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What to Know About This Kit

This kit was created in memory of Barb Youngman, who worked for Harford County Public Library after retiring from a career in Nursing, and was funded through the generous donations of her family and HCPL friends.

Nurses are very important people. They are health care professionals that work with lots of other people to help make sick people better. A nurse is often the first health care professional that a sick or injured person sees.

By participating in the activities in this kit, children will learn about what a nurse does and how to keep themselves healthy. Through role play, they will act as a nurse as they give a stuffed toy or doll a checkup. They will practice healthy habits, like handwashing. They will use mathematical thinking when measuring and comparing objects.

The chart below shows the five major activities included in this kit that explore nursing. Each activity offers one or more activities that highlight science, language, and math literacy skills. Hands-on activities included in the kit also provide suggested vocabulary, fun facts, and further reading.

In addition, the activities in this kit offer opportunities to incorporate the practices of singing, playing, talking, reading, and writing into your child's learning experience. *Current early literacy research has shown that regularly sharing these five practices with young children can help them to become ready to read by the time they start school. *(from "Every Child Ready to Read," 2011)

Activity #1	Activity #2	Activity #3	Activity #4	Activity #5
Toy Checkup	Handwashing	Heart Rate Test	Measurement	Ask a Nurse

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#1: Toy Checkup

SUMMARY:

Dramatic play is a fun and complex way to enhance early literacy skill development. By using their imaginations to role play various scenarios, children expand and apply their knowledge of the world around them, and build their vocabulary. Many young children naturally enjoy “playing doctor” with their stuffed toys and dolls. This particular activity can also help children prepare for real life events that may cause some anxiety, such as visiting the doctor or getting vaccinations.

*Your child can have as much independence in completing this activity as you think is appropriate. If this is a new playtime activity for your child, you may want to model the activity first, and then let him or her try it independently. Older children may want to jump into this activity on their own, and even write down checkup “notes” as they go. The order of tasks and tools in this activity is not as important for learning as the dramatic play itself.

WORDS TO USE:

Bandage: a piece of fabric or plastic used to cover cuts on the skin

Blood pressure: the strength of blood moving inside the body

Blood pressure cuff: a tool for measuring blood pressure, on the upper arm

Checkup: a test to check a person’s health

Otoscope: a tool for looking inside people’s ears

Reflex: one way the body moves, especially at joints like the knee

Reflex hammer: a tool for testing reflexes, especially at the knee

Vaccination: a special kind of medicine that keeps people from getting sick

Syringe: a tool for giving shots, usually into the arm or leg

Temperature: how hot or cold the inside of the body is

Thermometer: a tool for measuring body temperature, in the ear or under the tongue

MATERIALS NEEDED:

- nurse role play costume set (*included in this kit*)
- nurse tool kit (*included in this kit*)
- stuffed animal, doll or other toy (*one included in this kit*)

ACTIVITY:

- Pick one of your stuffed animals, plush toys, or dolls to receive a checkup, or use the doll included in this kit.
- Put on the scrubs included in this kit, so you can pretend to be a nurse.
- Say hello to your toy or doll, and introduce yourself. (“Hi! I’m _____. I’m your nurse today.”)
- Sit up your toy or doll or lay it down so it’s comfortable, and tell it that you’re going to do a simple checkup.
- Use the thermometer to take your toy’s temperature. Put the thermometer in your toy’s ear, or in its mouth, and wait a few seconds. Make sure your toy has a healthy temperature.
- Use the blood pressure cuff to take your toy’s blood pressure. Wrap the band around its arm and squeeze the bulb at the end a few times. Make sure your toy has a healthy blood pressure.
- Use the stethoscope to listen to your toy’s heartbeat. Put the curved ends in your ears and gently put the flat end on its chest. Listen quietly for a few seconds. Make sure your toy has a healthy heartbeat.
- Use the otoscope to look inside your toy’s ears. Gently put the pointy end into each ear, and look through the other end to see inside. Make sure your toy’s ears are clean and healthy.
- Use the reflex hammer to check your toy’s reflexes. Gently tap the hammer against your toy’s knees, and make sure its feet kick out quickly.
- If you think your toy needs a vaccination to stay healthy, use the syringe. Make sure your toy is comfortable and not scared. Place the end of the syringe against your toy’s shoulder or upper arm, and push in the end. Use the bandage to cover the spot where you gave your toy the vaccination.
- When you’re finished, tell your toy that you’re all done. (“We’re all finished! You did a great job, and you’re very healthy!”)

OBSERVATIONS:

- Was it easy or hard to pretend to be a nurse and give your toy a checkup? Would you like to do it again?
- Did your toy get scared or nervous at any point? If so, why do you think it was worried? How could you help your toy stay calm and happy?
- Were any of the tools hard to use? Did you find any other ways to use these tools?
- Did you find anything that surprised you (like a really fast heartbeat or something inside your toy’s ear)? Why was it a surprise, and what might it mean?

- What do you think it would be like to be a real nurse and do many, many checkups every day? What would be the hardest part? What would be the best part?

DID YOU KNOW?

- The heart is the strongest muscle in the human body.
- Your heart is just a little bit bigger than your closed fist.
- The smallest bone in your body is in your ear. The largest bone in your body is in your thigh.
- Every time you step forward, you use 54 muscles.
- Just like fingerprints, each person's tongue print is different.
- A typical person (who is not exercising) breathes 10 to 15 times per minute. A baby breathes 40 to 50 times per minute.
- Food stays in your stomach for 2 to 4 hours.

SUGGESTED READING:

- ICR E Wells *Max's Checkup*
- J 612 C *The Magic School Bus Inside the Human Body*
- J 612 G *The Human Body* by Dan Green
- J 612 M *My Amazing Body*
- J 618.92 S *I'm Getting a Checkup*

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#2: Handwashing

SUMMARY:

Handwashing is a basic, everyday process, but it is also a skill and behavior that must be learned as a child. As with all skills, the earlier that a child learns and incorporates the action into a routine, the more likely it is to become a lifelong habit.

Handwashing really is our best defense against many kinds of bacteria and viruses that cause infection. Children typically don't like to take the time to wash their hands, but there are ways you can make it fun using games, songs, and teaching them about germs.

Practice good hand washing with your children:

- Wet hands
- Apply soap
- Rub soapy hands for 20 seconds
- Scrub fingertips & between fingers
- Scrub forearm to just below elbow
- Rinse forearms & hands
- Use towel to dry hands & forearms
- Turn off water with towel & throw towel away

Sing the song Wash, Wash, Wash Your Hands while you wash the hands:

Tune: "Row Your Boat"
"Wash, wash, wash your hands
Play our handy game.
Rub and scrub, and scrub and rub.
Germs go down the drain.

Wash, wash, wash your hands
Play our handy game.
Rub and scrub, and scrub and rub.
Dirt goes down the drain."

WORDS TO USE:

Fingernail: the hard protective layer at the upper tip of each finger that grows and requires regular trimming

Fingertips: the ends of the fingers

Germs: tiny living organisms that can cause diseases

Lather: a thick, creamy foam formed when soap is mixed with water

Scrub: to clean something by rubbing or brushing it hard

Soap: a substance used for washing and cleaning

MATERIALS NEEDED:

- Cooking Oil
- Cinnamon
- Hand soap
- Paper towel

ACTIVITY:

- Rub a little vegetable oil on your child's hands, then sprinkle with cinnamon "germs" while explaining that real germs are too small to see. Be sure to tell your kids not to touch their noses or eyes while cinnamon is on their hands.
- Have your child wash his or her hands without soap. The "germs" won't come off.
- Add soap and watch those "germs" disappear!

While they're washing:

- Teach your kids to wash their hands frequently.
- Wash hands with soap and water for 20 seconds—the time it takes to sing the Happy Birthday song twice.

OBSERVATIONS:

- "Germs" did not come off while only using water but when we added soap, they came off. Why?
- Where can we find germs?
- What can germs do to us?

DID YOU KNOW?

- Hands are the most common ways for germs to spread because germs like the warm and moist environment on hands.
- Using soap to wash hands is more effective than using water alone because the surfactants in soap lift soil and microbes from skin, and people tend to scrub hands more thoroughly when using soap, which further removes germs.
- You should always wash your hands:
 - After going to the bathroom
 - After playing with pets
 - Before eating
 - After cleaning up spills
 - After diapering a child

- Before and after preparing or serving food
- After playing outdoors
- After coughing or sneezing into hands or a tissue
- When your hands are dirty
- According to experts, the single most important thing you can do to prevent getting the flu is to wash your hands (if you do not get a flu vaccine).
- Most germs on our hands are on the fingertips and under the fingernails.
- Damp/wet hands spread more germs than dry hands.

SUGGESTED READING:

- E Krall *Sick Simon*
- E Mack *Who Needs a Bath?*
- E McElroy *Let's Get Cleany Clean!*
- ICR J 613.0432 O *Germs*
- J 613 S *Keeping Clean*
- J 613.4 C *Clean Hands, Dirty Hands*

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#3: Heart Rate Test

SUMMARY:

Your heart is a muscle that pumps blood out around your body through your arteries. You can feel the blood pumping where the arteries are close to your skin. These are your pulse points, and if you feel gently with your fingertips, you can count how fast your heart is beating.

The idea of aerobic exercise is to get your heart pumping faster, which will exercise and strengthen your heart. Learn how to take your pulse, and you will be able to see how well you are doing in your aerobic exercises.

WORDS TO USE:

Aerobic exercise: strengthening the heart and lungs by making them work hard

Blood: the red fluid your heart pumps through your veins and arteries for several minutes or more

Heart: the organ in your chest that pumps blood all through your body

Heartbeat: one complete pumping movement of the heart

Heart Rate: the number of times your heart beats per minute

Pulse: a steady beat or throb, especially the feeling of the heart moving blood through your body

MATERIALS NEEDED:

- Stethoscope (*included in this kit*)

ACTIVITY:

Ask your child to hold two fingers together in the air (1st and 2nd fingers). Ask them to place their fingers on the middle of their necks and continue to gently move their fingers to the sides of their necks until they feel the soft spot. Tell them they will recognize the spot by feeling a bumping on their fingers. Ask them to pay attention to how fast the bump is going and clap out how quickly it is beating.

AND/OR

Ask your child to place the stethoscope over the left side of their chest and listen for their heart beat. Have them clap out the rate of the beat after listening for a while. Ask your child to perform activities (such as running in place, hopping on one foot, dancing, etc.) to raise their heart rate, and then use the stethoscope again. You may say something like, "Show me with your hands how fast it is going."

OBSERVATIONS:

- Take your pulse before you start—this is your 'starting pulse'. Take your pulse after you have been doing high level exercise. Do you notice a difference?
- When you run around a lot, your body needs a lot more oxygen-filled blood. Your heart pumps faster to supply the oxygen-filled blood that your body needs.

DID YOU KNOW?

- Your heart is located in your chest and is protected by your rib cage.
- A child's heart is about the size of a child's fist.
- An adult heart is about the size of two adult fists.
- The heart has four chambers: the left atrium, the right atrium, the left ventricle, and the right ventricle.
- Your heart beats about 100,000 times per day and about 35 million times per year.
- A child's heart rate (or pulse) is about 90 beats per minute.
- An adult's heart rate (or pulse) is about 70 beats per minute.
- The heart pumps the equivalent of about 1 million barrels of blood during an average lifetime.

SUGGESTED READING:

- J 612.17 H *Hear Your Heart*
- J 612.17 H *Inside the Heart*
- J 612.17 L *My Heart*

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I AM A NURSE

#4: Measurement

SUMMARY:

During a well-child visit, a nurse takes measurements of a child's height and weight to track growth. If medications are prescribed, doses are measured according to the child's weight.

Preschoolers develop mathematical thinking skills when they begin to understand measurement concepts, like size, length, height, and weight. Children can use standard units of measure, like inches, feet, and pounds, or they can measure using non-standard units, like teddy bears, toy cars, etc.

WORDS TO USE:

- **Capacity:** how much something holds
- **Height:** how tall something is
- **Length:** how long something is
- **Standard units of measurement** (inches, foot/feet, pounds, ounces)
- **Weight:** how heavy something is

MATERIALS NEEDED:

- 6-ft long ruler (*included in this kit*)
- Bathroom scale
- Plastic kitchen measuring cups & spoons

ACTIVITIES:

Measuring Height

- Tape the 6-ft ruler on a doorframe or wall so that the bottom touches an uncarpeted floor.
- Have your child remove his or her shoes, and stand with feet flat, together, and against the wall. Make sure legs are straight, arms are at sides, and shoulders are level.
- Make sure your child is looking straight ahead and that the line of sight is parallel with the floor.

- Take the measurement while the child stands with head, shoulders, buttocks, and heels touching the flat surface.
- Record the measurement using feet and inches, or just in inches, and the date it was taken.
- Alternately, you can use other objects to measure height or length. Stacked cereal boxes, a line of toy cars, or whatever else may be at hand can be used to measure. Make sure to record the measurement, including the units used—3 cereal boxes tall, 34 building blocks long, etc.

Measuring Weight

- To measure weight accurately at home, use a digital scale. Place the scale on firm flooring (such as tile or wood) rather than carpet.
- Have your child remove shoes and heavy clothing, such as sweaters.
- Have your child stand with both feet in the center of the scale.
- Record the weight to the nearest decimal fraction (for example, 35.5 pounds).
- Compare the weights of toys. Which ones are light and can be easily carried? Which ones are heavy?

Measuring Liquids

Since water play can be messy, the bathtub is a great place to practice measuring liquids. Otherwise, set up an area for water play, either indoors or outdoors.

- Provide your preschooler with a variety of containers, measuring spoons, and cups to fill and empty water. Talk with him or her about which container holds more or less, or is heavier or lighter. Count how many of a smaller container it takes to fill a larger one.

OBSERVATIONS:

- Ask your child questions to encourage him to compare. Making comparisons is the beginning of measurement and allows young children to fully develop the understanding and use of measurement skills. Comparison is finding a relationship between two things or a group of things. Which is taller? Which is shorter? Which is heavier or lighter?
- Provide your child with everyday objects that she can put in order, such as smallest to biggest (stuffed animals or toy cars), lightest to heaviest (different size books or balls made out of play dough), and shortest to longest (cut drinking straws or empty paper towel tubes at different lengths).

DID YOU KNOW?

- People grow at their fastest rate as babies in the first year of life, adding about 10 inches to their height from birth to age 1.
- You're tallest when you wake up and you may be as much as one centimeter shorter by the day's end.
- Many, many years ago, an inch was defined as the width of a person's thumb. A yard was originally the length of a man's belt or girdle, as it was called.

SUGGESTED READING:

- J 530.8 F *Sizing up winter*
- JDVD S *Sesame Street--Big Elmo Fun*
- JDVD 516.15 L *Leapfrog. Adventures in Shapeville Park*

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#5: Ask a Nurse

SUMMARY:

Curiosity about jobs and community roles is a natural part of early childhood. As children learn about the world around them, they may notice patterns in things like work uniforms and tools. Take advantage of this natural curiosity and encourage your child to engage in conversation with the nurse at your pediatrician's office. Plans to talk to the nurse may also help children who are reluctant to visit the doctor feel more comfortable with these appointments.

WORDS TO USE:

- **Career:** a permanent job, or a series of jobs in the same field
- **Doctor:** a skilled person trained in the art of healing, who works with nurses to maintain good health in patients and treat the sick
- **Health:** the condition of the body, especially when strong, fit, and not sick
- **Medicine:** the science or art of the prevention, cure, and treatment of sickness
- **Nurse:** a skilled person trained in caring for the sick, or in maintaining good health, who usually works with doctors or in hospitals
- **Pediatrician:** a doctor for babies and children
- **Scrubs:** special clothing that nurses and some doctors wear to work
- **Tool:** an object someone uses to do a job
- **Train:** to learn a profession or trade
- **Uniform:** the special clothes some people wear to work, so they are ready for their job and so other people know who they are

MATERIALS NEEDED:

- an appointment to see your doctor
- paper and a pencil (*optional*)

ACTIVITY:

- The next time you visit your doctor, look for the nurse who starts your checkup.
- Ask the nurse a few questions to learn about what nurses do. For example:
 - *Do you wear a uniform to work? What is it?*
 - *What tools do you use for your job?*
 - *How many years of school did you do to become a nurse?*
 - *What is the hardest part of being a nurse?*
 - *What is the best part of being a nurse?*
- If you like, write down the answers the nurse tells you on a piece of paper so you can look at them again later.
- Be sure to give your nurse a big thank you for answering your questions, and for taking good care of you!

OBSERVATIONS:

- What uniform does your nurse wear? Have you seen this uniform before? Does it look comfortable?
- How is a nurse's uniform, scrubs, like other work uniforms? How is it different? Think about uniforms for jobs such as police officer, firefighter, and mail carrier.
- What tools does your nurse use for work? Have you seen these tools before? What do they do?
- Are the tools that nurses use the same or different than the tools that doctors use? Why might they be the same?
- Did you notice other nurses at your doctor's office? How many?
- Would you like to be a nurse when you grow up? Why or why not?

DID YOU KNOW?

- There are at least 3 million nurses in the United States.
- Nurses go to school for 2 years, 4 years, or 6 years to learn nursing.
- Two very famous nurses are Clara Barton and Florence Nightingale. They both lived about 100 years ago.
- Clara Barton created the American Red Cross, which helps keep people safe and healthy.
- Florence Nightingale helped make nursing a professional job, and helped create special schools for nurses.

SUGGESTED READING:

- J 307.3362 G *Neighborhood Helpers*
- J 610.73 M *Nurses*