

**INSTITUTO CUMBRES SAN JAVIER  
PRIMARY  
SCHOOL YEAR 2018-2019**

Miss CINDY BALLOW Group 2nd A & B  
**Check Out the Human Body Guys!** September 2018 – May 2019

Project: \_\_\_\_\_ Date: \_\_\_\_\_

<b>COMPETENCES (THEMES)</b>		
Competency: Applies own knowledge and scientific thinking to understand the social, historical, geographical, cultural, economic, and natural phenomena from his/her immediate surroundings, and from other contexts.		
<b>ATTITUDES</b>	<b>PROCEDURES</b>	<b>CONCEPTS</b>
-Take care of the material used in writing exercises. Appreciate the work of others.	-Interact with and respond to the abilities and strategies that should be applied in specific situations.  -Recognizes, with guidance and support, the overall structure of the human body, including its systems, organs, and major functions.	-Identifies several systems that conform the human body, such as respiratory, circulatory, and digestive  -Describes in his/her own words the functions of the major organs of the body, such as brain, heart, lungs, stomach, and bones.

**PURPOSE OF PROJECT:** To learn the body systems in a fun and meaningful way during the course of the entire school year.

**PRODUCT:** Different models of the different body systems with their corresponding posters containing important information. An “I Movie” will be made with the different presentations that went on during the school year summing up the different systems that were covered and how the ss. learned about them with the usage of technological devices.

**OPENING QUESTIONS:** How do we breathe? What makes us think? How does our body get nutrients from food? Why is our heart always pounding? What does the blood do in our bodies? Why are our bones important? What do organs do in our bodies?

STAGES OF THE PROJECT	ACTIVITIES	RESOURCES AND MATERIALS		CLASS SESSIONS
		BOOKS	OTHER	
	<p>-T. will introduce the project to the ss. and ask the opening question. T. will also discuss the importance and the difference of what makes up a good team! Ss. will get into teams of three. There will be four teams per group.</p> <p>T. will introduce the body systems to ss. by presenting a video about the different body systems. (THE HUMAN BODY LESSON FOR KIDS) The video has all the systems, this will be to get them in the mood for the project. T. will then specify that they will be learning a specific system per month and also making specific hands-on projects to complement each system.</p> <p>Ss. will begin in SEPTEMBER- Ss. will begin with the RESPIRATORY SYSTEM and the parts of the blood. T. will have ss. use the app on the iPad that has this specific system. They will be working on this in class and then fill out a worksheet with the important parts of the system.</p> <p><b>THE HUMAN LUNG</b></p> <p><a href="https://www.icanteachmychild.com/human-body-activities-for-kids/">https://www.icanteachmychild.com/human-body-activities-for-kids/</a></p>  <p>This activity will be what the ss. will make for the respiratory system.</p> <p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• empty 2-liter bottle</li> <li>• plastic bag (trash bag or thick grocery bag)</li> <li>• <u>thick rubber band</u></li> <li>• <u>balloon</u></li> <li>• <u>drinking straw</u></li> <li>• masking tape</li> <li>• <u>modeling clay</u></li> <li>• scissors</li> </ul>	<p><b>Several Apps that have information about the body systems</b></p> <p><b>Work sheets</b></p>	<p><b>Internet investigations</b></p>	<p><b>3-4 per body system</b></p>

**What You Do:**

1. Cut the 2-liter bottle in half; you will only use the top part; discard the bottom and the bottle cap.
2. Cut a square of plastic from the bag. Make it big enough to cover the large opening of the cut bottle (about 8").
3. Stand the bottle top on the table and place the sheet of plastic over the large opening, use a large rubber band to secure it around the bottle. Gently pull the edges of the plastic, so it is



tight across the top.

4. Cut off the excess plastic next to the rubber



band.

5. Put the straw into the balloon and seal the opening around the straw with several pieces of tape. Blow gently on the end of the straw to make sure air goes into the balloon. If the balloon doesn't puff out a little, seal it around the straw better so air can't escape.
6. Put the balloon end into the bottle's opening and use modeling clay to secure the straw to the bottle so that air can



only pass through the straw.

7. Fold a piece of tape in half with sticky sides together leaving the ends exposed (only stick the tape together in the middle). Attach the sticky ends to the bottom of the



plastic.

8. Use the tape tab as a handle and gently pull down slightly on the plastic and watch what happens to the balloon. Now push up gently while watching the



balloon.

**What Happened:**

The model shows how your lungs work! The plastic at the bottom works like your diaphragm—a strong muscle that expands and contracts to cause your lungs to fill with air and then empty out again. The movement of the balloon matches your breathing – when you breathe in, your lungs fill with air just like the balloon did. That’s because the diaphragm expanded making room for air to get in through the straw (which represents your airway, or trachea). When you breathe out, your diaphragm contracts (or squeezes in) pushing all the air out of your lungs. The same thing happened in your soda bottle model – when you pulled down on the plastic, the balloon inflated slightly and when you pushed up, the balloon deflated! Inside your body, you have two lungs that work together, and the diaphragm is below them. Air goes in and out of both of your lungs at the same time. This model just represents one lung.

**Digestive System & the Small Intestines**

<https://www.thediscoveryapple.com/2017/01/13/21-super-fun-human-body-activities-and-experiments-for-kids/>

**Visualizing the length of the digestive system -**

<http://www.homeschoolroom.com/digestive-system-demonstration/>

An adult's small intestines are about 23 - 25 feet long. The length will vary for males & females and also by your age. And for a child, their intestines would measure about 20 feet long.

Ss. will use a piece of yarn and measure it and cut it and put it into a small zip lock bag, ss. will also measure the length of the large intestine which is 1 meter long, ss. will cut a wide ribbon and also put it in the bag.

Ss. will use recyclable material to make a model of the digestive system and the plastic bag with the intestines will be used in the model.

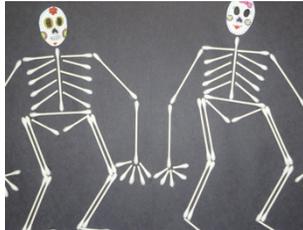


Ss. will follow the movement of the food with their fingers to understand how the food travels through the digestive system.

### **SKELETAL SYSTEM**

<https://www.icanteachmychild.com/human-body-activities-for-kids/>

Ss. will make a skeleton of the human body with black construction paper and Q-tips.



### **THE MUSCULAR SYSTEM**

<https://www.thediscoveryapple.com/2017/01/13/21-super-fun-human-body-activities-and-experiments-for-kids/>

Ss. Will also make a model of a hand to understand how important the bones and the muscles work together for the movement.



**Material –**

**Straws, tape, string, and colored paper.**

### **HEART AND CIRCULATORY SYSTEM**

**CIRCULATORY SYSTEM – BLOOD CELLS**

<https://www.noguilmom.com/very-simple-science-experiments/>

– Ss. will also make a poster with the important information they obtained.  
Ss. will be doing this activity to reinforce their learning.

**For the plasma we will use corn syrup. This is a good option because it has a slight yellow tinge to it which is very similar to real plasma. We will pour this into a clear glass bowl so that we could easily view the blood and its components. We will also use an empty water bottle to make a version of our blood model in a bottle.**

**For the red blood cells we will use little cinnamon candies. Red blood cells make up about 40% of the blood.**



**There is about one white blood cell for every 700 red blood cells, for these we will use lima beans.**

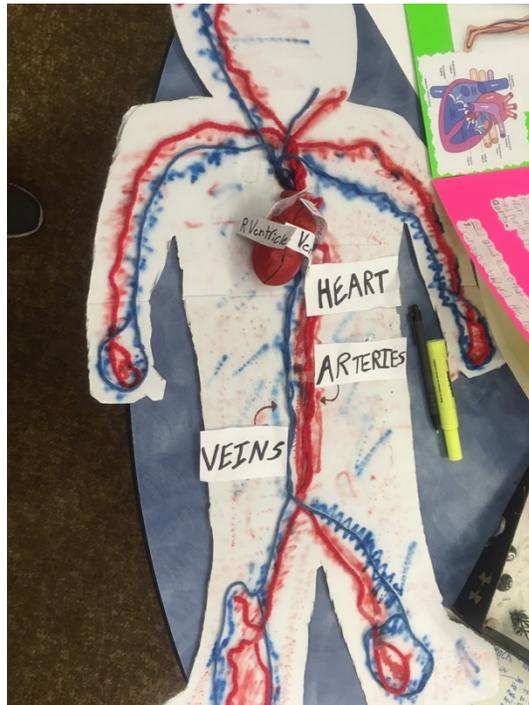
**We will use white sprinkles for the platelets**



Eah ss. will take a sample of the blood home in a small plastic bottle.

### Circulatory System video

Ss. will make a lifesize cutout of their bodies and add the veins and the arteries and the heart to their cutout.



<https://www.icanteachmychild.com/human-body-activities-for-kids/>

While the projects are going on, the T. will taking video of special moments of the children working, explaining, and presenting. At the end of the entire project, the T. will put the videos together into a presentation.
