

## **Written assignment**

### **Biology**

- 1) Complete each statement using SOME of the terms from the box

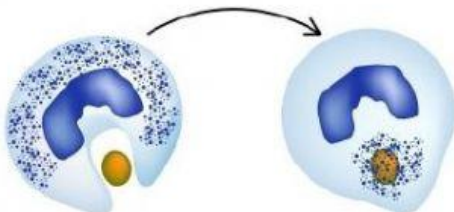
NUCLEI – OXYHEMOGLOBIN – BLEEDING – RED BLOOD CELLS – OXYGEN – FIBRIN – ANTIBODIES – HEMOGLOBIN (x2) – TISSUES

- a- \_\_\_\_\_ is a thread-like protein that forms a mesh to prevent the \_\_\_\_\_ from going out and thus stop \_\_\_\_\_.
- b- Red blood cells have no \_\_\_\_\_ and are packed with a substance called \_\_\_\_\_. In the lungs, \_\_\_\_\_ diffuses into the red blood cells and combines with \_\_\_\_\_ to form \_\_\_\_\_.

- 2) Think and answer



- a- When you scrape, the area turns reddish, inflamed and a bit hotter. Why is it so?
- b- Anemia is a blood disorder in which hemoglobin is not able to carry oxygen, or the number of red blood cells is not enough. How does this disorder affect a person?
- c- What process is shown in the picture below?
- d- Which type of blood cell is it?



3) Read the text and answer the questions

*Bumps and scrapes are a normal part of childhood. For most kids, a tumble off a bike or a stray kick in a soccer game means a temporary bruise or a cut that heals with a scab. However, for kids with hemophilia, these everyday mishaps are cause for concern.*

*What Is Hemophilia?*

*Hemophilia is a disease that prevents blood from clotting properly. Clotting helps stop bleeding after a cut or injury. If clotting doesn't happen, a wound can bleed too much.*

*Bleeding can be:*

- *external: on the outside of the body, where it's visible.*
- *internal: on the inside of the body, where it's not seen. Internal bleeding of the joints (like the knees or hips) is common in kids with hemophilia.*

*Hemophilia is a genetic disorder, which means it's the result of a change in genes that was either inherited (passed on from parent to child) or happened during development in the womb. Hemophilia mostly affects boys — about 1 in every 5,000-10,000. Girls who inherit the gene rarely get the condition, but as carriers of the gene they can pass it to their children.*

- a- Why is it dangerous for hemophiliac kids to suffer a cut or injury?
- b- Which type of bleeding is less dangerous? Why?
- c- Can people prevent hemophilia (for example with vaccines)? Why?



A bruise



A scab