*Virginia Science Checkpoint Assessment*

Science 3.4 SAMPLE

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| **Reporting Category: Life Processes and Living Systems** |
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| ***Standards of Learning Blueprint Summary*** |
| **Reporting Category** | **Grade 2 SOL** | **Grade 3 SOL** | **Number of Items** |
| Assessed with other SOL | 2.1(m) | 3.1(m) |  |
| Scientific Investigation, Reasoning, and Logic | 2.1(a-l) | 3.1(a-l) | 10 |
| Force, Motion, Energy, and Matter | 2.2(a-b), 2.3(a-c) | 3.2(a-d), 3.3(a-c) | 8 |
| Life Processes and Living Systems | 2.4(a-b), 2.5(a-d), 2.7(a), 2.8(a-d) | 3.4(a-b), 3.5(a-c), 3.6(a-d), 3.10(a) | 11 |
| Earth/Space Systems and Cycles | 2.6(a-c), 2.7(b) | 3.7(a-d), 3.8(a-c), 3.9(a-e), 3.10(b-d), 3.11(a-c) | 11 |
| Excluded from Testing | None |
| Subsumed Content | Content in Kindergarten and Grade 1 SOL |
| Number of Operational Items | 40 |
| Number of Field-Test Items | 10 |
| Total Number of Items on Test | 50 |

***Virginia Science SOL Test Cut Scores (2010)***

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| --- | --- | --- |
| **Test** | **Failing Scores** | **Passing Scores** |
| **Basic** | **Proficient** | **Advanced** |
| **# correct** | **% correct** | **Minimum****# correct** | **Minimum****% correct** | **Minimum****# correct** | **Minimum****% correct** |
| **Science 3** | **n/a** | **n/a** | **27 of 40** | **68%** | **36 of 40** | **90%** |
| **Science 5** | **n/a** | **n/a** | **26 of 40** | **65%** | **37 of 40** | **93%** |
| **Science 8** | **n/a** | **n/a** | **27 of 50** | **54%** | **44 of 50** | **88%** |
| **Earth Science** | **n/a** | **n/a** | **25 of 50** | **50%** | **45 of 50** | **90%** |
| **Biology** | **n/a** | **n/a** | **27 of 50** | **54%** | **45 of 50** | **90%** |
| **Chemistry** | **n/a** | **n/a** | **25 of 50** | **50%** | **44 of 50** | **88%** |

**Checkpoint Items**

1. Directions: Circle the picture you want to select.

**Which animal does not care for its young after birth?**



****

1. Directions: Circle the box you want to select.

**Soon after they hatch from their eggs sea turtles begin to move toward the ocean.**

****

**This action describes –**

an environment

a learned behavior

a physical adaptation

an instinct

1. Directions: Circle the box you want to select.

**Which is an example of a physical adaptation?**

A spider knows how to spin its own web

Rabbits use deep burrows for shelter

Monarch butterflies migrate as the seasons change

A porcupine has sharp quills for defending itself

1. Directions: Circle the picture you want to select. You must select all correct answers.

**Which animals are best adapted to catching fish out of the water?**

****

1. Directions: Circle the box you want to select.

**Look at the environment shown in the picture below.**

****

**Which physical adaptations would best help an animal survive in a cold and snowy forest?**

Feathers, wings and a beak

Scales, gills and fins

Thick fur, fat and claws

Six legs and an exoskeleton

1. Directions: Write your answer in the box. You may use the possible answer choices provided.

**This lion blends into his surroundings.**

****

**This is a type of .**

***Possible Answer Choices***

hibernation

mimicry

camouflage

migration

1. Directions: Circle the box you want to select.

**Which is not an instinct?**

A wolf learns to catch its prey

A bee gathers nectar from a flower

A fish swims through the water

An earthworm tunnels through the soil

1. Directions: Circle the picture you want to select. You must select all correct answers.

**Which animals migrate?**







1. Directions: Circle the box you want to select.

**Why might a skunk put off a very bad smell?**

****

To help care for its young after birth

To defend itself from predators

To hunt for food

To camouflage itself with its surroundings

**Checkpoint Solutions**

**SOL 3.4 The student will investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment. Key concepts include**

a) behavioral adaptations; and

b) physical adaptations.

 **Essential Knowledge, Skills and Processes**

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| --- |
| a. Give examples of methods that animals use to gather and store food, find shelter, defend themselves, and rear young |
| b. Describe and explain the terms camouflage, mimicry, hibernation, migration, dormancy, instinct, and learned behavior |
| c. Explain how an animal’s behavioral adaptations help it live in its specific habitat |
| d. Distinguish between physical and behavioral adaptations of animals |
| e. Compare the physical characteristics of animals, and explain how the animals are adapted to a certain environment |
| f. Compare and contrast instinct and learned behavior |
| g. Create (model) a camouflage pattern for an animal living in a specific dry-land or water-related environment (relates to 3.6) |
| h. Design and construct a model of a habitat for an animal with a specific adaptation |

1. Directions: Circle the picture you want to select.

**Which animal does not care for its young after birth?**



****

3.4aa Give examples of methods that animals use to gather and store food, find shelter, defend themselves, and rear young

1. Directions: Circle the box you want to select.

**Soon after they hatch from their eggs sea turtles begin to move toward the ocean.**

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**This action describes –**

an environment

a learned behavior

a physical adaptation

an instinct

3.4ab Describe and explain the terms camouflage, mimicry, hibernation, migration, dormancy, instinct, and learned behavior

1. Directions: Circle the box you want to select.

**Which is an example of a physical adaptation?**

A spider knows how to spin its own web

Rabbits use deep burrows for shelter

Monarch butterflies migrate as the seasons change

A porcupine has sharp quills for defending itself

3.4bf Compare and contrast instinct and learned behavior

1. Directions: Circle the picture you want to select. You must select all correct answers.

**Which animals are best adapted to catching fish out of the water?**

****

3.4be Compare the physical characteristics of animals, and explain how the animals are adapted to a certain environment

1. Directions: Circle the box you want to select.

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****

**Which physical adaptations would best help an animal survive in a cold and snowy forest?**

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3.4be Compare the physical characteristics of animals, and explain how the animals are adapted to a certain environment

1. Directions: Write your answer in the box. You may use the possible answer choices provided.

**This lion blends into his surroundings.**

****

camouflage

**This is a type of .**

***Possible Answer Choices***

hibernation

mimicry

camouflage

migration

3.4bb Describe and explain the terms camouflage, mimicry, hibernation, migration, dormancy, instinct, and learned behavior

1. Directions: Circle the box you want to select.

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