



# Bumblebees – Science KCV – Animals inc. Humans



## Key facts to learn:

- Know the names of key bones in the body and know how to label them
- Know that an adult human body has 206 bones
- Know that the heart and lungs are organs protected by the ribcage
- Know that the heart beats, pumping blood around the body and that blood vessels carry the blood; arteries carry blood away from the heart; veins carry blood towards the heart; capillaries are tiny blood vessels that connect arteries and veins
- Know that the heart is composed of four chambers: two atria and two ventricles; the aorta is the largest artery in the body and most major arteries branch off from it
- Know that blood travels around the body transporting nutrients that have been absorbed into the bloodstream from digestion; blood also absorbs oxygen from the lungs and carries it around the body which is used to power the body; this use of oxygen to create energy is called respiration
- Know that drugs are chemicals that have an impact on the natural chemicals in a person's body; know that drugs can be harmful or helpful, depending on what they are and how they are used; know that all drugs can be harmful if overused
- Know that there are many kinds of jobs as a scientist that fall into these categories: communicator scientist, developer scientist, entrepreneur scientist, explorer scientist, investigator scientist, regulator scientist, teacher scientist, technician scientist, policy scientist and business scientist

## Key skills to do:

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.

## Words to know and spell (Tier 2 Vocabulary)

human	blood vessel	substance
Internal organs	diet	alcohol
skeletal	exercise	damage
muscle	drugs	impact
heart	lifestyle	
circulation	nutrients	

## Words to understand and spell (Tier 3 Vocabulary)

<b>Aortic valve</b>	A valve in the human heart between the left ventricle and the aorta
<b>Mitral valve</b>	A valve that lets blood flow from the left atrium to the left ventricle
<b>Pulmonary artery</b>	The artery carrying blood from the right ventricle of the heart to the lungs for oxygenation
<b>Pulmonary valve</b>	The valve of the heart that lies between the right ventricle and the pulmonary artery
<b>Cardiovascular system</b>	An organ system that permits blood to circulate and transport to and from the cells in the body

## Concept check questions. Test yourself:

How does blood and oxygen make its way around our bodies?  
Are there many similarities between our skeletons and those of other animals?

Which is more important, diet or exercise?  
Is meat a necessity in our diet?

### Opportunities for Investigation:

**Fair Testing:** How does the length of time we exercise for affect our heart rate?