

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
GCSE**

**B712/02**

**GATEWAY SCIENCE  
SCIENCE B**

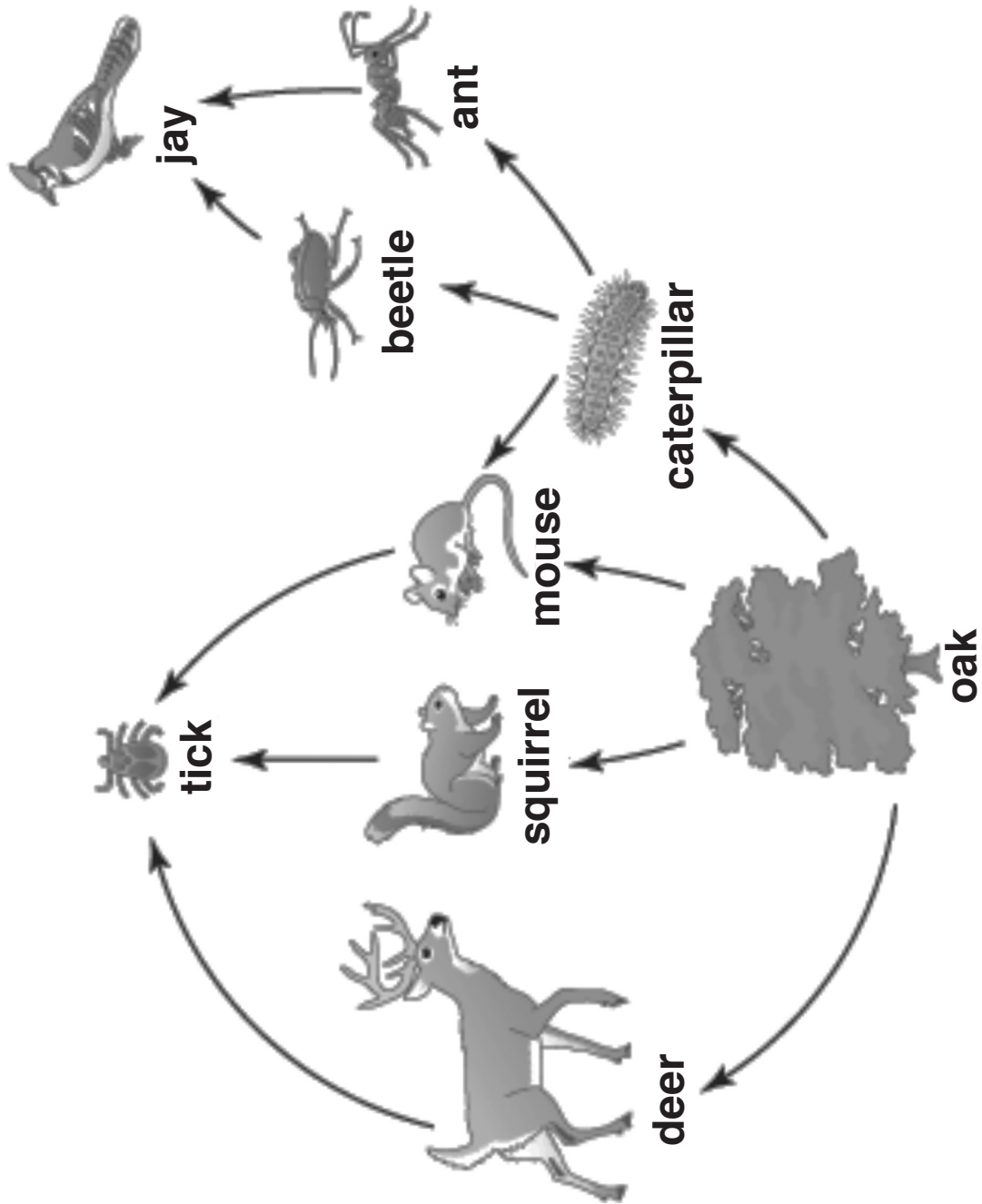
**Science modules B2, C2, P2  
(Higher Tier)**

**INSERT for questions 1, 2, 3, 7, 10 and 14**

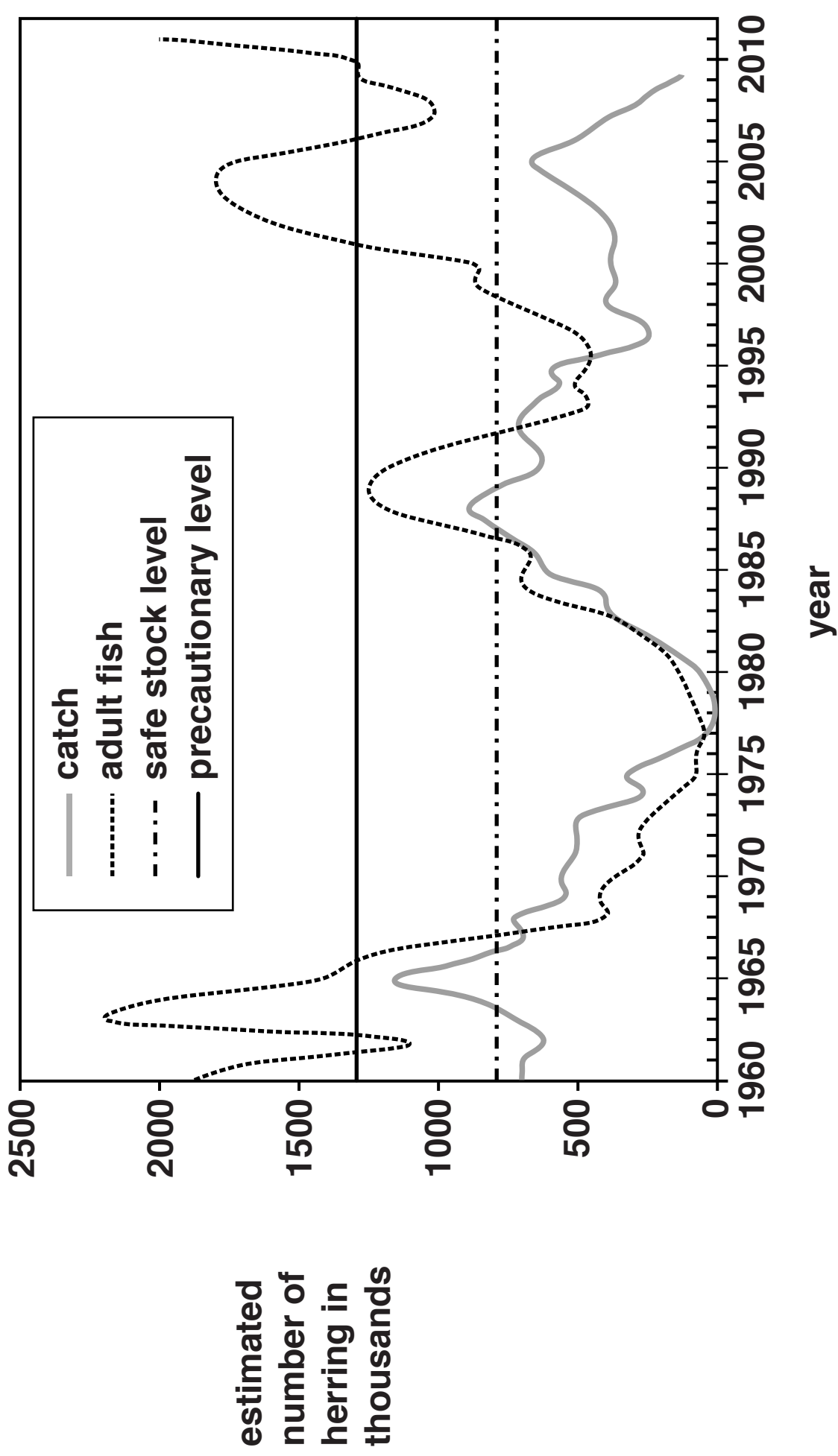
**FRIDAY 5 JUNE 2015: Afternoon**

**MODIFIED ENLARGED**

Food web for Question 1



Graph for Question 2



**Table for Question 3**

<b>Indicator species</b>	<b>Number in each sample</b>					<b>Mean</b>
	<b>Sample 1</b>	<b>Sample 2</b>	<b>Sample 3</b>	<b>Sample 4</b>	<b>Sample 5</b>	
<b>caddis fly lava</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>dragonfly nymph</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>flatworm</b>	<b>6</b>	<b>6</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>7</b>
<b>leech</b>	<b>7</b>	<b>5</b>	<b>9</b>	<b>10</b>	<b>7</b>	
<b>rat-tailed maggot</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>
<b>bloodworm</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>

**Table for Question 7**

<b>METAL OR ALLOY</b>	<b>PROPERTY</b>				
	<b>Melting point in °C</b>	<b>Density in g/cm<sup>3</sup></b>	<b>Relative conductivity of heat</b>	<b>Relative strength</b>	<b>Malleability</b>
<b>brass</b>	<b>900</b>	<b>8.4</b>	<b>109</b>	<b>55</b>	<b>malleable</b>
<b>copper</b>	<b>1083</b>	<b>8.9</b>	<b>401</b>	<b>22</b>	<b>very malleable</b>
<b>zinc</b>	<b>420</b>	<b>7.1</b>	<b>116</b>	<b>15</b>	<b>brittle except at high temperatures</b>

**Table for Question 10**

<b>Appliance</b>	<b>Mean power in kW</b>	<b>Time used each week in hours</b>	<b>Energy used each week in kWh</b>
<b>Tumble dryer</b>	<b>2.0</b>	<b>2.0</b>	<b>4.0</b>
<b>Kettle</b>	<b>2.5</b>	<b>3.0</b>	<b>7.5</b>
<b>Lights</b>	<b>0.1</b>	<b>40.0</b>	<b>4.0</b>
<b>Television</b>	<b>0.5</b>	<b>5.0</b>	
<b>Vacuum cleaner</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

Table for Question 14

Player	Body fat percentage			Muscle percentage		
	Before	After	Difference	Before	After	Difference
A	25.6	20.2	−5.4	56.6	61.0	+4.4
B	16.5	15.9	−0.6	59.7	62.5	+2.8
C	22.5	20.1	−2.4	52.6	54.4	+1.8
D	13.6	11.9	−1.7	60.0	63.4	+3.4
E	25.5	22.4	−3.1	54.6	57.8	+3.2

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