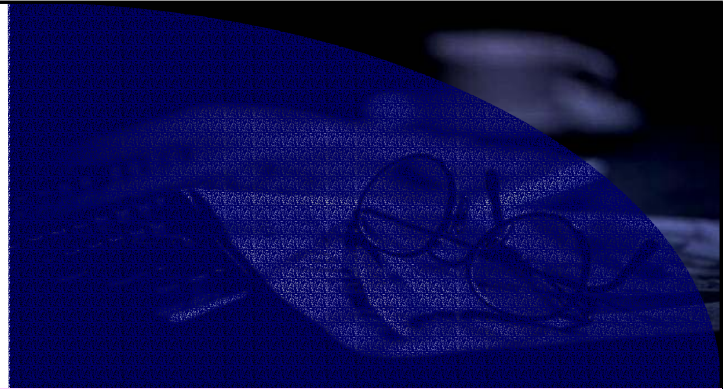


assessment for learning

year 7...mark scheme



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## 7D Variation and classification...mark scheme

### Assessment for learning...year 7 (level 3-6)

#### Question 1:

- (a) (i) mayfly nymph 1  
*accept 'mayfly' or 'nymph'*
- (ii) water beetle 1  
*accept beetle*
- (iii) lymnaea 1
- (b) (i) E 1  
*if more than one letter is given award no mark*  
*accept 'tubifex'*
- (ii) A 1  
*accept 'mayfly nymph'*
- B 1  
*accept 'water beetle'*  
*answers may be in either order*
- [6]**

#### Question 2:

- (a) nitrogen **or** N 1
- (b) **commercial or business – answers should refer to maximising either the yield of the reeds for thatching or the quantity of sewage treated**  
any **one** from 1
- reeds have grown to maximum size

*accept 'reeds get bigger' or 'they are at their best' or 'reeds dry out'*

*do not accept 'so they have to keep replanting them'*

- break down more sewage  
*accept 'allows the treatment to continue while they are growing'*

**environmental – answers should refer to the completion of the life cycles of animals or reeds, or to the provision of habitat**

any **one** from 1

- allows reeds to produce seeds **or** they reproduce
- provides habitat **or** home **or** protection for wildlife  
*accept they break down more sewage' unless it is also given as the commercial reason*

(c) any **one** from 1

- to neutralise **or** react with the acid  
*accept 'to neutralise the water'*
- to raise pH **or** to make the water less acidic  
*accept 'to make the water more alkaline'*

(d) (i) 3 **or** 7 **or** 8 1

(ii) there is plenty of oxygen present 1

(iii) 1 **or** 5 **or** 6 1

*accept 'stage 4 is anaerobic'*

**[7]**

**Question 3:**

<i>letter of spider</i>	<i>name of spider</i>	
A	Orb Weaving Spider <i>accept 'orb weaving'</i>	1
B	Jumping Spider <i>accept 'jumping'</i>	1
C	Wolf Spider <i>accept 'wolf'</i>	1
D	House Spider <i>accept 'house'</i>	1

**[4]**

**Question 4:**

- |     |   |   |
|-----|---|---|
| (a) | 2 | 1 |
| (b) | 1 | 1 |
| (c) | 4 | 1 |
| (d) | 3 | 1 |

**[4]**

**Question 5:**

- |     |      |  |                          |
|-----|------|--|--------------------------|
| (a) | (i)  | it goes up                                 | 1                        |
|     | (ii) | it stays the same                          | 1                        |
| (b) | (i)  | pigeon <b>or</b> bird                      | 1                        |
|     | (ii) | any <b>one</b> from                        | 1                        |
|     |      | • they give birth to live young            |                          |
|     |      | <i>accept 'they give birth' <b>or</b></i>  |                          |
|     |      | <i>'they do not lay eggs' <b>or</b></i>    |                          |
|     |      | <i>'babies grow inside the</i>             |                          |
|     |      | <i>mothers'</i>                            |                          |
|     |      | • they have mammary glands                 |                          |
|     |      | <i>accept 'they have teats'</i>            |                          |
|     |      | • they produce milk                        |                          |
|     |      | <i>accept 'they have ears on the</i>       |                          |
|     |      | <i>outside of their bodies'</i>            |                          |
|     |      | <i>do <b>not</b> accept 'they are warm</i> |                          |
|     |      | <i>blooded'</i>                            |                          |
| (c) | (i)  | answers may be in either order             |                          |
|     |      | • reptiles                                 | <i>accept 'lizard'</i> 1 |
|     |      | • fish                                     | <i>accept 'trout'</i> 1  |
|     | (ii) | answers may be in either order             |                          |
|     |      | • fish                                     | <i>accept 'trout'</i> 1  |
|     |      | • amphibians                               | <i>accept 'frog'</i> 1   |

**[8]**