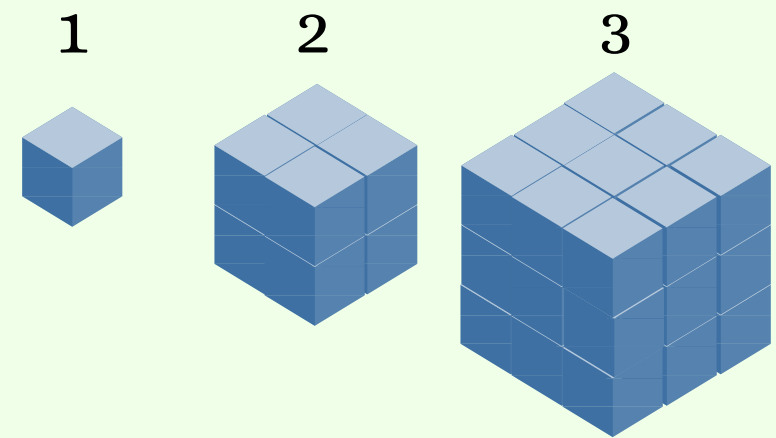


*environment, unicellular, exchange, large, volume*  
 \_\_\_\_\_ organisms are small and made of one cell. This provides them with a \_\_\_\_\_ surface area compared to their \_\_\_\_\_ so they can \_\_\_\_\_ materials directly with their \_\_\_\_\_

Which block has the great surface area to volume ratio?  
 Use the table to help you prove which one.



**Surface area to volume ratio**

**EXCHANGE SURFACES**

TOP MARKS SCIENCE

Block	Faces	No. of squares on each face	Surface area	Volume	SA : Vol ratio
1	6	1	6x1= _	1 <sup>3</sup> =	6 : _
2		4	6x_ _		24:8 _:_
3					

Reduces d\_\_\_\_\_ d\_\_\_\_\_

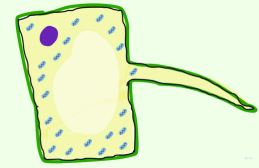
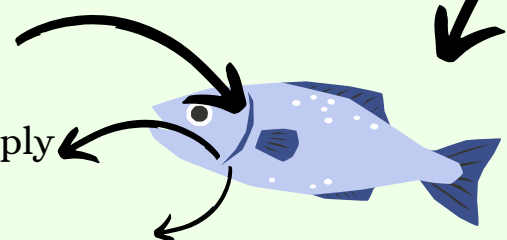
A large \_\_\_\_\_ area  
 Thin \_\_\_\_\_

**Adaptations**

Continuous \_\_\_\_\_ supply  
 Maintains a \_\_\_\_\_ gradient for diff\_\_\_\_\_

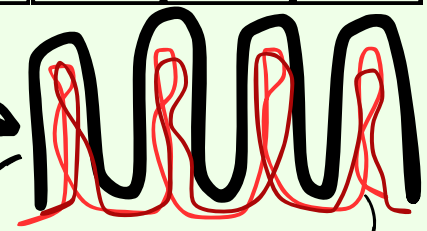
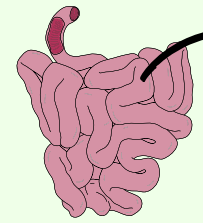
**Examples**

Fish g\_\_\_\_\_ Rich \_\_\_\_\_ supply  
 Continuous \_\_\_\_\_ flow to maintain a \_\_\_\_\_



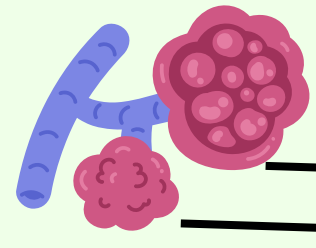
Adaptation for exchange: \_\_\_\_\_

Small \_\_\_\_\_



Villi & microvilli to increase: \_\_\_\_\_

Continuous \_\_\_\_\_ supply to maintain a \_\_\_\_\_



Continuous \_\_\_\_\_ supply to maintain a \_\_\_\_\_

Lots of tiny sacs to increase...

Moist and \_\_\_\_\_ membrane to reduce d\_\_\_\_\_ d\_\_\_\_\_ Increases \_\_\_\_\_ of diffusion