

# 9A Inheritance and selection

## Extension questions

Science Interactive LTD, PO BOX 50764 LONDON NW6 9AT email: [sales@science-interactive.co.uk](mailto:sales@science-interactive.co.uk)

web: [www.science-interactive.co.uk](http://www.science-interactive.co.uk)

Answer the following questions:



Click mouse to reveal answer

- Q1. What do we call getting characteristics from our parents?
- Q2. What do we call the process of choosing particular animals or plants to breed?
- Q3. Name a long molecule that contains all the information needed to make a plant or animal
- Q4. What do we call a section of DNA that contains the information about a particular trait?
- Q5. What do we call differences in characteristics within a particular species?
- Q6. Name a domestic pet originally selectively bred from wolves?
- Q7. Name a farm animal selectively bred for efficient meat or milk production?
- Q8. Name the fine powder produced by flowering plants that contains male reproductive cells and causes hay-fever?
- Q9. What do we call a chemical made in a plant or animal that regulates growth and development?
- Q10. What do we call a single stage in the evolutionary descent of a group of animals or plants?
- Q11. What do we call the surroundings in which all animals and plants live?
- Q12. What do we call the natural home of a particular plant or animal?
- Q13. What do we call the X shaped structures in a cell nucleus made up of coiled up DNA?
- Q14. What do we call a genetically determined inherited characteristic?
- Q15. What do we call variations that can take any value, like height or weight?
- Q16. What do we call variations that can only take certain values like eye colour or number of fingers?

# 9A Inheritance and selection

## Extension questions

Science Interactive LTD, PO BOX 50764 LONDON NW6 9AT email: [sales@science-interactive.co.uk](mailto:sales@science-interactive.co.uk)

web: [www.science-interactive.co.uk](http://www.science-interactive.co.uk)

### Answers:

A1. Inheritance

A2. Selection

A3. DNA Deoxyribonucleic acid

A4. A gene

A5. Variation

A6. Dog

A7. Cattle

A8. Pollen

A9. A hormone

A10. A generation

A11. The environment

A12. The habitat

A13. Chromosomes

A14. A trait

A15. Continuous

A16. Discrete

# 9A Inheritance and selection

multiple choice

Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT email: sales@science-interactive.co.uk

web: www.science-interactive.co.uk



Click mouse to reveal answer

---

1: What part of a normal cell contains the chromosomes ?

---

- A Cell membrane
  - B The nucleus
  - C The cytoplasm
  - D The Cell wall
- 

---

2: What feature is the result of a person's environment ?

---

- A Blood group
  - B Eye colour
  - C Hair colour
  - D Being good at mathematics
- 

---

3: What term describes how farmers try and improve the features of beef cattle ?

---

- A Evolution
  - B Natural selection
  - C Extinction
  - D Selective breeding
- 

---

4: How many chromosomes does a normal human cell have ?

---

- A 48
  - B 23
  - C 46
  - D 55
-

# 9A Inheritance and selection

## multiple choice

Science Interactive LTD, PO BOX 50764 LONDON NW6 9AT email: sales@science-interactive.co.uk

web: www.science-interactive.co.uk

---

1: What part of a normal cell contains the chromosomes ?

---

A

---

B The nucleus

---

C

---

D

---

---

2: What feature is the result of a person's environment ?

---

A

---

B

---

C

---

D Being good at mathematics

---

---

3: What term describes how farmers try and improve the features of beef cattle ?

---

A

---

B

---

C

---

D Selective breeding

---

---

4: How many chromosomes does a normal human cell have ?

---

A

---

B

---

C 46

---

D

---

# 9A Inheritance and selection

## literacy in science

Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT email: sales@science-interactive.co.uk

web: www.science-interactive.co.uk

Answer all the questions below:



Click mouse to reveal answer

1) Unscramble the following words:

geesn

repsm

fatietiliron

cispees

2) Make three sentences using the following nine words or phrases:

similar characteristics  
selective breeding  
cells

grouped  
choose in animals  
nucleus

species  
best characteristics  
genes

3) Match the word or phrase with the right meaning:

Genes

Characteristics in plants and animals that aid their survival

Inherited

The passing on of genes from parent to offspring

Adaptation

These control the characteristics in species or individuals

# 9A Inheritance and selection

## literacy in science

Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT email: sales@science-interactive.co.uk

web: www.science-interactive.co.uk

Answer all the questions below:

1) Unscramble the following words:

genes

sperm

fertilisation

species

2) Make three sentences using the following nine words or phrases:

similar characteristics  
selective breeding  
cells

grouped  
choose in animals  
nucleus

species  
best characteristics  
genes

3) Match the word or phrase with the right meaning:

Genes

These control the characteristics in species or individuals

Inherited

The passing on of genes from parent to offspring

Adaptation

Characteristics in plants and animals that aid their survival

# 9A Inheritance and selection

## complete the sentence

Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT email: sales@science-interactive.co.uk

web: www.science-interactive.co.uk

Place the right word or words to complete the sentence:

 [Click mouse to reveal answer](#)

control

selected

inherited

adapted

reduce

colour

genes

affected

sperm

- a) Genes \_\_\_\_\_ the characteristics of an individual.
- b) Human characteristics can be affected by both \_\_\_\_\_ and environmental variation.
- c) Some characteristics can be \_\_\_\_\_ by the environment, for example hair length.
- d) Fertilisation is the process where a \_\_\_\_\_ and egg cell fuse forming an zygote.
- e) Cacti are \_\_\_\_\_ to the desert, because they have no leaves and store water.
- f) Selective breeding in animals and plants can \_\_\_\_\_ the amount of variation.
- g) Eye \_\_\_\_\_ and blood group are good examples of inherited variation.
- h) We inherit half of our \_\_\_\_\_ from our dad and half of our genes from our mum.
- i) In crops, characteristics like high sugar or starch content have been \_\_\_\_\_ for.

# 9A Inheritance and selection

## complete the sentence

Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT email: sales@science-interactive.co.uk

web: www.science-interactive.co.uk

Place the right word or words to complete the sentence:

control

selected

inherited

adapted

reduce

colour

genes

affected

sperm

- a) Genes control the characteristics of an individual.
- b) Human characteristics can be affected by both inherited and environmental variation.
- c) Some characteristics can be affected by the environment, for example hair length.
- d) Fertilisation is the process where a sperm and egg cell fuse forming an zygote.
- e) Cacti are adapted to the desert, because they have no leaves and store water.
- f) Selective breeding in animals and plants can reduce the amount of variation.
- g) Eye colour and blood group are good examples of inherited variation.
- h) We inherit half of our genes from our dad and half of our genes from our mum.
- i) In crops, characteristics like high sugar or starch content have been selected for.