SCIENCE, TECHNOLOGY, ENGINEERING & MATH



Get to know the HEART: BUILD a STETHOSCOPE (3-5)

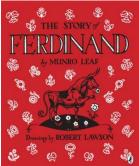
The SCIENCE of the HEART:

- The **heart** is a pump that sends blood throughout the body.
- The blood travels *away* from the heart via **arteries** (red lines).
- Blood *returns* to the heart via **veins** (blue lines).
- During exercise, the muscles need more **oxygen**, so the heart pumps faster.

LITERACY CONNECTION:

<u>The Story of Ferdinand</u> by Munro Leaf is a story about a big strong bull, with an even bigger heart.

Don't have this book at home? Look online for <u>digital versions</u> or <u>read aloud</u> videos.





ACTIVITY: BUILD a STETHOSCOPE

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

- 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 Stores & STEM projects to csharkey@literacypbc.org