

MY BLOOD

MATH AND MY BLOOD

Students integrate math concepts and science knowledge as they learn how much blood is in the human body.

Students Will Learn:

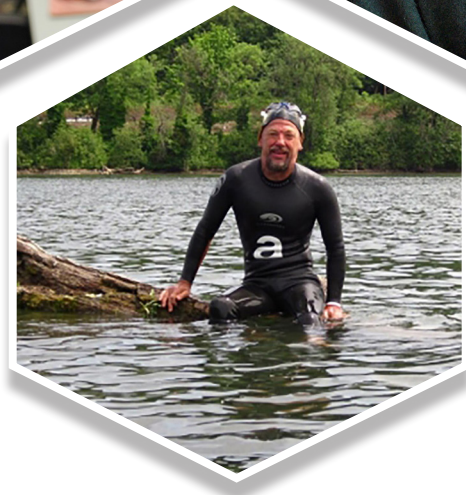
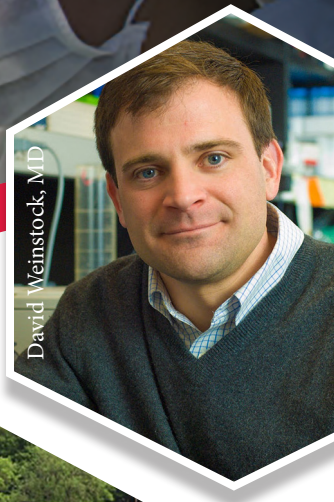
- An adult's body, a child's body, and a baby's body have different amounts of blood.
- One pint is equal to two cups.

Estimated Activity Time: 30–35 minutes

WORDS TO KNOW

pint: unit of measurement equal to two cups

circulate: to flow



Background Information

It takes about one minute for our blood to circulate completely through our body. How much blood circulates during that time? It depends on factors such as a person's size and gender. An average-size adult has eight to ten pints of blood, a 40-pound child has two or three pints of blood, and a newborn baby has about half a pint of blood.

Materials:

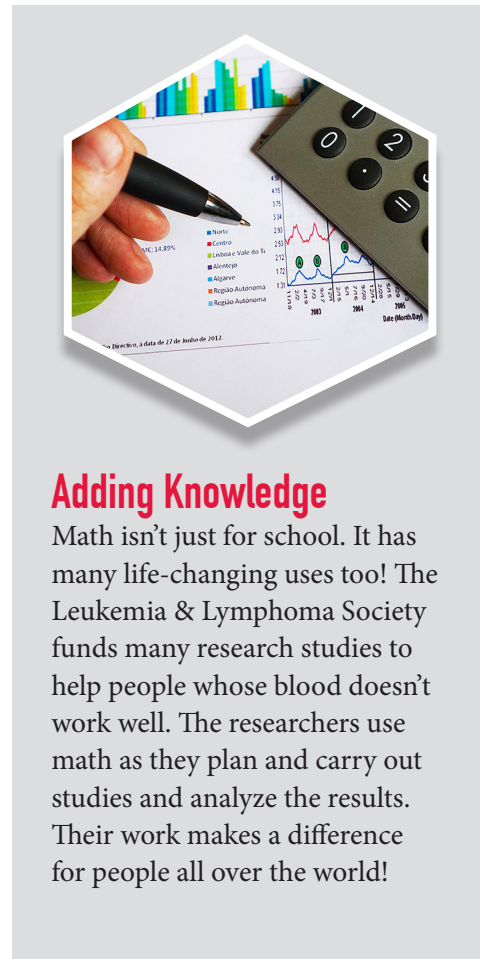
13 16-ounce disposable cups
8-ounce disposable cup

Additional materials:

copy of the provided printable for each student
class supply of scissors
class supply of glue sticks

Steps:

1. Poll students by a show of hands to find out whether they think all people have the same amount of blood circulating through their bodies. Invite students to share their thoughts. Then explain that, in general, the bigger the person, the more blood he has.
2. Set out one 16-ounce cup. Explain that it can hold a pint, or two cups, of liquid. Ask each student to signal the relative amount of blood he thinks an average-size adult has by giving a thumbs-up for more, a thumbs-down for less, or holding his hand out flat for the same amount. After scanning students' responses, tell students that an adult has more than one pint of blood.
3. Place a 16-ounce cup beside the first one and poll students again to find out how they think the amount of blood an adult has compares to the quantity represented. Continue the comparing and polling process until you set out ten cups. Explain that the quantity of blood an adult has varies depending on gender and size, but the average quantity is eight to ten pints.
4. Invite students to guess how much blood a 40-pound child has. Then set out three 16-ounce cups to represent the quantity. Explain that a 40-pound child might have two or three pints of blood. Set out an eight-ounce cup to represent the amount of blood a newborn baby has.
5. Guide students to use the words *least*, *more*, and *most* to compare the quantities. Then have them determine how many more pints of blood an average adult has than a 40-pound child.
6. Give each student a copy of the booklet pattern. Have him cut the pattern along the bold lines. Instruct him to glue the two strips together where indicated and then carefully accordion-fold the booklet. Ask him to write his name on the booklet cover. Then guide him to read and complete the sentences. (See the sample on the answer key page.)



Adding Knowledge

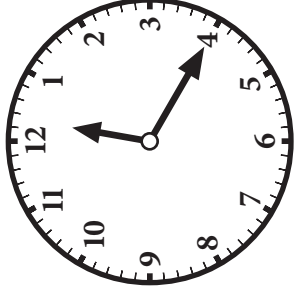
Math isn't just for school. It has many life-changing uses too! The Leukemia & Lymphoma Society funds many research studies to help people whose blood doesn't work well. The researchers use math as they plan and carry out studies and analyze the results. Their work makes a difference for people all over the world!

Standards Covered:

CCSS.SL.1.2: Ask and answer questions about key details in a text read aloud or information presented orally.

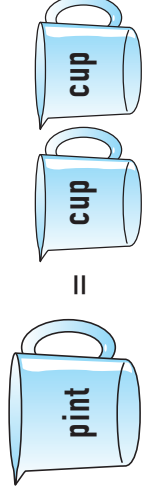
Math and My Blood

Name _____



Blood flows through my body every minute of every day.

1



An adult has _____ blood than a child. An adult has about ten pints of blood.

2

Glue.

A child has _____ blood than a baby. A 40-pound child might have _____ or _____ pints of blood.

3

A newborn baby has _____ blood than a child. A baby has about half a _____ of blood.

4

Bigger people usually have _____ blood than smaller people.

5

Cut off.

"Math and My Blood"

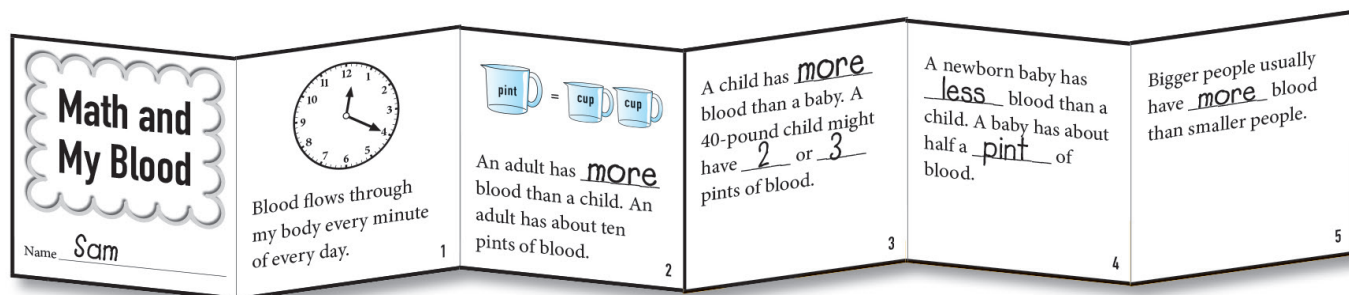
Answer Key

Page 2: more

Page 3: more; 2 or 3

Page 4: less; pint

Page 5: more



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Grade 1: My Blood
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