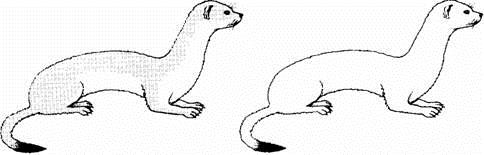
**Q1.** (a)   The drawings below show a stoat in summer and in winter.



summer                                          stoat in winter

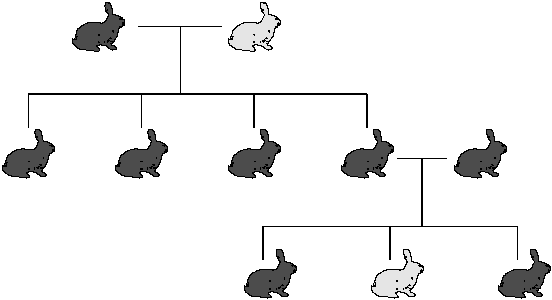
In winter the ground is often covered by snow or frost. During this part of the year a stoat’s fur is white.  
Suggest **two** ways its white coat helps a stoat to survive in the winter.

......................................................................................................................

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......................................................................................................................2 marks

(b)     The diagram shows the family tree for a family of rabbits.



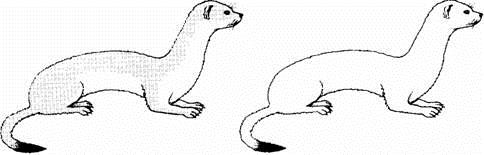
  Use words from the list below to complete the sentences.

**adapt**            **cytoplasm**           **genes**          **grow**          **inherit**

**letters**          **membrane**          **mutate**         **nuclei**

Rabbits have the same fur colour all year round. Young rabbits ............................................ fur colour from their parents. Information about fur colour is passed on from one generation to the next in the form of ................................... in the ..................................... of an egg and sperm. 3 marks

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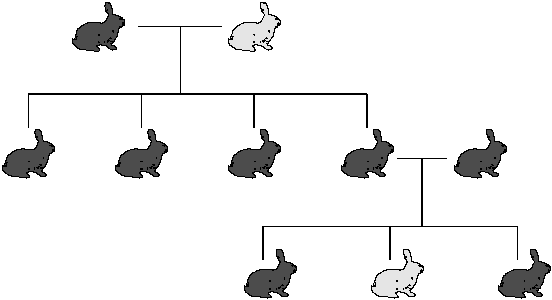
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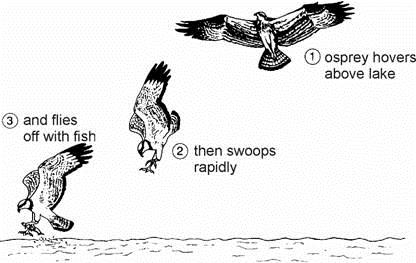
**Q2.** Ospreys can live in places where the weather is sometimes cold.

(a)     Explain how an osprey’s feathers insulate it in cold weather.

......................................................................................................................

...................................................................................................................... 1 mark

 Ospreys hunt for fish by flying about 10 metres above the water. When they see a suitable fish, they dive swiftly on their prey. This is shown in the diagram below.



(b)     (i)      What is the advantage of hunting for fish from such a height?

..............................................................................................................

.............................................................................................................. 1 mark

(ii)     Look at the diagrams above. Suggest **three** different features of ospreys which enable them to be successful at **catching**fish.

1. ......................................................................................................................................................................

...........................................................................................................................................................................

2. ........................................................................................................................................................................

...........................................................................................................................................................................

3. ........................................................................................................................................................................

..............................................................................................................................................................3 marks

Maximum 10 marks

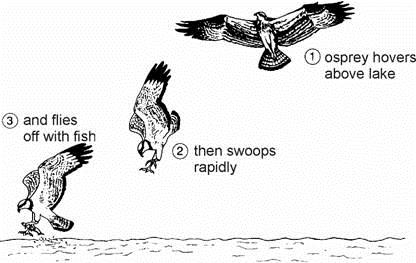
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..............................................................................................................................................................3 marks Maximum 10 marks

Mark schemes

**Q1.**

(a)     it helps it to hide from its prey

**1 (L6)**

it helps it to hide from predators

*answers may be in either order*

*accept ‘hides it from rabbits* ***or*** *from animals it eats’  
accept ‘hides it from animals which eat* ***or****hunt it’  
accept ‘to camouflage it’*

*for one mark only accept ‘it is an insulator’****or*** *‘it keeps them warm’*

**1 (L6)**

(b)     inherit

**1 (L6)**

          genes

**1 (L6)**

          nuclei

*accept ‘nucleus’*

**1 (L6)**

**[5]**

**Q2.**

(a)     they trap air

*accept ‘they are fluffed up’* ***or*** *‘they trap heat’*

**1**

(b)     (i)      any **one** from

•    wide field of view **or** they see a larger area

*do* ***not*** *accept ‘can see better’*

•    gives time to build up speed when diving

•    to prevent its shadow from falling on the fish

*accept ‘so fish can see it’* ***or*** *‘surprise attack’*

*do* ***not*** *accept ‘so fish cannot hear it’*

**1**

(ii)     any **three** from

•    large eyes **or** good eyesight

*accept ‘eyes positioned forward on the head*

•    can hover **or** large tail for balance

*accept ‘powerful flier’*

•    hooked claws **or** large talons

*accept ‘powerful claws* ***or*** *legs’*

•    can swoop rapidly **or** dive fast **or** streamlined body

*do* ***not*** *accept ‘large* ***or*** *powerful beak’*

**3**

**[5]**