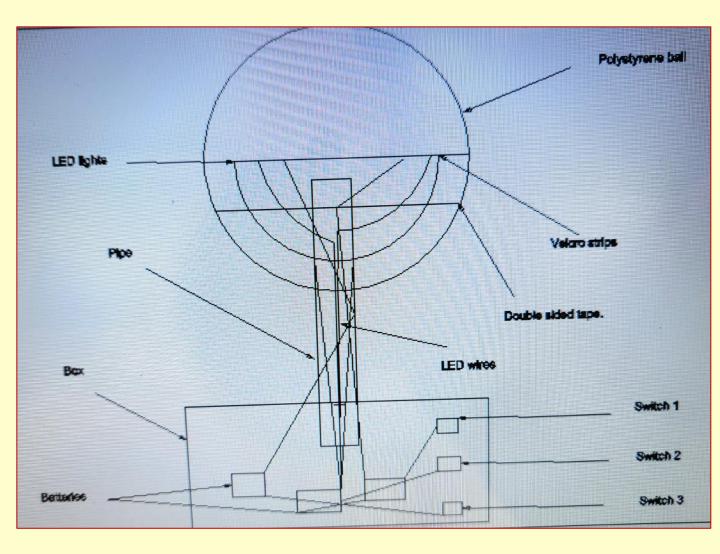


Your chosen cell:

WHITE BLOOD CELL



If you choose to upload a video file to Teams, try to keep recordings to less than 4 minutes.

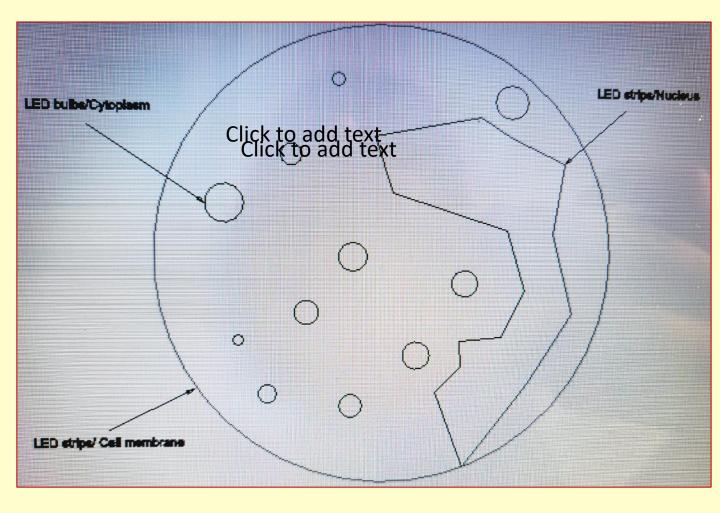




Your chosen cell: WHITE BLOOD CELL – INSIDE BALL/MODEL



If you choose to upload a video file to Teams, try to keep recordings to less than 4 minutes.





Your chosen cell:

WHITE BLOOD CELL



If you choose to upload a video file to Teams, try to keep recordings to less than 4 minutes.

INSTRUCTION SHEET

WHAT I NEED

- POLYSTYRENE BALL;
- LENGTH OF PIPE;
- VELCRO STRIPS;
- BOX WITH A LID (FOR CABLES, BATTERIES, BATTERY HOLDERS AND STAND);
- 9V BATTERIES AND HOLDERS WITH SWITCHES;
- WHITE DUCT TAPE;
- DOUBLE SIDED TAPE;
- CARD;
- LAMINATING MACHINE;
- LAMINATOR POUCHES.
- WHAT TO DO
- **STEP 1**

Cut the ball into three sections.

• STEP 2

Draw the cell on card cut into a circle and laminate. Make holes in the middle section to resemble the cytoplasm and nucleus. Fit the LED bulbs into the holes.

Place LED bulbs around the edge of the ball cross section for Cell Membrane.



Your chosen cell:



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STEP 3

Cut pipe to the size needed and make a hole in the ball to feed the wires through.

STEP 4

Fit the pipe to the lower and middle sections of the ball.

STEP 5

Fit one end of the pipe into the box/stand.

STEP 6

Put 9V batteries into holders and fit holders into box/stand. Connect the LED wires into the battery holders.

<u>STEP 7</u>

Secure lower section of ball to middle section using double-sided tape.



Your chosen cell:



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<u>STEP 8</u>

Test circuits to make sure LED bulbs light up to represent the numerous parts of the White Blood Cell.

<u>STEP 9</u>

Stick Velcro strips to the middle section and top section of the ball and check that they pull apart.

<u>STEP 10</u>

Place label next to the switches e.g. the switch that lights up the Nucleus, label 'Nucleus.' Write the function of the Nucleus, Cell Membrane and Cytoplasm on card then laminate it and stick to box.

HOW THE FINISHED MODEL WORKS

- 1. Pull ball apart (in middle section).
- 2. Put the switches on and each part will light up.