

SPORTS SCIENCE: The HEART (6-8)

KEY CONCEPTS:

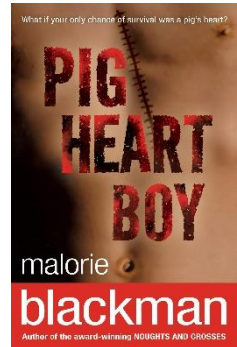


- The heart is a **muscle** that pumps blood throughout the body.
- During exercise, muscles need more **oxygen**, so the heart must beat faster to pump more oxygenated blood.
- Blood travels *away* from the heart through **arteries** and back *toward* the heart via **veins**.
- Sports Scientists must have a solid understanding of the body and how it works in order to make it stronger, faster and fitter.

LITERACY CONNECTION:

[Pig-Heart Boy](#) by Malorie Blackman is a story about a 13-year old boy who is dying of heart disease and is given a daring chance to keep his life by accepting a transplant – from an animal.

Not sure if this is the book for you? Listen to the [author read](#) the first chapter and see if it captures your attention.



ACTIVITY: PAPER TUBE STETHOSCOPE

Materials: paper towel tube, tape, balloon, scissors, funnel or cup, a partner (optional: timer)

1. Blow up the balloon, then let the air out (this makes it stretchy).
2. Cut the neck of the balloon off.
3. Stretch the balloon nice and tight over the large end of the funnel. Tape the balloon to the funnel if needed.

TIP: If using a plastic cup instead of a funnel, poke a hole in the bottom of the cup after stretching the balloon over the top.



4. Push the end of the funnel (or the bottom of the cup) into one end of the paper tube, and tape the funnel to the tube. Give it a try! Place the wide end of the funnel over your friend's heart and put the open end to your ear to hear their heartbeat!

EXPLORE: Set a timer for 20 seconds and count your friend's heart beats. Write the number down and have them run or do jumping jacks for 1 minute and count the beats again for 20 seconds when they are done. What happened?

For step-by-step instructions, watch the video at: [Stethoscope STEM Activity](#)

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org