PSSA and Keystone Exams Fall 2015 Item Writing and Handscoring Training Workshops

PSSA, Grade 8 Science

Animals and Seasonal Weather Changes

Handscoring Anchor Set

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SCIENCE SECTION 1	
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1			
2			

Animals and Seasonal Weather Changes Scoring Guide

2	The response demonstrates a <i>thorough</i> understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by describing two ways that animals respond to the seasonal weather changes in Pennsylvania. The response is clear, complete, and correct.
1	The response demonstrates a <i>partial</i> understanding of the response of organisms to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by describing one way that animals respond to the seasonal weather changes in Pennsylvania. The response may contain some work that is incomplete or unclear.
0	The response provides <i>insufficient</i> evidence to demonstrate any understanding of the concept being tested.

Note: No deductions should be taken for misspelled words or grammatical errors.

Responses that will receive credit:

Ways that animals respond (1 point each):

- Some animals hibernate, go into torpor, or become dormant in the winter.
- Some animals migrate to a warmer climate in the fall, and return in the spring.
- Some animals' fur turns a lighter color (white) in winter, and turns darker in spring.
- Some animals grow thicker fur / fat layers in preparation for winter.
- Some animals store food in the fall.
- Some animals find winter shelter.

9/16/10

1: One way animals in flenosylvania respond to the seasonal wheather change is that, in winter, many animals grow an extra amount of fur called a winter coat to adapt to the temperature change that occurs in winter.

2: Another way animals respond to the wheather changes in Pennsylvania, is that in winter, some animals stock up on food and grow greatly in size. They then go into hibernation and sleep through winter to wake up in spring when it is warm again.

A-1 Score Point 2

The response demonstrates a thorough understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing all tasks presented in the item. The student describes two animal responses (*in winter, many animals grow an extra amount of fur,* and *go into hibernation and sleep through winter*). This response is complete and correct.

1: One of the many ways that animals respond to the seasonal weather changes in Pennsylvania because when the weather starts to become colder, the birds start to migrate to the south to stary in warmer weather.

2: Another way that animals respond to the seasonal weather changes in Pennslyvania is that they go into hihumation. For example, bears would stay in caves and sleep until winter is over and spring starts again.

A-2 Score Point 2

The response demonstrates a thorough understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing all tasks presented in the item. The student describe two way that animals respond (*birds start to migrate to the south* and *they go into hibernation*). The additional explanation provided is not necessary for credit, but it must be correct if included with the answer. This response is complete and correct.

1: During the winter animals go hibernating for the winter. For example boars hibernate during the winter.
hibernating for the winter. For example
bears hibernate during the winter.
No.
2: Some animals even change their appearance. For example, a bunny may have white for in the winter and
appearance. For example, a bunny may
have white for in the winter and
then it will change to a brownish color
then it will change to a brownish color during the summer.

A-3 Score Point 2

The response demonstrates a thorough understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing all tasks presented in the item. The student describes that "during the winter animals go hibernating for the winter" and "some animals even change their appearance". The additional description of the change in appearance (a *bunny may have white fur in the winter and then it will change to a brownish color during the* summer) illustrates a seasonal change and is required for the credit. This response is complete and correct.

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food for winter	·
g is graph to describe.	2° \$
2: Also in the winter people	ac hunting
So what some animals are	i ununted y
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A-4 Score Point 1

The response demonstrates a partial understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing one task presented in the item. This student describes that "when winter comes some animals in Pennsylvania store food" which is an acceptable answer. The second attempted description (in the winter people go hunting which would decrease some animal populations) is not an acceptable seasonal response. This response demonstrates a partial understanding and receives one point.

1. When it is Winter, anima	is usually
go into hibernation. When i	t's cold they
build a little home and ev	up until
Sprim.	The state of the s
2. In the summer, some on	imals are noc-
turnal. They sleep all day o	ESTAGE F. AGE. 10%-SEC
at night.	,
The state of the s	emperature and annual
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A-5 Score Point 1

The response demonstrates a partial understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing one task presented in the item. This student correctly describes that "when it is winter, animals usually go into hibernation." The second response describes that some animals are nocturnal which does not represent a response to a seasonal change. This description does not receive additional credit. Some information is incorrect, so this answer receives partial credit.

1: Some animal will go into hibernos
where they will store food and go
to sleep till warmer weather, Then
go on till hext year. And eat better
Soon afterwards like bears, in the winter
2: Other animals will not go to sleep
but continuely look for food Woodher
it is plante to much onor meat to
samor. Much like Deer do in the
winter.

A-6 Score Point 1

The response demonstrates a partial understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing one task presented in the item. The student describes that "some animal will go into hibernation where they will store food and go to sleep till warmer weather." The second response does not clearly describe a response to a seasonal change (not going to sleep but continuously looking for food). This behavior is not clearly differentiated from normal animal behavior. This response contains some work that is unclear and receives partial credit.

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2: <u>Avocl</u>	sino animals do
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A-7 Score Point 0

The response provides insufficient evidence to demonstrate any understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing none of the tasks presented in the item. The student describes that "some animals don't like certain weather and some do." Neither of the statements describes a way that animals respond to a seasonal weather change. No credit is given for this response.

1: Well when it's hot court for or
etho exins out the Wolves come
out and fin a their food.
2: Well, when it's cold or raining
the wolves find a place to
Stay warm.

A-8 Score Point 0

The response provides insufficient evidence to demonstrate any understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing none of the tasks presented in the item. Both responses provided by the student attempt to describe an animal's response to a daily weather change. These types of responses demonstrate a misunderstanding of the given prompt. This response receives no credit.

1: the ginimals know what to do alwing
the Kind of season,
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The state of the s
2: the Vilespond differently then humans
10 dut to the weather,
The state of the s
The state of the s

A-9 Score Point 0

The response provides insufficient evidence to demonstrate any understanding of the response of organisms, to environmental changes (e.g., changes in climate, hibernation, migration, coloration) and how these changes affect survival by completing none of the tasks presented in the item. The answers provided do not give any specific animal responses. The idea that "the animals know what to do during the kind of season" does not receive credit without describing what the animals actually do. The second response continues with general information that also does not receive credit. No part of this response is acceptable for credit.

PSSA and Keystone Exams Fall 2015 Item Writing and Handscoring Training Workshops

PSSA, Grade 8 Science

Animals and Seasonal Weather Changes

Handscoring Training Set 1

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1. One way is that animals go into hibrenation
1: One way is that animals go into hibrenation during the cold winter monthes,
3
*
2. Another way is that mosquitoes come out to seed during warm summer days,
out to seed during warm summer days,

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	be in w		
and not	cold b	vere.	
Sing Sing Sing Sing Sing Sing Sing Sing			
2: Mice +	ravel into	houses and	people
places be	cause it	15 80	cold during
the winter	<i>1</i>	<i>x</i>	
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1: They may react by be very cold because of the weather changing for the winter because they might not be used to it.
of the weather changing for the winter because
they might not be used to its
2: Thou are too hot because during the
Sprika. Summer and sometimes fall if acts
may over heatet.

They habornate in the water. They want warm areus. Not cold areas to freeze in.
cold areas to freeze in.
2: They come back in the spring They come back because they
can get food.
and the second s

i: One way that animals respond to the seasonal weather changes in lennsylvania is by hibernating during the winter seasons.

2: Another way that animals respond to the seasonal weather changes in Pennsylvania is by knowing what animals to expect to be able to prey on during certain seasons with certain temperatures and characteristics:

1: Type-deer sleep mostly diging
the winter. They also turn
grav constthe dimate.
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2: Some deer are stupid cause they rum: in traffic That's why you see
rum traffic That's why you see
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2: Another weather chanses in pennsyrums

2: Another way the animals respond

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animals change.

1. One way that animals respond to
the sectional weather changes in
Penosylvonia is that they blend more
or less because the leaves turn
COLOR
2. Another way is it a right be the
2: HOTTEN WILL IS IT IMIGHT WILL MICH
dictions to find food for certain
animak because they might blend
in with the fall colors.

PSSA Science: Animals and Seasonal Weather Changes (Grade 8); Training Set One

Item: Animals and Seasonal Weather Changes

Grade 8

Subject: **Science**

Name		
Number	Score	Notes
T1-1		
T1-2		
T1-3		
T1-4		
T1-5		
T1-6		
T1-7		
T1-8		
T1-9		
T1-10		

PSSA and Keystone Exams Fall 2015 Item Writing and Handscoring Training Workshops

PSSA, Grade 8 Science

Animals and Seasonal Weather Changes

Handscoring Training Set 2

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1: Binds in Pennsylvania Fly south in Search of warmer Weather once it starts getting cold. They find warmer temperature because it is essential to their survival to be warm and to have a reliable food source. Once weather change warm again, they return.

2: In the winter, when cold weathe sets in frage bury under mud and water and pond scum. They go into a deep sleep type phase lince the weather warms the awaken.

1. Some mammals hibernate
That means they fall as Leep
auding winder.
And the second s
2. Other animals adopt to the
2. Other animais adapt to the different seasons, every season
And the second s

1: 50me avimals When ets
cold they doint evel 19th
Lograge Child High So High Just
chay home doing nothing.
2: But on summer lots of animal
be in Each & With the is owned
morning acount Playing and
morning acound playing and mailing lots of fun.

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and they come out like ground spring
or summer and their buisness.
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A TOTAL CONTRACTOR OF THE PARTY
2: They stay in their homes when it is
too hot and when it is too cold.

1: In winter bears go into hipernation and sleep all winter.
sleep all winter.
- N
2: In the spring deer fight pachother over motes and recive new antlers.
over motes and recive new antlers.
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1: Hibomation					
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e de Service de la consequencia		×			
2: Fly South					
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Maria Cara Cara Cara Cara Cara Cara Cara		5	·		

1. The animals can hear to the
The animals can hear to the Seasonal weather changes.
V
2: The animals can See if the
Weather is Changing.
4*

1: Some chirds migrate			ner a	reas
when it becomes	winter	here	and	then
will comes back in	spring.	र तर्व कृष्णिक रूप प्रवर्ति ।	· P	^
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2: Boars out more	whon it	gots	colder	λ
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PSSA Science: Animals and Seasonal Weather Changes (Grade 8); Training Set Two

Item: Animals and Seasonal Weather Changes Grade 8

Subject: Science

Name		
Number	Score	Notes
T2-1		
T2-2		
T2-3		
T2-4		
T2-5		
T2-6		
Т2-7		
T2-8		
Т2-9		
T2-10		

PSSA and Keystone Exams Fall 2015 Item Writing and Handscoring Training Workshops

PSSA, Grade 8 Science

Animals and Seasonal Weather Changes

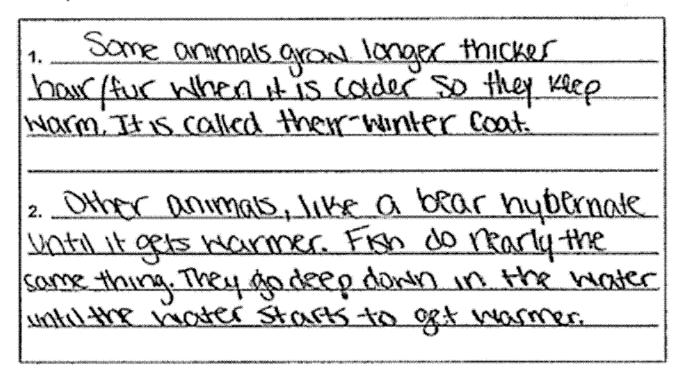
Handscoring Practice Set*

*Responses in this set do not have true scores. Apply scores based on scoring criteria.

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1. Animals respond by migrating to a warmer area because they can't survive in the cold.

2. Animals respond by adapting to the weather conditions because they aren't created to live in different habitats.



1; some onimals may
nivercate when the weather
Octs ead and stats to soon.
A Secretarian and the secr
2. Another way animals may
react to infather is they may
die berouse that and hiberook
and have no where to as so
they die out in the cold.

1: There are many ways animals respond to
the seasonal weather changes in Pennsulvania

ONE. Wary is because if some animal live in
the heat weather and it would they could dee.

2: Another reason is because some
as the an inclis food might not be
growing at that time either.

1. One way an onimal would adopt its exfox. Depending
1. One way an animal would adopt its exfox. Depending on what season a foxes coat will change color
along with the season.
2. Another way on animal would adopt its that birds would
2. Another way on animal would adopt its that binds would fly to a womer niver area once if storted to get
Coldoutside.

1: In Pernovivania the birds
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18+00010 for them in the winter
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2: AFO, the knuesfall from the trees
in-the fall in Penblivania
because of the chrostic
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Fact the first stronger 2 for the first strong
2: They know when they
are Coming so they adant
The state of the s
Cond. Street Cores.

1. When it gets cooler outside
1. When it gets cooler outside animals go into hibernation.
2. Animals also gather food for winter since plants start
winter since plants start
to die.

1: Some animals migrates.	*
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2: Some ommals adopte to the were	then
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1. One way is they a for or hair to star	one thicker
2. another way is the	y could eat
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PSSA Science: Animals and Seasonal Weather Changes (Grade 8); Practice Set

Practice Set*

Subject:	Science	Item: A	Animals and Seasonal Weather Changes	Grade 8
Name				
Number	Score	Consensus	Annotation	
P-1				
P-2				
P-3				
P-4				
P-5				
P-6				
P-7				
P-8				
P-9				
P-10				

^{*}Responses in this set do not have true scores. Apply scores based on scoring criteria. Page 3-48 $\,$

PSSA and Keystone Exams Fall 2015 Item Writing and Handscoring Training Workshops

PSSA, Grade 8 Science

Animals and Seasonal Weather Changes

Handscoring
Training Sets 1 and 2
True Scores/Annotations

Training Set 1

Paper	Score	Comments
T1-1	1	Part 1: go into hibernation Part 2: no credit – feeding season of mosquitos is not a seasonal behavior
T1-2	2	Part 1: birds fly south for the winter Part 2: Mice travel into housesbecause it is so cold during the winter (find shelter)
T1-3	0	Part 1: "they lose hair" is not specific enough to a seasonal change Part 2: not specific enough – what seasonal change helps them do this
T1-4	2	Part 1: hibernation Part 2: store food Student does not have to name season for full credit (but if they do, it must be correct)
T1-5	0	Part 1: No credit – being very cold is not an acceptable animal response to seasonal changes Part 2: No credit – getting overheated is not an acceptable animal response to seasonal changes
T1-6	2	Part 1: hibernate in winter Part 2: come back in the spring (come out of hibernation)
T1-7	1	Part 1: hibernating during winter Part 2: no credit for knowing what animals to expect to be able to prey on during certain seasons
T1-8	0	Part 1: sleep mostly during the winter implies hibernation – this is not a correct behavior of deer; this error detracts from the answer Part 2: no credit
T1-9	2	Part 1: some hibernate Part 2: furs of some animals change
T1-10	0	Part 1: "blend more or less because the leaves change color" is not a response of the animal, so it receives no credit (the change in color of the fur would be a response to seasonal weather change) Part 2: same incorrect idea—no credit

Training Set 2

Paper	Score	Comments
T2-1	2	Part 1: birds fly south and/or once weather change warm again, they return Part 2: frogs bury under mud and waterthey go into a deep sleep type phase and/or once the weather warms, they awaken
T2-2	1	Part 1: hibernate Part 2: No credit – adapt to different seasons, every season is too general (what are the 'adaptations')
T2-3	0	Part 1: No credit – 'stay home and do nothing' is not an acceptable description of 'hibernation'
T2-4	1	Part 1: most animals migrate between seasons (student does not lose credit for using the word "most") Part 2: no credit for "fish are still active"
T2-5	2	Part 1: hibernate when it is winter and/or they come out around spring Part 2: no credit This paper gets two points for having two correct answers in part 1, because there is nothing incorrect in part 2.
T2-6	1	Part 1: bears go into hibernation Part 2: Incorrect. Spring is not the correct mating season for deer; fall is their mating season.
T2-7	2	Part 1: hibernation Part 2: fly south
T2-8	0	Part 1 and Part 2: No credit – student attempts to talk about how animals could identify a seasonal change
T2-9	1	Part 1: Incorrect. Birds do not migrate north to warmer areas in winter. Part 2: bears hibernate
T2-10	2	Part 1: migrate Part 2: hibernate