

Grade	5
Unit/Domain	Chemical Matter: Detectives, Dinosaurs, Discovery
Copyright (original or public domain)	Original
Lexile/Average Grade Level	Unavailable at this time
Word Count	381
Flesch-Kincaid	7.8
Title	Birds
Author	CKLA

Birds

(1) Birds have several characteristics that enable them to fly, but one of the most essential characteristics is that birds are warm-blooded. Cold-blooded animals, such as reptiles and fish, depend on their surroundings to regulate their internal body temperature. Their body temperature decreases when the weather is cold and increases when the weather is hot. In contrast, birds and other warm-blooded animals use food to produce heat within their own bodies. Their body temperature remains steady regardless of the weather. As a result, these animals can remain active longer and live in more extreme conditions than cold-blooded animals.

(2) Compared to cold-blooded animals, warm-blooded animals also have a higher metabolism. Metabolism is the process by which food is converted to energy in most animals' bodies. The more active an animal is, the more food it must consume and the higher its metabolism must be. The high metabolism of birds provides the steady flow of energy necessary for sustained flight.

(3) Have you ever heard the expression *eats like a bird*? It is used to describe a person who eats a small amount of food at each meal. But don't let the expression fool you into thinking birds do not eat very much. Their high metabolism and activity levels mean they burn a lot more energy than most animals, which means they need to eat a lot of food daily! They achieve this by eating many small meals throughout the day.

(4) What characteristics determine how far and high a bird can fly. Feathers play several important roles in bird flight. They are lightweight and mesh together as the bird's wings flap downward. Then, as the wings sweep upward, the feathers separate again to let air through. Feathers also act as insulation, an extra layer that protects birds' skin from the sun and holds in

heat. The trapped heat provides energy and warmth in cold temperatures—such as those high above the ground.

(5) Birds are the only animals that have feathers. Some birds, penguins most notably, use their feathers to stay warm instead of to fly. But regardless of their main function, birds' precious feathers take quite a beating, so all birds take good care of them. Birds often preen their feathers with their beaks to keep them clean, waterproof, and in just the right position.



Caption: The colors of feathers are created by pigments in the feather and are independent of the feather structure.

<https://www.shutterstock.com/image-photo/pink-flamingo-feather-pattern-background-550729771>

Item #	1
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, Discovery
TEKS	TEKS 5.7.C Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (C) use text evidence to support an appropriate response.
Objective	Students will use text evidence to support a response.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	Which sentence best supports the idea that birds have a high metabolism and need to obtain a great deal of energy from food?
prompt	<i>Select the best answer.</i>
randomize_answer_choices	yes
answer_a	In contrast, birds and other warm-blooded animals use food to produce heat within their own bodies. (paragraph 1)
answer_b	The high metabolism of birds provides the steady flow of energy necessary for sustained flight. (paragraph 2)
answer_c	Their high metabolism and activity levels mean they burn a lot more energy than most animals, which means they need to eat a lot of food daily! (paragraph 3)
answer_d	The trapped heat provides energy and warmth in cold temperatures, such as those high above the ground. (paragraph 4)
correct answer	c

correct_answer_rationale	The correct answer is “Their high metabolism and activity levels mean they burn a lot more energy than most animals, which means they need to eat a lot of food daily!” (paragraph 3) This shows that because birds have a high metabolism, they must eat a lot of food to maintain their energy.
incorrect_answer_1	a
incorrect_answer_1_rationale	This sentence is about food providing heat, but it is not about energy.
incorrect_answer_2	b
incorrect_answer_2_rationale	This sentence addresses the fact that their high metabolism provides them with a steady flow of energy. This energy comes from food, but it is not explicitly stated in this sentence.
incorrect_answer_3	d
incorrect_answer_3_rationale	This sentence discusses the need for birds to use trapped heat for energy and warmth in cold temperature and does not reference the need for food.
scoring	Exact match; 1 point

Item #	2
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, Discovery
TEKS	TEKS 5.6.F Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to: (F) make inferences and use evidence to support understanding.
Objective	Students will answer inferential questions about a text.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	Based on the details in the passage, what can the reader conclude about warm-blooded animals?
prompt	<i>Select the best answer.</i>
randomize_answer_choices	yes
answer_a	They depend on their surroundings to help regulate their body temperature.
answer_b	They do not have a high metabolism, so they do not require much food.
answer_c	Their body temperature increases when the weather is hot and decreases when the weather is cold.
answer_d	Their body temperature remains constant, enabling them to be active in extreme conditions.
correct_answer	d

correct_answer_rationale	The passage states that birds can “live in more extreme conditions than cold-blooded animals can,” and their body temperatures are unaffected by changes in the weather. These statements suggest that birds can survive sudden changes in weather, including air temperature, and remain active.
incorrect_answer_1	a
incorrect_answer_1_rationale	Cold-blooded animals like reptiles and fish depend on their surroundings to regulate their temperature.
incorrect_answer_2	b
incorrect_answer_2_rationale	Warm-blooded animals have a high metabolism and they have to eat a lot of food for energy.
incorrect_answer_3	c
incorrect_answer_3_rationale	Cold-blooded animals’ body temperature increases when the weather is hot and decreases when the weather is cold. That is not the case with warm-blooded animals.
scoring	Exact match; 1 point

Item #	3
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.7.C Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (C) use text evidence to support an appropriate response.
Objective	Students will use text evidence to support a response.
DOK Level	3
Question Type	Hot Text

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	Reread paragraph 3. Which sentence explains why birds eat the way they do? [Have you ever heard the expression <i>eats like a bird</i> ?] [It is used to describe a person who eats a small amount of food at each meal.] [But don't let the expression fool you into thinking birds do not eat very much.] [Their high metabolism and activity levels mean they burn a lot more energy than most animals, which means they need to eat a lot of food daily!] [They achieve this by eating many small meals throughout the day.]
prompt	Select the best answer.

correct_answer	[Their high metabolism and activity levels mean they burn a lot more energy than most animals, which means they need to eat a lot of food daily!]
correct_answer_rationale	Birds eat a lot of food each day because they burn a lot of energy, due to their high metabolism and activity levels.
incorrect_answer_1	[Have you ever heard the expression <i>eats like a bird</i> ?]
incorrect_answer_1_rationale	This simile is used to provide context to the passage but does not explain why birds eat the way they do.
incorrect_answer_2	[It is used to describe a person who eats a small amount of food at each meal.]
incorrect_answer_2_rationale	This explains the simile used in the passage but does not explain why birds eat the way they do.
incorrect_answer_3	[But don't let the expression fool you into thinking birds do not eat very much.]
incorrect_answer_3_rationale	This statement provides no information about why they eat the way they do.
incorrect_answer_4	[They achieve this by eating many small meals throughout the day.]
incorrect_answer_4_rationale	This statement explains how they eat a lot but not why they do so.
scoring	Exact match; 1 point

Item #	4
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.9.Dii Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts—genres. (9)The student recognizes and analyzes genre-specific characteristics, structures, and purposes within and across increasingly complex traditional, contemporary, classical, and diverse texts. The student is expected to: (D) recognize characteristics and structures of informational text, including: (ii) features such as insets, timelines, and sidebars to support understanding.
Objective	Students will recognize the purpose of the text feature.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	In which part of the selection would the reader find information about how the color of feathers is created?
prompt	<i>Select the best answer.</i>
answer_a	The caption under the photograph
answer_b	The introductory paragraph
answer_c	Paragraph 4
answer_d	The concluding paragraph
correct_answer	a
correct_answer_rationale	The caption under the photograph explains how feather colors are created and that the feather color is separate from feature structure.
incorrect_answer_1	b

incorrect_answer_1_rationale	The introductory paragraph explains one of the characteristics that enables birds to fly, not how the color of their feathers is created.
incorrect_answer_2	c
incorrect_answer_2_rationale	This paragraph provides information about the wing's shape and the fact that birds have hollow bones that help them fly.
incorrect_answer_3	d
incorrect_answer_3_rationale	The concluding paragraph provides information about the importance of a bird's feathers to keep them warm and that birds have to take care of them.

Item #	5
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.D.x Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (D) edit drafts using standard English conventions, including: (x) italics and underlining for titles and emphasis and punctuation marks, including quotation marks in dialogue and commas in compound and complex sentences.
Objective	Students will identify a conventions error in a written sentence.
DOK Level	2
Question Type	Multiple choice

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	A student writing about the passage "Birds" wrote the following sentence: According to the passage, birds have a high metabolism and the high metabolism provides needed energy for flying. What change is needed in the sentence?
prompt	Select the best answer.
randomize_answer_choices	yes
answer_a	Delete the comma after passage .
answer_b	Change have to has .
answer_c	Add a comma after metabolism .
answer_d	Change energy to energy .
correct_answer	c

correct_answer_rationale	The correct answer is "Add a comma after <i>metabolism</i> ." The sentence is compound, and a comma is needed before the independent clause.
incorrect_answer_1	a
incorrect_answer_1_rationale	The comma is necessary after the word <i>passage</i> , as this is an introductory clause.
incorrect_answer_2	b
incorrect_answer_2_rationale	Changing <i>have</i> to <i>has</i> would create an error in subject-verb agreement. <i>A bird has</i> , while <i>birds have</i> .
incorrect_answer_3	d
incorrect_answer_3_rationale	<i>Energy</i> is correctly spelled in the sentence. Making this change would create an error.
scoring	Exact match; 1 point

Item #	6
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.C (11) Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (C) revise drafts to improve sentence structure and word choice by adding, deleting, combining, and rearranging ideas for coherence and clarity.
Objective	Students will combine two sentences to create one clear and effective sentence.
DOK Level	2
Question Type	Short Constructed Response

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	A student writing about the passage "Birds" wrote the following sentences: According to the passage, birds are warm-blooded. According to the passage, birds have feathers. What is the most effective way to combine the sentences?
prompt	<i>Write your response in the box provided.</i>
sample_answer	According to the passage, birds are warm-blooded and have feathers.
scoring	1 point for a response that clearly and effectively combines the sentences.

Item #	7
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.D.x Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (D) edit drafts using standard English conventions, including: (x) italics and underlining for titles and emphasis and punctuation marks, including quotation marks in dialogue and commas in compound and complex sentences.
Objective	Students will identify and correct a conventions error in a sentence.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Birds

QUESTION

Element	Value
stimulus	Refer to the passage, "Birds."
question_stem	A student wrote the following sentence after reading the passage: After reading the passage, I checked out a book entitled, <i>Amazing Bird Trivia Strange and Interesting Facts about Texas Birds</i> . What change needs to be made to this sentence?
prompt	Select the best answer.
randomize_answer_choices	yes
answer_a	Change checked to check .
answer_b	Change entitled to intitled .

answer_c	Add a colon after <i>Trivia</i> .
answer_d	Change <i>Interesting</i> to <i>interesting</i> .
correct_answer	c
correct_answer_rationale	A colon correctly separates the main title from the subtitle.
incorrect_answer_1	a
incorrect_answer_1_rationale	The sentence is currently correct to reflect the correct verb tense for subject-verb agreement.
incorrect_answer_2	b
incorrect_answer_2_rationale	Changing the word <i>entitled</i> to <i>intitled</i> would create an error due to a misspelling. The word <i>entitled</i> is correctly spelled in the sentence.
incorrect_answer_3	d
incorrect_answer_3_rationale	Because “interesting” is part of the title, this word needs to be capitalized, so no change is needed.
scoring	Exact match; 1 point

Grade	5
Unit/Domain	Chemical Matter: Detectives, Dinosaurs, and Discovery
Copyright (original or public domain)	Original
Sources	https://www.thoughtco.com/physical-and-chemical-changes-examples-608338 https://www.thoughtco.com/examples-of-physical-changes-608336
Lexile/Average Grade Level	Unavailable at this time
Word Count	452
Flesch-Kincaid	6.4
Title	Physical Changes in Matter
Author	Allen Woods

Physical Changes in Matter

(1) Scientists call all the different materials in our world *matter*. This includes everything from the bread in a sandwich to the air that we breathe, from the water in a lake to the screen on a computer. There are three well-known types, or phases, of matter on Earth: solids, liquids, and gases. A solid, like a frozen ice cube, has a particular shape and volume. A liquid, such as water in a glass, has a particular volume but can change shape—for example, if poured into a different container. A gas can change its shape and its volume to fit its container. Have you noticed the smell of air freshener as you walked into a room? That is the gas phase of the air freshener filling the room.

(2) The world around us is constantly changing, and matter is no different. Matter changes from one phase to another based on temperature and pressure. For example, in very cold weather, the water in a pond will freeze: The liquid water becomes solid ice. When the weather becomes warm again, the ice will melt, changing from solid back to liquid.

(3) Water provides many common examples of how matter changes phase. We have already seen how liquid water and ice may change back and forth. What happens when we add heat to liquid water by boiling it? When water boils, it changes to steam, a gas. If we capture the steam and let it cool, the gas will condense back into liquid water.

(4) These are all examples of physical changes. During a physical change, the phase of the matter may change, but the matter remains the same substance. In contrast, when a chemical change happens, a new substance is formed, with a different chemical name. A chemical formula tells how many atoms, of which type, make up one molecule of a substance. Liquid, solid, and gaseous water are all forms of H_2O . H_2O is the chemical formula for water. One water molecule contains two hydrogen atoms (H) and one oxygen atom (O).

(5) There are other kinds of physical changes. If you crush an aluminum can, its shape becomes flat, but it does not become a new substance. It is still aluminum. The same is true if you shatter a glass bottle. Each piece of the bottle has the same chemical formula that the glass had when it was whole.

(6) In most cases, physical changes can be reversed. A dented can may be straightened and used again. Frozen water can be melted into a liquid. Even shredding paper into tiny pieces does not turn the paper into a different substance. If you had time, you could put the pieces back together to remake the original sheet.

Item #	8
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.6.F Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to: (F) make inferences and use evidence to support understanding.
Objective	Students will make inferences and use evidence to support understanding.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter

QUESTION

Element	Value
stimulus	Refer to the passage, "Physical Changes in Matter."
question_stem	Based on the details in the passage, what can the reader infer about matter?
prompt	<i>Select the best answer.</i>
randomize_answer_choices	yes
answer_a	Physical changes in matter are not very important to scientists.
answer_b	Water can have many different chemical names.
answer_c	Many types of matter can change phases like water can.
answer_d	If a gas changes its shape and volume, a chemical change has happened.
correct_answer	c
correct_answer_rationale	The correct answer is "Many types of matter can change phases like water can." The author uses water as an example of how matter can change phase, but the passage does not suggest that water is the only kind of matter that changes phase.
incorrect_answer_1	a
incorrect_answer_1_rationale	Physical changes in matter are very important to scientists. Each paragraph addresses some aspect of the change in

	matter, which indicates it is important.
incorrect_answer_2	b
incorrect_answer_2_rationale	The passage states that, "Liquid, solid, and gaseous water are all forms of H ₂ O. H ₂ O is the chemical formula for water. One water molecule contains two hydrogen atoms (H) and one oxygen atom (O)." This indicates that water can come in different forms but does not say that water can have different chemical names.
incorrect_answer_3	d
incorrect_answer_3_rationale	The text states that "A gas can change its shape and its volume to fit its container." Even when a gas changes its shape and volume, this does not result in a new substance.
scoring	Exact match; 1 point

Item #	9
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.7.C Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (C) use text evidence to support an appropriate response.
Objective	Students will identify the correct supporting text evidence.
DOK Level	1
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter

QUESTION

Element	Value
stimulus	Refer to the passage, "Physical Changes in Matter."
question_stem	Which sentence from the selection describes a physical change in matter?
prompt	<i>Select the best answer.</i>
randomize_answer_choices	yes
answer_a	A gas can change its shape and its volume to fit its container. (paragraph 1)
answer_b	The liquid water becomes solid ice. (paragraph 2)
answer_c	What happens when we add heat to liquid water by boiling it? (paragraph 3)
answer_d	Each piece of the bottle has the same chemical name that the glass had when it was whole. (paragraph 5)
correct_answer	b
correct_answer_rationale	The correct answer is "The liquid water becomes solid ice." This sentence describes the physical change of water when it freezes.
incorrect_answer_1	a

incorrect_answer_1_rationale	"A gas can change its shape and its volume to fit its container" (paragraph 1) does not describe a physical change in the gas.
incorrect_answer_2	c
incorrect_answer_2_rationale	"What happens when we add heat to liquid water by boiling it?" (paragraph 3) poses a question about adding heat to liquid water to boil it but does not describe the physical change of water.
incorrect_answer_3	d
incorrect_answer_3_rationale	"Each piece of the bottle has the same chemical name that the glass had when it was whole" (paragraph 5) shows that the glass did not change in substance; it is the same chemical formula.
scoring	Exact match; 1 point

Item #	10
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.7.C Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (C) use text evidence to support an appropriate response.
Objective	Students will quote accurately from a text to support answers to questions about a text.
DOK Level	3
Question Type	Hot Text

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter

QUESTION

Element	Value
stimulus	Refer to the passage, "Physical Changes in Matter."
question_stem	<p>Suppose that a container of water undergoes a chemical change. Which sentence from paragraph 4 supports the idea that the result of the change will be different from water?</p> <p>[These are all examples of physical changes.] [During a physical change, the phase of the matter may change, but the matter remains the same substance.] [In contrast, when a chemical change happens, a new substance is formed, with a different chemical name.] [A chemical formula tells how many atoms, of which type, make up one molecule of a substance.] [Liquid, solid, and gaseous water are all forms of H₂O.] [H₂O is the chemical formula for water.] [One water molecule contains two hydrogen atoms (H₂) and one oxygen atom (O).]</p>
prompt	Select the best answer.

correct_answer	[In contrast, when a chemical change happens, a new substance is formed, with a different chemical name.]
correct_answer_rationale	The author explains that a chemical change produces “a new substance.”
incorrect_answer_1	[These are all examples of physical changes.]
incorrect_answer_1_rationale	This sentence does not provide support for the idea that the result of change will be different from water. It just states that there are examples of physical changes.
incorrect_answer_2	[During a physical change, the phase of the matter may change, but the matter remains the same substance.]
incorrect_answer_2_rationale	This statement is a generalization about how matter may change but stays the same substance, which is the same as water. Water changes form, but the substance is the same.
incorrect_answer_3	[A chemical formula tells how many atoms, of which type, make up one molecule of a substance.]
incorrect_answer_3_rationale	This sentence explains what a chemical formula is but not how the chemical formula may change when a new substance is formed.
incorrect_answer_4	[Liquid, solid, and gaseous water are all forms of H ₂ O.]
incorrect_answer_4_rationale	This sentence explains that water in all its forms is still H ₂ O.
incorrect_answer_5	[H ₂ O is the chemical formula for water.]
incorrect_answer_5_rationale	This is stating a fact about water but does not provide support for how the change will be different from water.
incorrect_answer_6	[One water molecule contains two hydrogen atoms (H ₂) and one oxygen atom (O).]
incorrect_answer_6_rationale	This explains the chemical formula for water. It does not support how the change will be different from water.
scoring	Exact match; 1 point

Item #	11
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.D (11) Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (D) edit drafts using standard English conventions, including: (i) complete simple and compound sentences with subject-verb agreement and avoidance of splices, run-ons, and fragments.
Objective	Students will identify and correct the subject-verb agreement error in a sentence.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter

QUESTION

Element	Value
stimulus	Refer to the passage, "Physical Changes in Matter."
question_stem	A student writes the following sentence about the physical changes of water when it freezes: If I put water in a freezer, a change in phase will occurred when I take it out. What is the correct way to write this sentence?
prompt	Select the best answer.
randomize_answer_choices	yes
answer_a	If I put water in a freezer, a change in phase will have occurred when I take it out.
answer_b	If I put water in a freezer, a change in phase will occur when I take it out.

answer_c	If I put water in a freezer, a change in phase has occurred when I take it out.
answer_d	If I put water in a freezer, a change in phase occurs when I take it out.
correct_answer	a
correct_answer_rationale	The correct answer is "If I put water in a freezer, a change in phase will have occurred when I take it out." The phrase <i>will have occurred</i> is a correct example of the future perfect tense.
incorrect_answer_1	b
incorrect_answer_1_rationale	The change occurred while it was still in the freezer. <i>Will occur</i> would indicate that the action will happen in the future, but that would make the sentence incorrect.
incorrect_answer_2	c
incorrect_answer_2_rationale	The change occurs in the freezer. The use of the word <i>has</i> is the present perfect tense, which is the incorrect usage in this case.
incorrect_answer_3	d
incorrect_answer_3_rationale	The change occurs while in the freezer, not when it is taken out. The use of <i>occurs when</i> would indicate the event is happening in the present.
scoring	Exact match; 1 point

Item #	12
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.D.ii (11) Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (D) edit drafts using standard English conventions, including: <i>(iii) past tense</i> of irregular verbs.
Objective	Students will form and use the perfect verb tense.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter

QUESTION

Element	Value
stimulus	Refer to the passage, "Physical Changes in Matter."
question_stem	A student wrote the following sentence about the passage: <i>I heard a crunch and saw that someone had crush the can.</i> What is the correct way to write this sentence?
prompt	Select the best answer.
randomize_answer_choices	yes
answer_a	I heard a crunch and saw that someone had crushed the can.
answer_b	I heard a crunch and saw that someone have crushed the can.
answer_c	I heard a crunch and saw that someone will have crushed the can.
answer_d	I heard a crunch and saw that someone had crushes the can.
correct_answer	a
correct_answer_rationale	The correct answer is "I heard a crunch and saw that someone had crushed the can." The can was crushed before the person turned, requiring the past perfect tense of verb.

incorrect_answer_1	b
incorrect_answer_1_rationale	The usage of <i>have crushed</i> indicates present perfect tense, but the crunch occurred at the same time as rushing of the can, so this is the incorrect usage.
incorrect_answer_2	c
incorrect_answer_2_rationale	The can was crushed before the person was seen; <i>will have crushed</i> indicates future perfect tense, so there is no subject-verb agreement in this sentence.
incorrect_answer_3	d
incorrect_answer_3_rationale	The can was crushed before the person was seen; <i>had</i> indicates past perfect tense, but <i>crushes</i> is in the present form, so this would not be the correct usage. The correct words would be <i>had crushed</i> .
scoring	Exact match; 1 point

Item #	13
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.D.x Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (D) edit drafts using standard English conventions, including: (x) italics and underlining for titles and emphasis and punctuation marks, including quotation marks in dialogue and commas in compound and complex sentences.
Objective	Students will understand how to use commas in compound sentences.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter

QUESTION

Element	Value
stimulus	Refer to the passage, "Physical Changes in Matter."
question_stem	Which sentence about the passage is punctuated correctly?
prompt	<i>Select the best answer.</i>
randomize_answer_choices	yes
answer_a	Water can change into other phases, but it will still have the same chemical name.
answer_b	Water can change into other phases: but it will still have the same chemical name.
answer_c	Water can change into other phases but, it will still have the same chemical name.
answer_d	Water can change, into other phases, but it will still have the same chemical name.

correct_answer	a
correct_answer_rationale	The correct answer is “Water can change into other phases, but it will still have the same chemical name.” The comma and coordinating conjunction are used to separate two independent clauses.
incorrect_answer_1	b
incorrect_answer_1_rationale	This is the incorrect use of a colon because the colon is often used to introduce a list of items.
incorrect_answer_2	c
incorrect_answer_2_rationale	When you have two sentences that can stand on their own and are connecting them with a conjunction, you must put a comma on the word before the conjunction.
incorrect_answer_3	d
incorrect_answer_3_rationale	No additional comma is necessary after the word <i>change</i> , as <i>Water can change</i> can stand on its own.
scoring	Exact match; 1 point

Grade	5
Unit/Domain	Chemical Matter: Detectives, Dinosaurs, and Discovery
Copyright (original or public domain)	Original
Sources	https://science.howstuffworks.com/environmental/earth/geophysics/fire1.htm https://www.sbs.com.au/topics/science/fundamentals/article/2016/12/14/please-eggsplain-what-happens-when-you-cook-egg https://science.howstuffworks.com/question445.htm https://www.epa.gov/acidrain/what-acid-rain
Lexile/Average Grade Level	Unavailable at this time
Word Count	497
Flesch-Kincaid	8.2
Title	Chemical Changes That Can't Be Reversed
Author	Allen Woods

Chemical Changes That Can't Be Reversed

(1) The matter that we encounter in our daily lives often changes. Scientists have identified two basic types of change: physical and chemical. The main difference is that chemical changes produce new substances, whereas physical changes do not.

(2) Chemical changes are a common, central part of our lives. We couldn't enjoy fluffy pancakes without the bubbles of carbon dioxide gas released by acid-base reactions when we add baking powder to the batter. If we didn't keep milk refrigerated, it would turn sour because of chemical changes. When you sit by a campfire or fireplace, the warmth you feel comes from chemical changes to the wood. Engines powered by gasoline also rely on chemical changes.

(3) During a chemical change, the atoms in one or more substances recombine and form new substances. When a chemical change occurs, matter changes from one chemical substance to another. One important chemical change is called combustion. For example, when propane gas in a gas stove burns, the carbon and hydrogen atoms in the propane combine with oxygen atoms in the air and form carbon dioxide (CO₂) and water (H₂O). When atoms recombine to form new substances, it usually isn't possible to reverse these changes. That is another key

difference between chemical and physical changes. When propane is burned, for example, we cannot turn the CO_2 and the H_2O back into propane.

(4) Cooking and eating are two of the most common examples of everyday chemical changes. The heat used to cook an egg breaks the bonds holding together some of the egg's proteins. Then, new bonds are formed to make the egg more solid than liquid. When we eat and digest an egg—or any food—the acids in our stomach break down the food molecules so they can be used for energy.

(5) Other chemical changes can have more negative effects. Many metals that we use for building contain iron. Iron atoms readily combine with oxygen atoms if water is present and form iron oxide, or rust. Iron oxide (rust) is a much weaker substance than iron. Caretakers of bridges and other metal structures are extremely careful to prevent iron from coming in contact with water and oxygen. They do this by coating the metal with paint or other protective chemicals.

(6) Another example of a large-scale chemical reaction that many of us see without perhaps even realizing it is photosynthesis. Photosynthesis is the process by which plants use water (H_2O) plus carbon dioxide (CO_2) in the presence of sunlight to create oxygen (O_2) and energy in the form of sugar ($\text{C}_6\text{H}_{12}\text{O}_6$). Plants gather the water and carbon dioxide from the soil and air and recombine the atoms with the help of the sun to create the oxygen and sugar. The oxygen is then released into the atmosphere and plants store the sugar in the form of glucose. Organisms, animals, and people can then obtain this energy by eating the plants.

Item #	14
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.7.C Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (C) use text evidence to support an appropriate response.
Objective	Students will use text evidence that supports a response.
DOK Level	2
Question Type	Multiple Choice

PASSAGE

Element	Value
passage_link	
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value
stimulus	Refer to the passage, "Chemical Changes That Can't Be Reversed."
question_stem	Which sentence from the selection describes a negative effect of a chemical change?
prompt	<i>Select the best answer.</i>
randomize_answer_choices	yes
answer_a	For example, when propane gas in a gas stove burns, the carbon and hydrogen atoms in the propane combine with oxygen atoms in the air and form carbon dioxide (CO ₂) and water (H ₂ O). (paragraph 3)
answer_b	The heat used to cook an egg breaks the bonds holding together some of the egg's proteins. (paragraph 4)
answer_c	Iron atoms readily combine with oxygen atoms if water is present and form iron oxide, or rust. (paragraph 5)
answer_d	Plants gather the water and carbon dioxide from the soil and air and recombine the atoms with the help of the sun to create the oxygen and sugar. (paragraph 6)

correct_answer	c
correct_answer_rationale	The correct answer is “Iron atoms readily combine with oxygen atoms if water is present and form iron oxide, or rust.” (paragraph 5). Rust weakens iron structures.
incorrect_answer_1	a
incorrect_answer_1_rationale	This sentence provides information about combustion and that carbon dioxide and water are formed when hydrogen atoms and oxygen atoms combine. This does not detail a negative effect.
incorrect_answer_2	b
incorrect_answer_2_rationale	The chemical changes from cooking are not negative effects because we need food to survive.
incorrect_answer_3	d
incorrect_answer_3_rationale	Recombining atoms with the help of the sun to create oxygen and sugar is a positive effect of a chemical change.
scoring	Exact match; 1 point

Item #	15
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.11.D.x Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to: (D) edit drafts using standard English conventions, including: (x) italics and underlining for titles and emphasis and punctuation marks, including quotation marks in dialogue and commas in compound and complex sentences.
Objective	Students will understand how to use commas in a range of contexts.
DOK Level	2
Question Type	Inline Choice

PASSAGE

Element	Value
passage_link	
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value	
stimulus	Refer to the passage, “Chemical Changes That Can’t Be Reversed.” Select the answer that completes the sentence correctly.	
question_stem	A When cooked B When cooked, C When, cooked D When, cooked,	an egg undergoes a chemical change.
prompt	Select the best answer.	
randomize_answer_choices	yes	

answer_a	When cooked
answer_b	When cooked,
answer_c	When, cooked
answer_d	When, cooked,
correct_answer	b
correct_answer_rationale	The phrase <i>When cooked</i> is an introductory element. A comma should separate an introductory element from the rest of the sentence.
incorrect_answer_1	a
incorrect_answer_1_rationale	When using an introductory phrase, a comma follows it to separate it from the rest of the sentence to provide clarity.
incorrect_answer_2	c
incorrect_answer_2_rationale	Dependent clauses should be separated from independent clauses by a comma only when the dependent clause precedes the independent one. If the dependent clause follows the independent one, no comma is placed before the word <i>when</i> .
incorrect_answer_3	d
incorrect_answer_3_rationale	The comma placed after the word <i>cooked</i> is correct to separate the introductory phrase. The comma placed after the word <i>when</i> is incorrect, as it is a part of the introductory phrase. The dependent clause follows an independent one, so no comma is placed before the word <i>when</i> .
scoring	Exact match; 1 point

Item #	16
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.9.D.i Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts—genres. The student recognizes and analyzes genre-specific characteristics, structures, and purposes within and across increasingly complex traditional, contemporary, classical, and diverse texts. The student is expected to: (D) recognize characteristics and structures of informational text, including: (i) the central idea with supporting evidence.
Objective	Students will evaluate details read that support a central idea.
DOK Level	2
Question Type	Hot Text

PASSAGE

Element	Value
passage_link	
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value
stimulus	Refer to the passage, "Chemical Changes That Can't Be Reversed."
question_stem	Select the sentence from paragraph 5 that the author uses to support the idea that rusting is a negative change. [Other chemical changes have more negative effects.] [Many metals that we use for building contain iron.] [Iron atoms readily combine with oxygen atoms if water is present and form iron oxide, or rust.] [Iron oxide (rust) is a much weaker substance than iron.] [Caretakers of bridges and other metal structures are extremely careful to prevent iron from coming in contact with water and oxygen.] [They do this by coating the metal with paint or other protective chemicals.]
prompt	Select the best answer.

correct_answer	[Iron oxide (rust) is a much weaker substance than iron.]
correct_answer_rationale	This sentence explains why rust makes iron weaker. This change has negative effects on a metal structure.
incorrect_answer_1	[Other chemical changes have more negative effects.]
incorrect_answer_1_rationale	This statement addresses other chemical changes that have negative effects but not specifically rust.
incorrect_answer_2	[Many metals that we use for building contain iron.]
incorrect_answer_2_rationale	This statement explains that many metals contain iron but does not support the negative effects of rust.
incorrect_answer_3	[Iron atoms readily combine with oxygen atoms if water is present and form iron oxide, or rust.]
incorrect_answer_3_rationale	This statement describes how rust is made but does not explicitly state its negative impact.
incorrect_answer_4	[Caretakers of bridges and other metal structures are extremely careful to prevent iron from coming into contact with water and oxygen.]
incorrect_answer_4_rationale	This statement reflects what actions can be done to prevent the negative effect but does not describe what rust does to metal.
incorrect_answer_5	[They do this by coating the metal with paint or other protective chemicals.]
incorrect_answer_5_rationale	This statement reflects what actions can be done to prevent the negative effect but does not describe what rust does to metal.
scoring	Exact match; 1 point

Item #	17
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.6.E Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to: (E) make connections to personal experiences, ideas in other texts, and society.
Objective	Students will compare and contrast the information presented in two different texts.
DOK Level	3
Question Type	Multiple Select

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value
stimulus	Refer to the passages, "Physical Changes in Matter" and "Chemical Changes That Can't Be Reversed."
question_stem	Which information is presented in both passages?
prompt	Select THREE answers.
randomize_answer_choices	yes
answer_a	Changes to matter are common in everyday life.
answer_b	Matter changing phase is a kind of physical change.
answer_c	Chemical changes have positive and negative effects.
answer_d	Chemical changes, but not physical changes, produce new substances.
answer_e	Physical changes, but not chemical changes, can be reversed.
correct_answer	a, d, e
correct_answer_rationale	Both passages share that changes to matter are common occurrences. They both name that chemical changes produce

	new substances, and that physical changes can be reversed.
incorrect_answer	b, c
incorrect_answer_rationale	The first passage explains how matter changing phase is a type of chemical change, and the second passage explains that chemical changes can have different types of effects.
scoring	Partial match per response; 1 point (.33 each)

Item #	18
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.7.B Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to: (B) write responses that demonstrate understanding of texts, including comparing and contrasting ideas across a variety of sources.
Objective	Students will compare and contrast information presented in two different texts.
DOK Level	3
Question Type	Table Match

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value
stimulus	Refer to the passages, "Physical Changes in Matter" and "Chemical Changes That Can't Be Reversed."
prompt	How are the two passages different ? Choose "Yes" if the statement describes a difference between the passages. Choose "No" if it does not.
column_label_1	Yes
column_label_2	No
question_1	The "Physical Changes" passage describes phases of matter, but the "Chemical Changes" passage does not.
answer_1	Yes
question_2	The "Chemical Changes" passage identifies negative effects of changes, but the "Physical Changes" passage does not.
answer_2	Yes
question_3	The "Physical Changes" passage provides specific examples of the changes it describes, but the "Chemical Changes" passage does not.
answer_3	No

question_4	The "Chemical Changes" passage explains what chemical names are, but the "Physical Changes" passage does not.
answer_4	No
question_5	The "Physical Changes" passage describes changes that can be reversed, whereas the "Chemical Changes" passage does not.
answer_5	Yes
correct_answer_rationale	Only the "Physical Changes" passage describes phases of matter; phase changes are physical changes. This passage also describes changes that can be reversed, such as shredding paper and denting aluminum. Only the "Chemical Changes" passage identifies negative effects of changes: for example, negative effects of rusting, which is a chemical change.
incorrect_answer_rationale	Only the "Physical Changes" passage describes phases of matter; phase changes are physical changes. This passage also describes changes that can be reversed, such as shredding paper and denting aluminum. Only the "Chemical Changes" passage identifies negative effects of changes: for example, negative effects of rusting, which is a chemical change.
scoring	Partial match per response; 1 point (.2 each)

Item #	19
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.6.H Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to: (H) synthesize information to create new understanding.
Objective	Students will synthesize information from two different sources to answer questions about a text.
DOK Level	3
Question Type	Multiple Select

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value
stimulus	Refer to the passages, "Physical Changes in Matter" and "Chemical Changes That Can't Be Reversed."
question_stem	Which of these show matter changing from one substance to another?
prompt	Select TWO answers.
randomize_answer_choices	yes
answer_a	Snow melting on a parking lot
answer_b	Breaking a twig in half
answer_c	Baking a loaf of bread
answer_d	Burning a piece of paper
correct_answer	c, d
correct_answer_rationale	The correct answers are: Baking a loaf of bread, burning a piece of paper. In these changes, matter changes from one substance to another.

incorrect_answer	a, b
incorrect_answer_rationale	Snow melting on a parking lot, breaking a twig in half are physical changes because they change in shape and phase of matter, but no new substance is formed.
scoring	Partial match per response; 1 point (.5 each)

Item #	20
Discipline	ELA
Grade Level	5
Assessment Type	End of Unit
Unit/Domain Title	Chemical Matter: Detectives, Dinosaurs, and Discovery
TEKS	TEKS 5.6.H Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to: (H) synthesize information to create new understanding.
Objective	Students will integrate information from two different sources to answer questions about a text.
DOK Level	3
Question Type	Short Constructed Response

PASSAGE

Element	Value
passage_link	
passage_title	Physical Changes in Matter
passage_title	Chemical Changes That Can't Be Reversed

QUESTION

Element	Value
stimulus	Refer to the passages, "Physical Changes in Matter" and "Chemical Changes That Can't Be Reversed."
question_stem	Read the question carefully. How does knowing what atoms make up a piece of matter help you determine whether a physical or chemical change has occurred? Support your answer with evidence from the selection.
prompt	<i>Write your response in the box provided.</i>

2-point correct answer	<ul style="list-style-type: none"> • A complete response explains that if a chemical change happens, the atoms recombine to form new matter. This does not happen during a physical change • A complete response will include at least one piece of supporting evidence from either text.
	<ul style="list-style-type: none"> • A complete response may include, but is not limited to, the following evidence cited or paraphrased from the text: <ul style="list-style-type: none"> ○ When wood burns, its molecules break down into separate atoms. ○ The atoms then recombine with oxygen in the air to form new substances, including carbon dioxide (CO₂) and water (H₂O). (paragraph 2 of “Chemical Changes That Can't Be Reversed”) ○ In contrast, when a chemical change happens, a new substance is formed, with a different chemical name. ○ A chemical name tells how many atoms, of which type, make up one molecule of a substance. (paragraph 4 of “Physical Changes in Matter”) • Evidence is accurately used to support the response. • The response and the evidence to support it are based on the text.
1-point correct answer	<ul style="list-style-type: none"> • A partial response explains that if a chemical change happens, the atoms recombine to form new matter, but the response does not provide supporting evidence. • A partial response may cite or paraphrase relevant text evidence, but the student does not include an accurate answer to the prompt.
0-point answer	<ul style="list-style-type: none"> • The response is incorrect. • The response is not based on the text. • No response is provided.
scoring	See rubric for scoring information

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