

# The Muscular System



Our bodies have approximately 600 muscles that control every move we make from breathing and walking to blinking! Our skeletal and muscular systems work very closely together to move various parts of our body. Not only does muscle help to move the body, it also assists to move things through the body. The muscular system contains all the muscles within your body. Regardless of how still you are, your muscles are always working which means they are always contracting, which is what muscles do. Muscle is the one type of tissue in the body that can contract and shorten or relax and contract. Every time there is movement in your body, even when you blink, muscles are involved. Our muscular system has many functions, it produces movement, provides us with posture and balance, produces heat and stabilizes our joints. Muscle even helps us with breathing and digestion! Some muscles are voluntary and you can control them, other muscles are involuntary and you can not control them. Muscles are bundles of stretchy fibers that will contract to produce movement when our brain sends the signal to. We have three main types of muscles which are, skeletal, cardiac and smooth muscles. The skeletal muscle is voluntary and we have control of it which is unlike the other two types of muscle. Skeletal muscles are attached to the bone by tendon tissues which work by pulling on bones; when you flex your biceps, you are using skeletal muscles. Skeletal muscles work in pairs that pull (never push) in opposite directions. Cardiac muscles are the muscles that are found in and around your heart, they are involuntary, you do not control your cardiac muscles. Smooth muscles are the muscles found in many of your internal organs like your lungs and your digestive tract which are also involuntary muscles. A smooth muscle, like all muscles moves with contraction which narrows or closes a passage way then relaxes to open it. All muscles need energy (in the form of glucose and oxygen) to do their work; your blood vessels, through the circulatory system provide energy to all of your muscles. Over a period of time, your muscles can change and depending on the kind of work they do, they can become smaller or they can become larger.

- 1 Explain the difference between voluntary and involuntary muscle movement and provide some examples.
- 2 Why is the muscular system important?
- 3 What are the 3 types of muscles and what do they do?
- 4 Write 4 facts about the muscular system.
- 5 Write 3 questions you have about the muscular system.