Key Stage 2

SCIENCE

Modified large print

Test ST002B

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Key Stage 2

SCIENCE

Modified large print

Test ST002B

| First name | | | |
|---------------|-----|-------|------|
| Middle name | | | |
| Last name | | | |
| Date of birth | Day | Month | Year |
| School name | | | |
| DfE number | | | |

Note to markers:

This paper should be marked using the MODIFIED LARGE PRINT mark scheme amendments – MLP.

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TIME ALLOWED

You have 25 minutes for this test, plus your additional time allowance.

INSTRUCTIONS

Write all your answers on this question paper.

For some questions, you may need to draw an answer instead of writing one.

1. Duck pond

(a) Peter goes to the duck pond with his grandad and his dog.

Tick two boxes to show two things that are true about a dog and a duck. [1 mark]

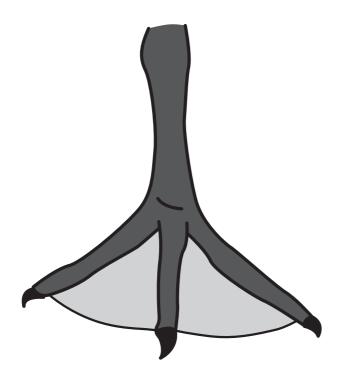
They both have fur.

They both move.

They both lay eggs.

They both breathe.

(b) Look at the diagram of a duck's foot.



(i) Describe how a duck's feet are adapted for swimming. [1 mark]

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Two of the ducks come out of the pond.

The male duck has a bright green head with a white ring around the neck. The body feathers are light grey. The female duck has brown feathers all over its body.

Peter says, 'Why do the two ducks look different?'

His grandad says, 'The female needs to stay hidden when she sits in her nest.'

| (ii) | Why would the female duck be hard to see in a nest? |
|------|---|
| | [1 mark] |

| (iii) | Explain why the female duck needs to stay hidden when |
|-------|---|
| | she is in her nest. [1 mark] |
| | |

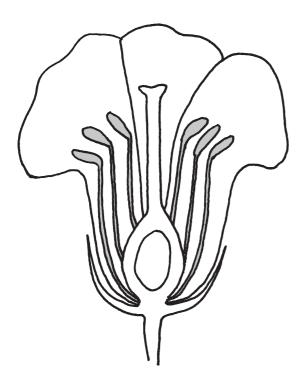
| (c) |) Peter sees some piles of soil on the grass near the pond. | | |
|-----|--|---|--|
| | Grandad tells him that the piles of soil are made by animals called moles. | | |
| | Read the description of a mole. | | |
| | A mole has small eyes, a furry coat, sharp claws, dark fur, a pointed nose and large front paws. | | |
| | (i) | Describe how a feature of the mole helps the mole to live underground. [1 mark] | |
| | | Feature: | |
| | How it helps: | | |
| | | | |
| | | | |

| (ii) | Peter says, | 'Why do moles live in soil?' | |
|------|---|---|--|
| | His grandadin the soil.' | I says, 'To find earthworms to eat, and to hide | |
| | Which word can not be used to describe a mole? | | |
| | Tick one box. [1 mark] | | |
| | prey | | |
| | producer | | |
| | predator | | |
| | consumer | | |
| | | | |

2. Seed dispersal

(a) The diagram shows a flower cut in half.

Put a cross (X) on the diagram to show where the seed develops. [1 mark]



(b) Class 6 have collected different types of seed.

They blow the seeds with an electric fan.

This disperses the seeds.

They measure how far each seed travels.

What equipment can measure how far the seeds travel? [1 mark]

| c) | The seeds can be blown by the children's mouths or with an electric fan. | | | |
|----|--|--|--|--|
| | Explain why the electric fan helps to make the test fair. [1 mark] | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

(d) Here is a table of the children's results using an electric fan.

| Plant sycamore | | apple | bulrush | oak |
|----------------------------|----|-------|---------|-----|
| Seed | | | | |
| Distance travelled (cm) | 76 | 27 | 149 | 0 |

The sycamore seed and bulrush seed travel the furthest distances.

They fall slowly from the plant so the wind has more time to blow them away.

Tick one box to show which features of the seeds help them to fall slowly. [1 mark]

| They are smooth and soft. | |
|---------------------------------------|--|
| They have a large area and are heavy. | |
| They have a large area and are light. | |
| They are flexible and soft. | |

| (e) | Name the force that slows the seeds as they fall. [1 mark] |
|-----|--|
| | |
| (f) | The children dispersed the seeds with an electric fan. |
| | The electric fan disperses seeds like the wind does in nature. |
| | Name one other way seeds are dispersed in nature. [1 mark] |
| | |
| | |
| | |

3. Grass heads

| (a) | Class 6 are investigating how grass grows. |
|-----|---|
| | They grow grass on grass heads filled with sand. |
| | They keep their grass heads standing in dishes of water so they do not dry out. |
| | All plants need water to grow. |
| | Name two other things that all plants need to grow. [1 mark] |
| | and |
| (b) | Some children give their grass head a hat. |
| | They keep all other conditions the same. |
| | The children predict that when the grass under the hat grows, it will look more yellow than the grass not covered by the hat. |
| | Give one reason why the grass under the hat might look more yellow. [1 mark] |
| | |
| | |
| | |
| | |

(c) Class 6 use a ruler to measure the height of the grass every week. The grass grows to different heights so it is difficult to know which piece of grass to measure.

Write yes or no next to each idea to show if it is a good way for class 6 to measure the height of the grass each week.
[1 mark]

| Class 6 could measure the height of the grass by | Yes or no? |
|---|------------|
| finding an average length of several pieces of grass. | |
| measuring the length of a different piece of grass each week. | |

(d) Some other children put their grass head in a sealed, dry plastic bag. They keep all other conditions the same. They observe that droplets of water form on the inside of the bag. grass grass head plastic bag dish of water Tick one box to explain why droplets of water form on the inside of the plastic bag. [1 mark] Water condenses from the grass head and evaporates on the bag. Water dissolves from the grass head and evaporates on the bag. Water evaporates from the grass head and condenses on the bag.

Water dissolves from the grass head and

condenses on the bag.

4. Smallpox

| a) | Smallpox and cowpox are diseases. People who catch smallpox can die. | | |
|----|---|--------------------------------|--|
| | | Jenner lived abople catching s | out 200 years ago. He discovered how to stop mallpox. |
| | He said, 'I think that people who have had cowpox will not catch smallpox.' | | |
| | (i) | What sort of s | statement did Dr Jenner make? |
| | | Tick one box. | [1 mark] |
| | | explanation | |
| | | prediction | |
| | | comparison | |
| | | | |

observation

| (11) | Dr Jenner did a test to find out if his statement was true. |
|-------|--|
| | He infected a boy called James with cowpox. |
| | James got better. |
| | Describe what Dr Jenner must have done next and also describe the evidence needed to show that his statement was true. [2 marks] |
| | |
| | |
| | |
| | |
| (iii) | Dr Jenner tested other people. |
| | Why did Dr Jenner test other people? [1 mark] |
| | |
| | |

(b) Not everyone had Dr Jenner's treatment.

In 1844 many people died from smallpox.

The table shows how many people died from smallpox at different ages in London.

| Age (years) | Number of people who died from smallpox |
|-------------|---|
| 10 | 226 |
| 20 | 240 |
| 30 | 98 |
| 40 | 43 |
| 50 | 13 |
| 60 | 19 |
| 70 | 10 |
| 80 | 10 |

How many people who were 30 years old died from smallpox? [1 mark]

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| ;) | Holly looks at the information in the table. |
|------------|--|
| | She says, 'The younger the person the more likely they were to die of smallpox.' |
| | Explain why Holly cannot be sure of her conclusion. [1 mark] |
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END OF TEST

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