

**A band**

**I band**

**Z line**

**H zone**