Welcome to this lesson today on white blood cells. Today we are going to be talking about the five different types of white blood cells and what their role in the body is. So first of all, leukocytes is another word for white blood cells. So whenever you see or hear leukocytes, just think white blood cells.

So white blood cells are a component of blood that play a role in the body's defense system. So we have five different types of white blood cells, as I mentioned, that each have a little bit of a different role in helping to clean up the body, remove old cells, destroy bacteria, fight infection, et cetera. So we're going to talk about their specific roles when we get into the five different types.

But first of all, as I mentioned, white blood cells are a component of blood. So if you'll recall, the other components of blood are RBCs, or red blood cells. We also have platelets, which play a role in blood clotting. And then we have our five different types of white blood cells. So these here are going to be our white blood cells. OK.

So we're actually going to start with these down here. We break white blood cells down into two separate categories. And one category is called granulocytes. So granulocytes are types of white blood cells that have visible granules in their cytoplasm. And these granules are a type of enzyme. And these granules are visible when the cell is stained. So they play some sort of role in defense.

So our three different types of granulocytes are basophils, eosinophils, and neutrophils. OK. So basophils are also sometimes referred to as mast cells. So you might hear them talked about that way, mast cells. And these type of cells play a role in the inflammation response. So when their granules are released from the cell, it plays a role or contributes to inflammation. So that's one way in which the body helps defend itself against certain types of pathogens, is with information, and that comes from basophils.

Eosinophils are another type of granulocyte that target parasites too big for phagocytosis. So an example of this type of parasite might be a worm. So if somebody has worms, eosinophils are the type of white blood cell that would target those and help to get rid of it. And neutrophils are another type of granulocyte. And their main role is in targeting bacteria and fungi.

So if we take a look at our next group up here, these are going to be agranulocytes. So these types of white blood cells do not have those visible granules in their cytoplasm. So our two types of agranulocytes are going to be lymphocytes.

And lymphocytes play a role in various different types of immune system responses. And there's actually various different types of lymphocytes that all play different roles in our immune system responses. So when you learn a

little bit more in depth about the immune system and how that works, you'll learn about lymphocytes, the different types of lymphocytes, and their specific roles. But just know for now that they play a role in immune system responses.

And then monocytes are our second type of agranulocyte. So monocytes basically will develop into macrophages and then engulf microbes. And that's their main role. So these are the five different types of white blood cells. So this lesson has been an overview on the function of white blood cells.