



For Supervisor's use only

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90178



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

Level 1 Human Biology, 2004

90178 Describe functioning of human circulatory, respiratory and excretory systems

Credits: Six

9.30 am Tuesday 23 November 2004

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should answer ALL the questions in this booklet.

If you need more space for any answer, use the page provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–9 in the correct order and that none of these pages is blank.

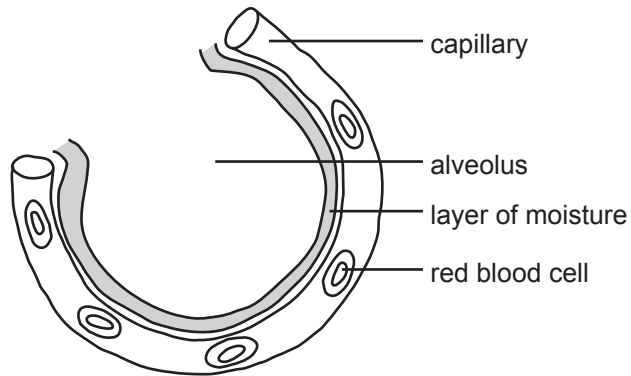
YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

Achievement Criteria			<i>For Assessor's use only</i>		
Achievement		Achievement with Merit		Achievement with Excellence	
Describe functioning of human circulatory, respiratory and excretory systems.	<input type="checkbox"/>	Describe functioning of human circulatory, respiratory and excretory systems.	<input type="checkbox"/>	Describe functioning of human circulatory, respiratory and excretory systems.	<input type="checkbox"/>
		Explain functioning of human circulatory or respiratory or excretory systems.	<input type="checkbox"/>	Discuss functioning of human circulatory or respiratory or excretory systems.	<input type="checkbox"/>
Overall Level of Performance (all criteria within a column are met)					<input type="checkbox"/>

You are advised to spend 50 minutes answering the questions in this booklet.

QUESTION ONE

The diagram below shows a cross section of an alveolus (air sac).



(a) Describe the functions of the following parts.

Part	Function
Alveolus	
Red blood cell	
Layer of moisture	

(b) Certain characteristics allow gas exchange to occur more quickly.

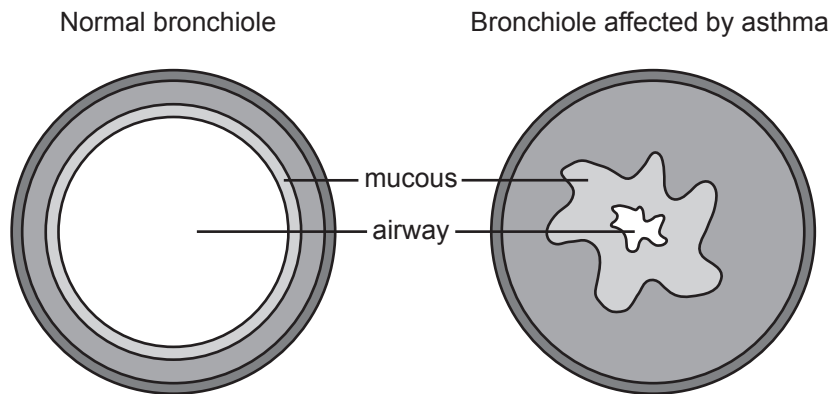
Give two characteristics of an efficient gas exchange surface.

(1) _____

(2) _____

The diagram below shows the difference between the bronchiole of a normal person, and that of one who is affected by asthma during exercise.

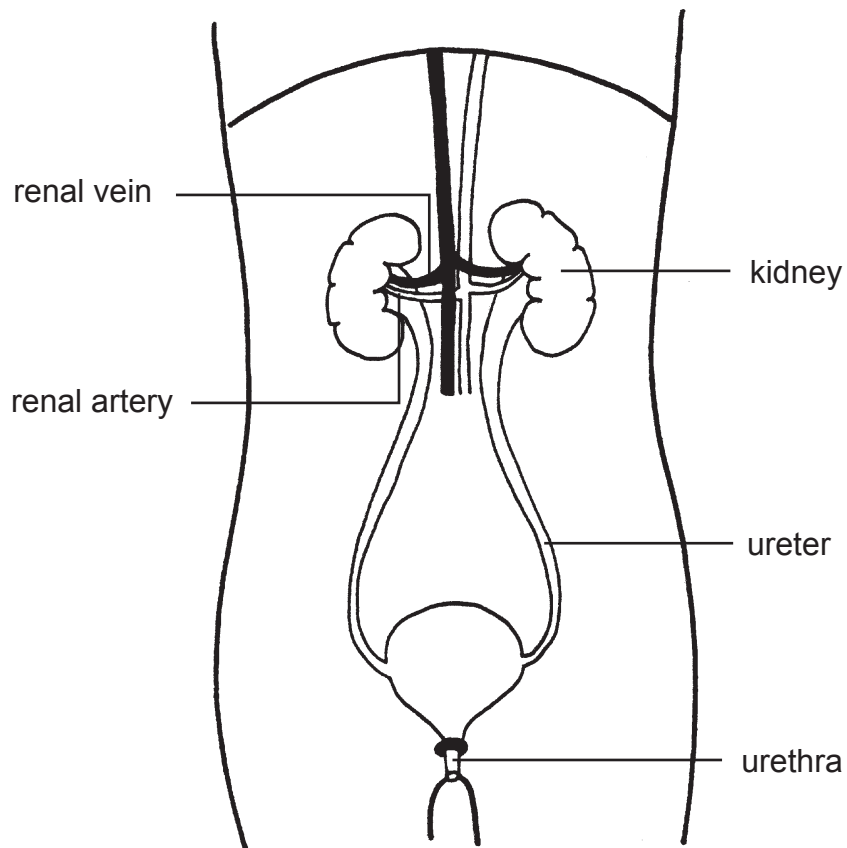
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(c) Use the diagram above to **explain** how asthma affects the function of the bronchioles.

QUESTION TWO

The diagram below shows the renal system.



(a) Describe the function of the following parts.

Part	Function
Ureter	
Urethra	
Kidney	

