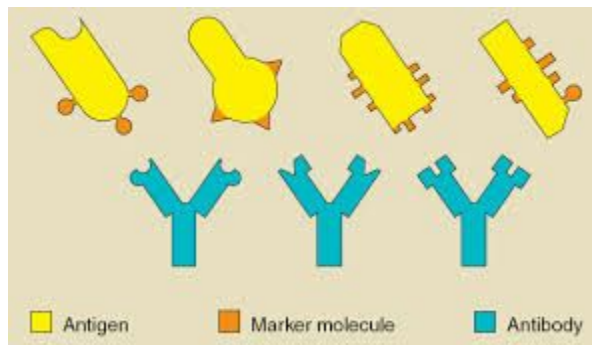


Immune system project proposal

The system that we are modeling is the immune system and lymphatic system. Our group chose to model the 3 lines of protection that our immune system offers. The three layers of protection are the skin, mucous membranes, hair, cilia, gastric juice, vaginal secretion and urine, tears, sweat, saliva, and cerumen. The second line of defense is leucocytes (white blood cells) which consist of granulocytes and agranulocytes. The third line of defense is the specific immune response, immune system's antibodies can identify foreign and "domestic" antigens, this allows the antibodies to get rid of the foreign antigens while keeping the body's "domestic" antigens.

In order to model the immune system we are going to model the third line of defense by modeling antibodies and antigens. We will model interaction between these two cells by creating two objects that fit together and two objects that don't fit together. When the two objects that fit together touch it will light up a light imitating a signal being sent to the brain that it is a "domestic" antigen. When the two objects that don't fit together are connected it will not light up a light signaling that it is a "foreign" antigen. This will simulate that body's response to when it activates that immune response and when it does not. The materials needed will be two objects that fit together and one object that doesn't fit, wire, LED, tape, and a 9 volt battery.



To demonstrate how white blood cells work we will be using tools such as hammers and fruit. Here are our steps for this

1. Acquire Hammer
2. Label hammer "white blood cell"
3. Acquire fruit
4. Label fruit "disease"
5. Destroy disease with white blood cell

