



## **Family Science Activity Book**

2020, Edition 4

**Families with Kids in Grades **K-3****



UNIVERSITY OF SASKATCHEWAN

**College of Engineering**

ENGINEERING.USASK.CA

Name: \_\_\_\_\_

## Technology and Human Body

E	M	M	O	B	G	S	M	I	L	E	P
G	U	D	E	H	F	T	B	H	C	T	X
B	P	L	M	E	E	E	L	A	E	C	U
N	H	U	A	A	E	E	J	Z	Y	U	J
O	O	V	I	R	T	T	F	I	E	X	U
S	N	J	L	T	A	H	E	V	S	J	T
E	E	X	F	F	C	H	A	N	D	S	Q
T	L	Q	K	J	R	A	D	I	O	K	L

Find the following words in the puzzle.

Words are hidden → and ↓ .

EMAIL

EYES

FEET

HANDS

HEART

NOSE

PHONE

RADIO

SMILE

TEETH

# Learning about Your Heart

## What does our heart do?

“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.”



To **check your pulse** at your wrist,

**Step 1:** Place two fingers between the bone at the inside of your arm (you may need help for an adult to find your heartbeat).

**Step 2:** When you feel **your pulse**, count the number of **beats** in 15 seconds.

Number of heart beats: \_\_\_\_\_

**Step 3:** Multiply this number by four to calculate **your beats** per minute.

Number of Heartbeats x 4: \_\_\_\_\_

**Children** 3 to 4 years old: 80 to 120 beats per minute.

**Children** 5 to 6 years old: 75 to 115 beats per minute.

**Children** 7 to 9 years old: 70 to 110 beats per minute.

**Children** 10 years and older: 60 to 100 beats per minute.

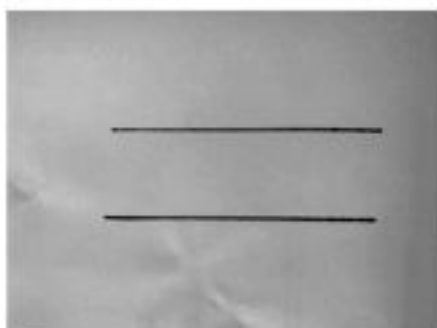
## Find Your Blindspot!

**Activity:** Your eyes are the reason you see, but did you know there is a spot that you can't see?? Today we will create something to find where that spot is on you!

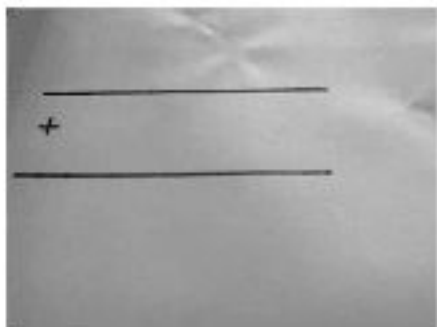
**What you need:**

- Paper
- Scissors
- Pen
- Ruler

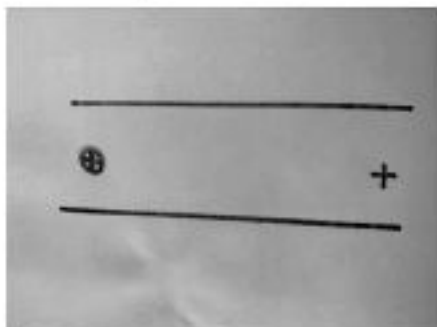
**Step 1:** Using the ruler draw 2 lines as shown!



**Step 2:** Draw a plus sign on one end of the paper!



**Step 3:** Draw a target on the other end!



**Step 4:** Hold up the paper to your right eye and look at the plus sign!

**Step 5:** Close your left eye!

**Step 6:** Move the paper away until you can no longer see the target. You have found your blindspot!!!

## Can You Beat Your Heart?

In just one day, the heart pumps 7,200 liters of blood through our body! This means that the heart pumps about **5 liters** of blood per **minute**. That's about a whole milk jug in one minute!

Activity: Do you think you can beat your heart in a one minute race? Can you scoop out 5 liters of blood 1/4 cup at a time in ONE minute?

What you need:






- 2 large dishpans, buckets, or bowls
- 5 liters of water (4.9 liters to be exact!)
- a 1/4 cup measuring cup
- watch or timer

What you'll do:

1. Fill one large dishpan, bucket, or bowl with 5 liters of water (or 4.9 liters if you want to be exact!).
2. Place the bucket with the water in it beside the empty bucket.
3. Set a watch or timer for 1 minute.
4. Try to move all the water in the dishpan (5 liters) into the empty dishpan in just one minute or less
5. **Go!**

## Sorting our Five Senses

Activity: The five senses — seeing, hearing, smelling, tasting, and touching — help us to learn about our surroundings. For this activity, you'll need colours, scissors and glue. Colour the many different objects in the next page and cut them out. Sort them under which sense and glue them in the table below.

 see	 smell	 taste	 hear	 touch



# Thank you to our local Sponsors!



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