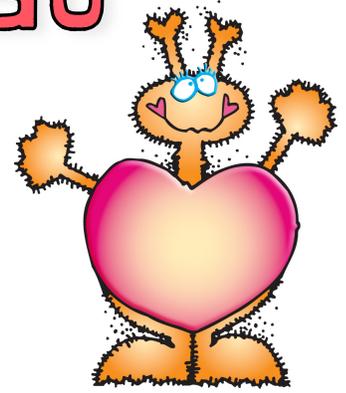


in a Heartbeat

SUPPLIES:

♡ Small marshmallows

♡ toothpicks

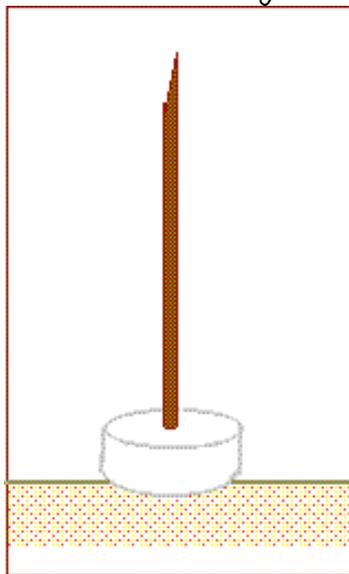


DIRECTIONS:

Gather together enough miniature marshmallows to have one for each student and one for yourself. Make narrow four-inch "sticks" by slicing plastic straws lengthwise, making one "stick" for each marshmallow. Insert this stick in the marshmallow. (Alternatives for the candy and straw equipment could be a ball of dough and a toothpick - just so long as the combination stays lightweight.) Each student must carefully observe the demonstration.

Lay your left hand, palm up and still, on the table. Find your wrist pulse. Stand the marshmallow on top of the pulse point and carefully watch the tip of the straw. Sure enough you will see the straw twitch with each pulse and the number of twitches you count in fifteen seconds multiplied by four will be in the 65 -75 range - normal for adult humans.

Set the children up in twos or threes so that one can perform the experiment while the other watches and counts, and then they change places. They will find that a child's heart rate is considerably faster than that of an adult.



did you know?

Heartbeats Per Minute (resting)

Bat	750	Camel	30
Cat	120	Chick	380
Chicken (Adult)	280	Cow	64
Dog	110	Elephant	35
Giraffe	65	Goat	90
Guinea Pig	280	Hamster	450
Horse	45	Human adult	60
Human baby	120	Lion	40
Monkey	190	Mouse	520
Pig	60	Rabbit	205
Rat	328	Sheep	75
Skunk	166	Squirrel	250

Extensions:

Take your pulse after doing heart healthy exercises:

- Running in place
- Jumping
- Hopping
- Spinning

Have a heart healthy taste test! Test foods like:

- Carrots
- apples
- whole wheat bread
- Broccoli
- Dark chocolate



happy hearts

Your heart is really a muscle. It's located a little to the left of the middle of your chest, and it's about the size of your fist. There are lots of muscles all over your body — in your arms, in your legs, in your back, even in your behind.

But the heart muscle is special because of what it does. The heart sends blood around your body. The blood provides your body with the oxygen and nutrients it needs. It also carries away waste.

Your heart is sort of like a pump, or two pumps in one. The right side of your heart receives blood from the body and pumps it to the lungs. The left side of the heart does the exact opposite: It receives blood from the lungs and pumps it out to the body.

We Got the Beat

How does the heart beat? Before each beat, your heart fills with blood. Then its muscle contracts to squirt the blood along. When the heart contracts, it squeezes — try squeezing your hand into a fist. That's sort of like what your heart does so it can squirt out the blood. Your heart does this all day and all night, all the time. The heart is one hard worker!

Keep Your Heart Happy

Most kids are born with a healthy heart and it's important to keep yours in good shape. Here are some things that you can do to help keep your heart happy:

- Remember that your heart is a muscle. If you want it to be strong, you need to exercise it. How do you do it? By being active in a way that gets you huffing and puffing, like jumping rope, dancing, or playing basketball. Try to be active every day for at least 30 minutes! An hour would be even better for your heart!
- Eat a variety of healthy foods and avoid foods high in unhealthy fats, such as saturated fats and trans fats (reading the labels on foods can help you figure out if your favorite snacks contain these unhealthy ingredients).
- Try to eat at least five servings of fruits and vegetables each day.
- Avoid sugary soft drinks and fruit drinks.
- Don't smoke. It can damage the heart and blood vessels.

So now you know that your heart doesn't look like a valentine, but it sure deserves to be loved for all the work it does. It started pumping blood before you were born and will continue pumping throughout your whole life.

in a Heartbeat



Did you know a mouse has a resting heart rate of 520 beats per minute? My heart beats about _____ times per minute!

This is a picture of the experiment we did:



I learned that:

Four sets of horizontal writing lines, each consisting of a solid top line, a dashed middle line, and a solid bottom line, for the student to write their findings.

Name _____