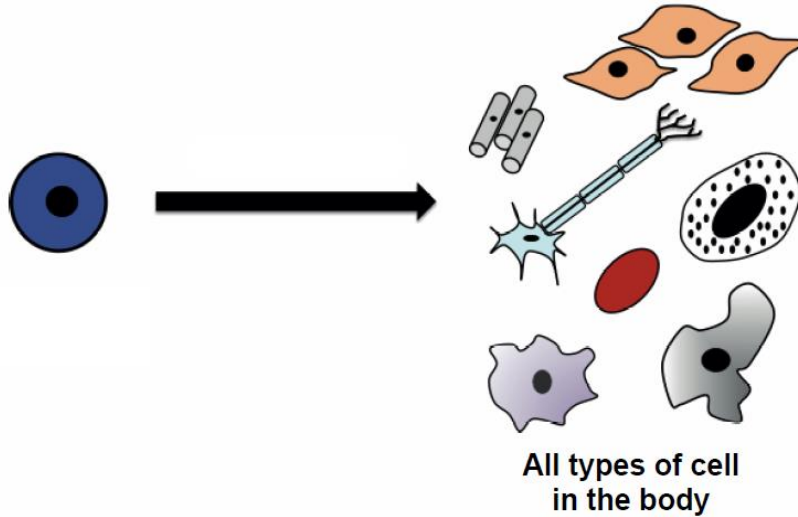


Key Area 2.1 Homework 3

1. (a) The diagram below shows many different specialised cells. Explain the term 'a specialised cell'.

KU1



- (b) Describe how a red blood cell is specialised for its function. KU1
- (c) Put the following structure in order from smallest to largest. KU1

cell system organ tissue

- (d) Copy and complete the table below with three examples of systems in animals. KU3

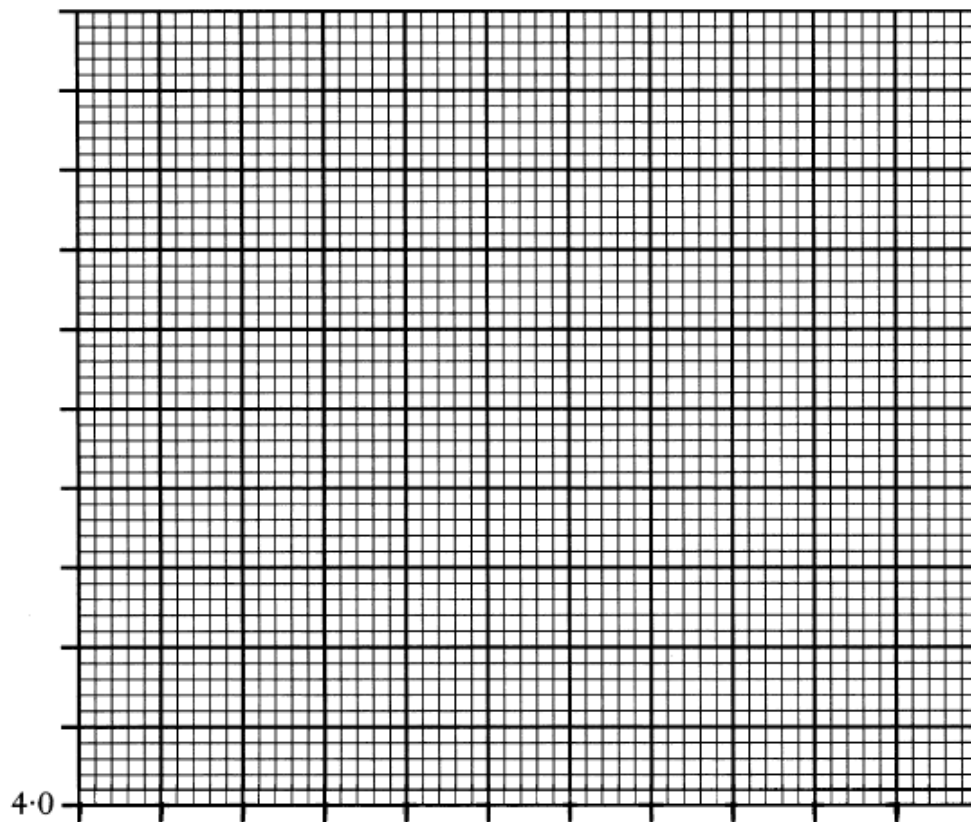
System	Function	Organs in this system	Cells in this system
Cardiovascular			
Nervous System			
Female Reproductive System			

2. The oxygen concentration of the air decreases as the height above sea level increases.

The table below shows the red blood cell count of a mountaineer taken at different heights above sea level.

<i>Height above sea level</i> (metres)	<i>Red blood cell count</i> (millions/mm ³ of blood)
200	5.0
1000	5.6
2200	6.5
3600	7.6
4800	8.5

- (a) On the grid, plot a line graph to show red blood cell count against height above sea level. PRO2



- (b) (i) From the table, describe the relationship between the height above sea level and the red blood cell count. S1
- (ii) Explain the importance of this change in the red blood cell count. A1