

BLOOD LINE / LIFE LINE: Track 9

This song describes the circuit of blood through the body. Deoxygenated blood is denoted in blue and oxygenated blood in red. Recall that the pulmonary veins return oxygenated blood to the heart for distribution to the systemic circuit, so in the pulmonary circuit blue = artery, while in the systemic circuit red = artery. Note that each chorus is different to describe the many necessities distributed by blood throughout the body. Travel of blood through new sections of the body is noted in italicized green brackets. Some students struggle with cardiac and circulatory subjects so spots for notes are interspersed throughout this song.

CHORUS:

Liquid lines of sustenance
Transport oxygen, hormones and nutrients
Blood line, life line, feel fine
Keep time, steady rhyme, blood line

Arteries leave the cardiac chambers
Veins return blood, not favors
Arteries' goods usually oxygenated
Except pulmonary arteries, not yet sated

Arteries to arterioles to capillaries
Continuous or fenestrated it varies
Venules to veins to vena cava
Valves stop backflow, venous return will save ya

[Begin heart section]

Vena cava superior + inferior sum
Empties deoxygenated into right atrium
Through tricuspid valve to ventricle right
Semilunar valve - pulmonary trunk in sight

Trunk branches laterally right and left
Spreading blood through lungs in chest
Once oxygen rich, the blood returns
Via pulmonary veins – it's the left heart's turn

Into left atrium and through bicuspid valve
Also called A-V and mitral
Left ventricle, enough muscle to afford ya
Power to pump far, starting with the aorta
[End heart section]

The aortic arch, a multiple junction
Goes north and south to support function
Brachiocephalic breaks right in woman or man
To branch right carotid - becomes right subclavian

Liquid lines of sustenance
Transport water, CO₂ and self defense
Blood line, life line, feel fine
Keep time, steady rhyme, blood line

Meanwhile across sternum aortic arch descends
After starting left carotid and left subclavian
subclavian's name tells where these arteries are
[Begin arm section]

Goes axillary, then brachial, to radial to palmar
arch

Digital exchange then veins take blue blood home
median antebrachial, a superficial vein that roams
Deep like radial or ulnar protects blood from harm
leads to basilic, brachial and cephalic in upper arm

Veins getting bigger as they near the heart
Subclavian brings all arm blood towards the start
[End arm section]

Joined by jugulars returning blood from the head
All into superior vena cava wanting to be red

[Begin abdomen section]

Now that descending aorta brings life to the south
To feed organs that handle what goes in your
mouth

Celiac trunk sub diaphragm branches like tree
Into Common hepatic, left gastric and splenic
arteries

Past Superior mesenteric, renal, inferior
mes(enteric) more

The abdominal aorta stays one until L4

[end abdomen section]

[begin leg section]

There it splits left and right common iliac
External to Femoral which slips round back

To popliteal which splits tibially
Posterior and anterior which becomes dorsalis
pedis

From there it's a mess of arches and anastomoses
But it gets the blood from your ankles to your
toesies

Veins have a job to get it up the lower leg vertical
Via small saphenous and posterior/anterior tibial
Femoral and Great saphenous through thigh
Iliac past hip bones, way up high

[end leg section]

Inferior Vena cava takes all this and more
As organs empty, need plenty from the cardiac
store

Superior and Inferior meet at right atrium

And now we're back where we begun

Liquid lines of sustenance
Transport heat, electrolytes and nutrients
Blood line, life line, feel fine
Keep time, steady rhyme, blood line

NOTES:
