(Music)

STUDENT: HOW MUCH BLOOD IS IN YOUR VEINS?

Dr. Melissa AGOUDEMOS: THE AVERAGE ADULT HAS ABOUT FIVE LITERS OF BLOOD IN THEIR VEINS WHICH IS ABOUT 1.3 GALLONS. A TEN YEAR OLD BOY HAS ABOUT ONE GALLON OF BLOOD IN HIS VEINS.

JASPER: HI MY NAME IS JASPER AND WHY IS BLOOD RED?

AGOUDEMOS: BLOOD GETS ITS COLOR FROM IRON. IRON IS RED. IRON IS IN YOUR RED BLOOD CELLS AND HELPS TO BIND OXYGEN AND CARBON DIOXIDE TO CARRY IT AROUND THE BODY.

Student: HOW MANY BLOOD VESSELS LEAD TO AND FROM THE HEART?

AGOUDEMOS: SO THE BLOOD VESSELS ARE LIKE THE BRANCHES OF A TREE. THE AORTA IS THE BIG BLOOD VESSEL THAT COMES OUT OF THE HEART AND IT BRANCHES INTO MANY SMALL VESSELS. SO THE AORTA IS LIKE THE TRUNK OF THE TREE GOING OUT into MANY SMALL BRANCHES. THOSE BRANCHES GET SMALLER AND SMALLER UNTIL THEY ARE CALLED Capillaries. THEY ARE ALL OVER YOUR BODY. THEY ARE ABOUT 10 BILLION Capillaries IN YOUR BODY.

(Music)