

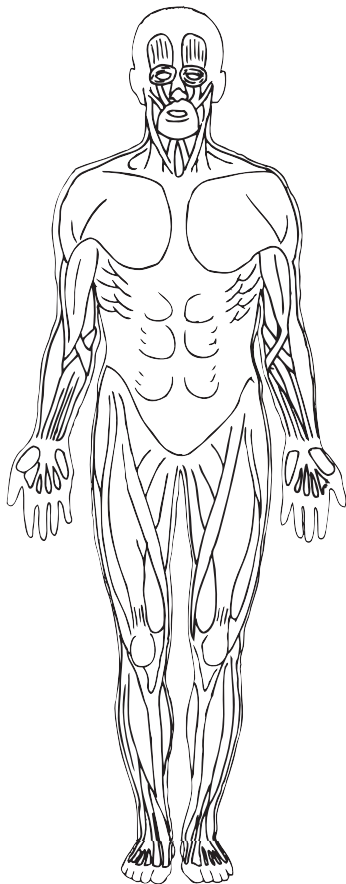
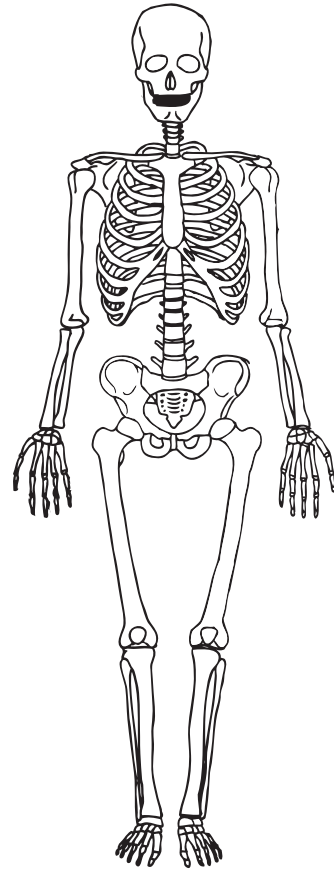
Human Body Systems

The human body consists of nine major **body systems**. Each carries out a different activity, and consists of a number of parts, or **organs**. Only the major parts of the systems are shown in the illustrations in this section. The urinary, endocrine and reproductive systems are not shown.

Skeletal System

The **skeletal system** consists of all the bones in the body. The skeleton gives the body shape, protects and supports vital organs, and, together with the muscles, allows the body to move.

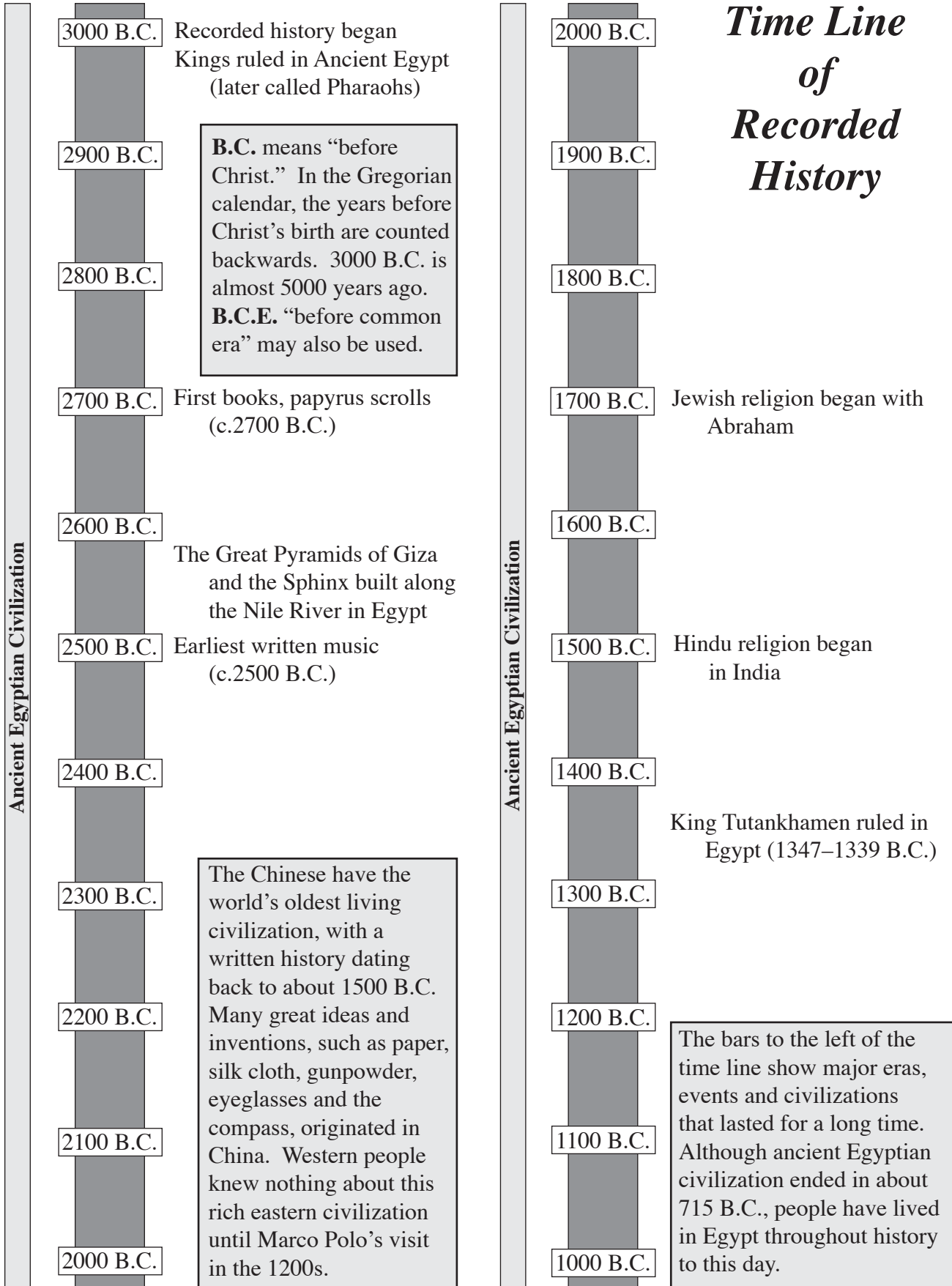
The adult human skeleton has about 206 bones. They are joined to each other by **joints**. Joints may be immovable, such as the joints in the skull, or movable, such as the hinge joint of the elbow or the ball and socket joint of the shoulder.



Muscular System

The **muscular system** consists of all the muscles in the body. Skeletal muscles are **voluntary muscles**. They move the bones of the skeleton and are controlled by thought. The heart muscle is an **involuntary muscle** that pumps blood through the body. Smooth muscles are also involuntary, not controlled by thought. They move food through the digestive system and help blood circulate.

An adult's body has about 656 skeletal muscles, which make up between one-third and one-half of a person's weight.

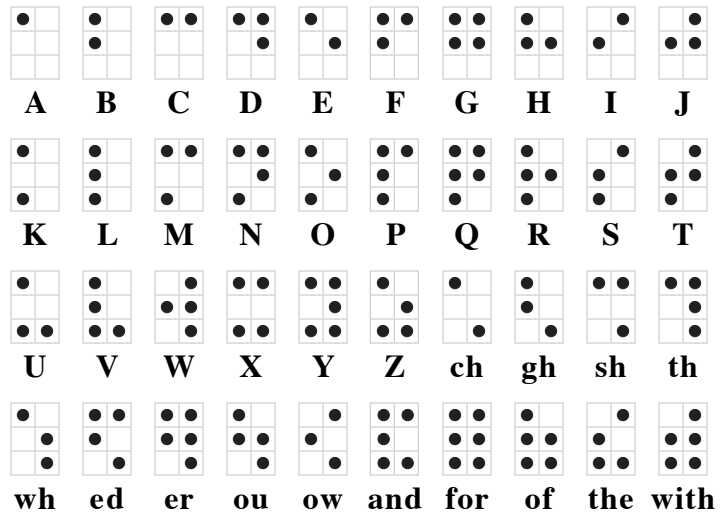


South America



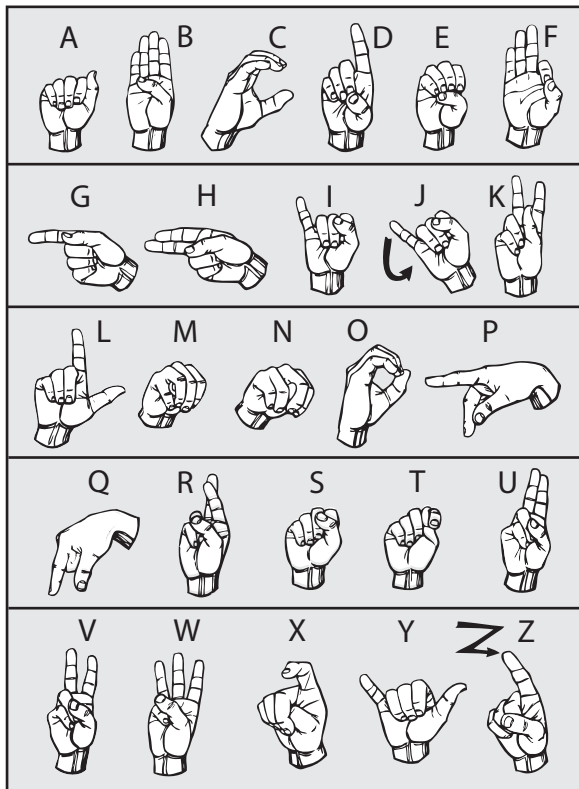
Special Alphabets

Braille is a coded alphabet of raised dots that can be read by touch. It was developed in 1824 by Louis Braille, a 15-year-old blind Frenchman, and is the alphabet used most often by the blind. Numerals are formed by using a special number sign with the first ten letters. An **A** preceded by this sign is 1, **B** is 2, **C** is 3, and so on. **J** is used for the numeral 0.

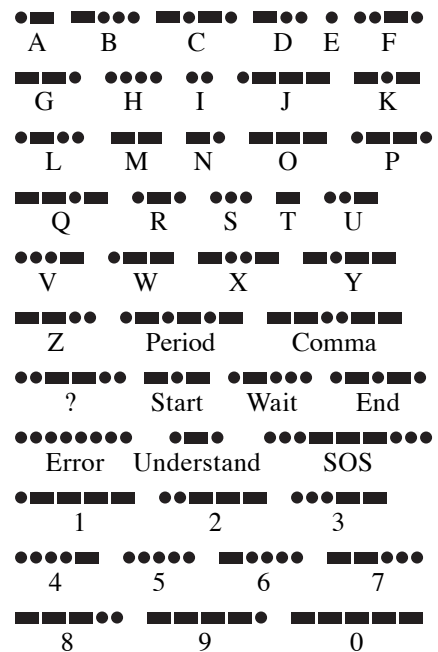


The **phonetic alphabet** is used by the military and by airplane pilots around the world to stand for letters of the alphabet. A pilot whose airplane number is N6837E would say November 6837 Echo.

Sign language is a system of communicating with hand gestures. The American manual alphabet below can be used to spell out words and is generally understood by deaf persons.



- Alpha
- Bravo
- Charlie
- Delta
- Echo
- Foxtrot
- Golf
- Hotel
- India
- Juliet
- Kilo
- Lima
- Mike
- November
- Oscar
- Papa
- Quebec
- Romeo
- Sierra
- Tango
- Uniform
- Victor
- Whiskey
- X Ray
- Yankee
- Zulu



International Morse code was developed by the inventor of the telegraph, Samuel Morse. It was used extensively in the past to transmit telegraph messages and news.