

Science 18988

Interpret information presented in tables, diagrams, and graphs to answer given questions

Elements and Performance Criteria

element 1

Interpret information presented in tables, diagrams, and graphs to answer given questions.

performance criteria

1.1 Information relevant to given questions is selected from materials provided.

Range: table, diagram; two of – line graph, pie chart, bar graph, histogram.

1.2 Interpretation of the data answers the given questions.

Sample questions

The table below shows the volume of blood flowing through different parts of the body at rest and during exercise.

Part of the body	Volume of blood flowing in mL per minute			
	At rest	Light exercise	Moderate exercise	Vigorous exercise
Heart muscle	250	350	600	1000
Skin	500	1500	1150	600
Brain	750	750	750	750
Kidneys	1100	900	600	250
Muscles attached to skeleton	1200	4500	13000	22000
Digestive system	1400	1100	700	300
Rest of body	600	400	400	600
Total	5800	9500	17200	25500

1. Which part of the body has the greatest blood flow “at rest”?

[1.1]

2. Which two parts of the body have the same blood as each other during “moderate exercise”?

[1.1]

3. Which part of the body always has a constant volume of blood flowing through it, per minute?

[1.1]

4. In which part of the body does the blood flow **decrease** by 50% (half) between “at rest” and “moderate exercise”?

[1.2]

5. By how much does the total blood flow increase as the exercise changes from “moderate” to “vigorous exercise”?

A 830 mL per minute

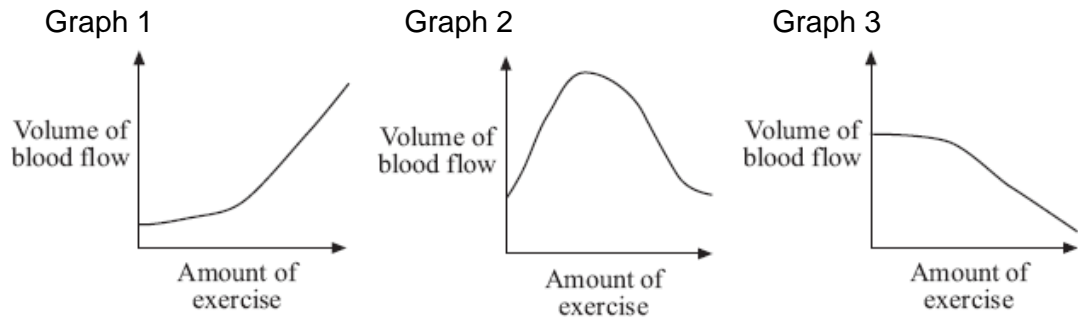
C 10260 mL per minute

B 8300 mL per minute

D 16000 mL per minute

[1.2]

6. The graphs show how the blood flow through different organs changes as the exercise increases.



Which graph best shows the change in blood flow through the skin as the exercise increases?

[] 1.2

ANSWERS

1. The digestive system
2. Kidneys & heart muscle
3. The brain
4. Digestive system
5. 8300 mL per minute
6. Graph 2

PC 1.1 requires you to extract the information from the table.

PC 1.2 requires you to do something with the information from the table..... interpret it, make comparisons, look for patterns, or do some simple calculations.

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